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# Examining Motivation to Participate in Sport: A Retrospective Look at Current and Former Athletes' Motivation to Participate in Athletics

Nicholas Anthony Raymond

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EXAMINING MOTIVATION TO PARTICIPATE IN SPORT:  
A RETROSPECTIVE LOOK AT CURRENT AND FORMER ATHLETES'  
MOTIVATION TO PARTICIPATE IN ATHLETICS

A Thesis

Submitted to the School of Graduate Studies and Research  
in Partial Fulfillment of the  
Requirements for the Degree  
Master of Science

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Indiana University of Pennsylvania  
August 2016

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Title: Examining Motivation to Participate in Sport: A Retrospective Look at Current and Former Athletes' Motivation to Participate in Athletics

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This study investigates individual's motivations for athletic participation. Additionally, the study examines what specific lack of motivations led to discontinued participation in athletics. Lastly, it looks at the differences in two specific groups of individuals, males vs. females and current IUP NCAA athlete's vs non-athletes (former high school athletes). An adapted version of the SMS-28 survey was used from Pelletier, et al. (1995). The questionnaire was designed to examine the motivations for sport participation between male vs. females and athletes vs. non-athletes. In addition to this, the descriptive questions look at specific motivations for each group of individuals.

This study is designed to provide updated research from a retrospective viewpoint. To analyze the data, descriptive statistics were used, along with bar charts to present information and multiple Independent-Sample t-test. These test were performed and found significant and non-significant differences in the motivations to participate in athletics between groups. When males and females were compared, there was no significance found at the  $p = .05$  level. Conversely, athletes versus non-athletes was compared, significance at the  $p = .05$  level was found ( $p = .038$ ). In addition, each specific Likert scale question was looked into and five were found to be of significance. Male versus female Likert scale results provided two significant questions. "Because it is absolutely necessary to do sports if one wants to be in shape" ( $p = .018$ ). "For the satisfaction I experience while I am perfecting my abilities" ( $p = .005$ ). Additionally, when

athletes versus non-athletes Likert scale questions were looked into, three questions were found to be significant at the  $p=.05$  level. First being, “for the pleasure it gives me to know more about the sport that I practice” ( $p=.007$ ). For the excitement I feel when I am really involved in the activity” ( $p=.007$ ). “Because it is a good way to learn lots of things which could be useful to me in other areas of my” ( $p=.014$ ).

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## CHAPTER I

### INTRODUCTION

Motivation to participate in sport has been the subject of question for years. Why do students participate in sport while in high school and/or college? A theory that has been studied in previous research is the Self-Determination Theory (SDT) (Deci & Ryan, 2000). SDT is based on the idea that an individual has three psychological needs that promote motivation: 1) Autonomy, or the need to feel self-dependent on the activity; 2) Competence, or the need to experience mastery of the activity; and 3) Relatedness, or the need to experience social interactions from the activity (Deci & Ryan, 2000). The theory suggests that a person is more motivated to participate in an activity when one or more of the psychological needs are met (Lox, Martin-Ginis, & Petruzzello, 2006). Reasons like this shed light on why people get into sports in the first place and also why they continue to participate. Motivation is defined as influences that initiate, direct, and sustain human behavior (Iso-Ahola, 1999). This definition is difficult to quantify for a coach or teacher. This project will look closely into what motivational factors come into play most frequently when associated with collegiate sport participation.

One theory that attempts to describe, explain, and predict why people are motivated to participate in particular achievement areas is Harter's (1978, 1981) competence motivation theory. According to Harter, individuals are motivated to be competent in achievement areas such as academics, sports, and peer relationships. This is an important reason why youth begin to be actively involved and skilled at something. There is a broad consensus that the principle goals of youth sport are to provide intrinsically rewarding experiences and to maintain interest so that they are inclined to continue playing throughout their lives (Côté & Fraser-Thomas, 2007; Kirk, 2005; McNamee & Bailey, 2009). Most people who were involved in athletics through high

school or into college started at a young age. Some started because of personal interest and some had outside influences like parents or friends. Motivation is a driving force that keeps individuals on a line for success in sports and “intrinsic and extrinsic motivation” is a huge part of that. Deci & Ryan (1985) distinguished “intrinsic” motivation from “extrinsic” instrumental motivation. Intrinsic motivation is concerned with the pleasure of participating; the present moment in which the action is performed. Extrinsic motivation is concerned with future rewards or punishment (personal or social).

Another focus of previous research has been the investigation of differences in males and females and their particular motivation to participate in sport. Smith, Thurston, Green and Lamb (1997) showed that the reported levels and forms of participation in different sports and physical activities in extracurricular physical education of young people (15 and 16 year-olds) varied significantly and differentially according to gender and, to some extent, social class. Gender does play a large factor in participation in specific sports and how long some individuals will continue to participate in said sport. This study covered specific motivational topics that will look to unearth information about the motivational factors that lead to the continuation of sport participation at the collegiate level. Conversely, it looked into the lack of motivational factors that lead to the nonparticipation of former high school athletes.

### **Statement of Problem**

The study looked into the differences in motivational factors for sport participation, specifically, between males and females, athletes and non-athletes, at a mid-sized University in Western Pennsylvania. This research used a combination survey with three separate sections. The first section was all demographic questions, followed by 2 self-created questions (depending on if you are an athlete or non-athlete), continued with the Sport Motivation Scale (SMS-28)

(Pelletier et. al., 1995) and concluded with one more self-created question to examine the differences in the motivational factors in sport participation.

### **Research Questions**

1. What are individual's motivational factors to participate in high school athletics?
2. What motivations lead to continued participation in collegiate athletics?
3. What motivation(s) or lack of motivation(s) lead to discontinued participation in athletics after high school?
4. Is there a difference between male and female athlete's motivation in terms of sport participation?
5. Are collegiate athletes motivated differently than former high school athletes?

### **Hypotheses**

1. 'Affiliation' in the sport itself will be the largest motivation for participation, followed by 'Social Aspects/Friends'.
2. The highest motivation for continued athletic participation will be 'Financial Gain', followed by 'Affiliation with a Team'.
3. The main lack of motivation will be wanting to 'Focus on Academics', followed by 'Level of Competition'.
4. Males will score higher on the SMS-28 survey than females, when looking at motivation for athletic participation.
5. Collegiate athletes score higher on the SMS-28 survey than former high school athletes.

## **Definition of Terms**

- Motivational Factors - Reasons that encourage students to participate in athletics. ('Parental Influence', 'Fitness', 'Social Aspects/Friends', 'Interested in the Sport', 'Affiliation', 'Environment', 'Skill Mastery', 'Academic Rewards', 'Love of the Sport', 'Other') were used in the study.
- Motivation - Motivation is defined as influences that initiate, direct, and sustain human behavior (Iso-Ahola, 1999).
- Collegiate Athletes - A current student at Indiana University of Pennsylvania that actively participates in a NCAA sport.
- NCAA - National Collegiate Athletic Association.

## **Significance of Study**

Knowledge that childhood physical activity is related to long-term health benefits (Rowland, 1990), has led researchers to study motivation for participating in and discontinuing participation from structured youth activity programs. Information is needed within this area of research, specifically with a retrospective view point to help grasp the past motivational factors of participants. This research study being conducted expounded upon current information and helped lay a foundation for an important topic in sport, which is motivation to participation in athletic competition.

## **Limitations**

- Survey information will be obtained only from one Division II University (IUP).
- Only one years-time is allotted to complete this study.

## **Assumptions**

- Individuals will be open and honest on the survey they will fill out.
- Former and active participants in sport will be able to quantify their past and current motivations for their participation in sport.

## CHAPTER II

### REVIEW OF LITERATURE

To grasp the idea of motivation to participate in athletics at the collegiate level, basic motivational theories should be conveyed. Specific literature reviews have been selected to help demonstrate the need for expanded research on this topic. Focuses on intrinsic motivation, extrinsic motivation, and self-determination theory will be carried out inside of this study. Also concepts in gender differences in motivation, personal inspiration, burnout factor, and parental influence will be additional topics. Additionally, this chapter presents previous research about the aforementioned topics to help the reader grasp the idea of the study as a whole.

#### **Motivation**

Motivation is defined in many different ways by many by different individuals in the scholarly world of sports. For example, motivation has been defined as the intensity and direction of effort (Ferrer Caja & Weiss, 2002). Motivation is something that everyone wants, but not everyone has. Coaches of any sport would want dedicated and motivated athletes. It is something that is hard to define and also quantify. It is an idea and an enigma. Motivation will always have many definitions. Along with those definitions, there are many types of motivation.

According to Deci and Ryan's (1985; Deci & Ryan, 2000) Self-Determination Theory (SDT), the reasons why individuals choose to participate, exert effort, and persist in an activity can be classified along a continuum of self-determined behavior. This, along with intrinsic motivation, can be classified in the same areas. Simply, this means if one is extrinsically motivated, the individual would need an outside force or extrinsic motivation to get them going. If an individual is intrinsically motivated, they have what is called intrinsic motivation. They do

not need an outside force to get going. To go along with this is extrinsic and intrinsic motivation. Extrinsic motivation is when an individual is motivated by external factors, as opposed to the internal drivers of intrinsic motivation. Extrinsic motivation drives an individual to do things for tangible rewards or pressures, rather than for the enjoyment of the activity. On the other hand, intrinsic motivation would consist of performing an action or behavior because you enjoy the activity itself.

Motivation can come from all different sides of the spectrum. Some individuals play college sports, some played high school athletics and some, which aren't included in this study specifically, participate in recreational sports, exercise, and so forth for the fun of it. With that being said, campus intramurals are an important and popular element on college campuses around the United States. Not only does it give non-official collegiate sport players a chance to partake in an activity they enjoy, but it also is great for the athletes' health as well. Regular physical activity has been shown to decrease the risk of many chronic health problems (Haskell, Lee, Pate et al., 2007). Research has shown that only 38% of college students regularly participate in vigorous physical activity and only 20% participate in moderate physical activity, whereas high school students have a 65% rate of participation in vigorous physical activity and a 26% participation rate in moderate physical activity (Douglas, Collins, Warren et al., 1997; Grunbaum, Kann, Kinchen et al., 2002). Another separate definition of motivation consists of influences that initiate, direct, and sustain human behavior (Iso-Ahola, 1999). To go along with this is something that was mentioned earlier, which is, the SDT. SDT is based on the idea that an individual has three psychological needs that promote motivation: 1) Autonomy, or the need to feel self-dependent on the activity; 2) Competence, or the need to experience mastery of the activity; and 3) Relatedness, or the need to experience social interactions from the activity (Deci

& Ryan, 2000). These are all needs that individuals tend to want to have fulfilled in their lives. This is a reason why people turn to athletics. Athletics, for some, are an escape or stress reliever.

There are multiple ways individuals are motivated, but a theory suggests that they all have something in common. Individuals may differ in their motivational orientations, outside influences, and interpersonal perceptions (Hagger & Chatzisarantis, 2008).

Despite the ongoing debate between task and social cohesion, there is little refutation that general team cohesion is important in both sport participation and performance (e.g., Eys, Loughead, Bray, & Carrón, 2009; Lott & Lott, 1965; Widmeyer et al., 1993). For example, researchers have found that when individuals perceive higher levels of team cohesion, they are more likely to attend practices and participate in games as opposed to those athletes who view team cohesion as lower (Carrón et al., 1988). This all goes back to an element in the research question of “social aspects”. To elaborate on this some, “social aspects” are relationships between teammates, coaches, trainers, staff, and so on. That being said, it is clear that the closer a group or cohort is, the more responsive they will be as a whole. In many instances, coaches have said that the team is made up of players, but is trying to achieve one goal. That goal will be more readily achieved if the team is a cohesive unit. This is different for individual athletes, but cohesion is still necessary. In one study, it was found that collegiate male athletes demonstrated significantly higher levels of extrinsic motivation, specifically external regulation (obtaining measurable rewards) compared to females (Kingston et al, 2006). Again, this information is conclusive with other studies. Males tend to seek outside support from a fan base. This is even more evident when you look into male athletes with scholarships and at larger universities around the United States. Research has shown that both intrinsic and extrinsic motivation are important concepts for understanding motivational processes in sport settings (Deci & Ryan,

2002; Vallerand & Rousseau, 2001). Naturally, since a non-scholarship athlete is not getting any, or at least not a full, financial stipend to participate in athletics, they should have higher levels of intrinsic motivations. On the other hand, a scholarship athlete would have more extrinsic motivations because of the financial gains that are received and the obligations that athletes are forced to maintain. This is significant for many reasons. As you climb the collegiate athletics ladder, you see more fan devotion, television coverage, and money involved in athletics. These all are factors that play into extrinsic motivation and help give that outside boost to individuals that participate.

### **Burnout Factor**

Participation in youth sports has been steadily increasing over the years. A trend inside of youth sports that is also increasing is called “sports specialization,” which has been defined as; the “limiting’ of participation to one sport that is practiced. Specialization in a single sport before adolescence has been discouraged by the American Academy of Pediatrics (AAP, 2000). Yet, this is something parents do to their kids because they think it will give them a better chance to receive a college athletic scholarship, even though statistics say this isn’t accurate. For example, National Collegiate Athletic Association data (NCAA, 2004) indicates that high school seniors’ probability of playing varsity collegiate sports ranges from 2.9% (basketball) to 12.9 % (ice hockey), while the odds of transitioning from college to professional sports are even lower. Yet despite such odds, youth are still pressured to specialize in one sport (Landers et al., 2010). This type of action that is influenced by parents leads to sports burnout at times. Traditionally, burnout was viewed as a phenomenon that was easier to observe than define (Gould, 1997). Raedeke and Smith (2001) expanded on the concept of athlete burnout to include elements of physical and emotional exhaustion, reduced personal accomplishment, and sport devaluation.

Burnout factor is an awareness that isn't new and is based upon the idea that an individual, more often in high school but can also be seen at the collegiate level, puts focus on one sport and it is done year round. Burnout in athletes is thought to negatively influence the quality of their sport experiences, leading to decreased performance and ultimately discontinuing sport participation (Holden, 2014). This happens when an athlete perceives they have more on their plate than they can handle. It is when the pressures, such as school and practice, become too much to manage. Pines (1993) noted that burnout is a state of fatigue and emotional exhaustion which is the end result of a step-by-step process of disillusionment and is quite often found among individuals who are highly motivated. Burnout isn't just for the unprepared and underachievers; it can happen to anyone. Thus, you see athletes becoming disenchanted with their sport and stop competing at what should have been the highpoint of their sporting careers. More and more literature has become available about sports burnout and the effect it is having on collegiate athletes. School work, travel and practice can take their toll even on the most dedicated student. Coakley (1992) conducted informal interviews with high-level adolescent athletes who were "burned-out" and determined that burnout was directly related to the social organization of intense sport participation. More specifically, burnout is related to control and identity issues that entrap athletes into sport.

Entrapment is defined as when the athlete does not want to participate in the sport, but feels they must maintain involvement for a number of reasons (Holden, 2014). Parental influence; social factors, like friends/peers' and scholarship, which athletes rely on, are common reasons for entrapment. Pressures of this nature can be a deterrent for athletic participation in youth and teens across the board. Entrapment alone can lead to the absence of sport motivation. This in turn, will harm a teen's intrinsic motivation to continue in athletics in college or at any

level. It can also lead to an individual gaining access to a university through athletics, but already being burned out once getting there. With a loss in motivation, an athlete is more likely to quit a team and could possibly suffer losses of scholarship, social standing and more. Athletic burnout is an issue that is pervasive in today's society and it is paramount that more research is done on this topic.

### **Parental Influence**

Parental influence is something that can be a negative and a positive, in terms of motivations to participate in sport. Parental influence can be one of the strongest influences that youth have. If parents are athletes or former athletes, they will most likely encourage their children to participate in athletics. Studies based in this perspective demonstrate that early parent-child relationships have a distal or long-term impact on child behavior that sustains into adulthood (e.g., Crosnoe & Elder, 2004; Heard, 2007; Rossi & Rossi, 1990). This, along with the effects of early socialization into sport, may be experienced more distally with internalized values and norms influencing sport behaviors into adulthood (Bandura, 1977). With all this being said, it has been shown for females that early parental socialization of females is likely to have a strong and lasting impact on their lifelong sport and physical activity behaviors. In other words, if an individual and their parents have a distal relationship with sport/athletics in general and the influence is positive, this can lead to a long-term and lasting commitment to sport. If the relationship is too proximal, then it does the opposite. It pushes the individual away from the sport and provides too much pressure. Role modeling appeared to have a strong influence on the participants' experience in sport (e.g., Greendorfer, 1977; Sage, 1980; Woolger & Power, 1993). In addition to this, the parents who enroll their children into athletics at a young age expose them to the sports and have a greater chance of continued participation. Another factor was their

involvement in the sport. This could be as a coach, an administrator or just a consistent fan that attends almost all games. Proper encouragement was another factor that has been shown to have a strong influence on participation in sport. This was as simple as letting an athlete know they have support and actively involving parents to cheer them on at their games. Parental involvement can play a huge factor in the continuing participation of young athletes. It isn't a must, but it does play a role. In conclusion, this shows that the right combination and amount of parental influence can play a large factor in the lifetime connection with athletics. This can be through playing, coaching or in other aspects, but parental influence is paramount. It can go the wrong way if influence and pressure are too heavy, but if done correctly, it can be a very positive dynamic.

### **Youth Sport Participation**

Research done in Sweden on why non-elite athletes continue to participate in athletics during their youth, specifically their teen years, has exposed interesting information. International studies have revealed that some of the reasons that young people engage in sports are because of friends (MacPhail, Gorely & Kirk, 2003), the enjoyment of participation (Allander, Cowburn & Foster, 2006), and the ability to feel healthy (Light, Harvey & Memmert, 2011). This is no different than why college-age students choose to participate in sports as well. Studies about youth sport participation deal with youth in their early teens, but few have focused on sports participation by those in their mid- to late teens (15 – 19 years old) who are not elite athletes. Research like this can help illuminate reasons why teens continue with athletics without the encouragement of college scholarships. In the literature, they focus on not why youth drop out of sports, but why they continue, which makes this a stimulating study. Patton (2002) used purposeful sampling to select nine girls and nine boys between 15 and 19

years of age from eight different sports (basketball, equestrian sports, Physical Education and Sport Pedagogy 241 floorball, football, handball, swimming, and ultimate frisbee). The selection of sports and sports clubs was made using the Swedish Sports Confederation's database with its 69 individual sports federations (Swedish Sports Confederation 2011b). In this study, a total of 18 in-depth interviews were conducted. They were carried out in the spring of 2008 at locations close to the teenagers' sports clubs. Each interview lasted between 30 and 60 min and was conducted as a private conversation to encourage the respondent to talk openly about his or her experiences and for the interviewer to ask follow-up questions (Kvale 1996; Creswell 2005). Many of the youth felt that they continued to participate in sports for the reason of, 'doing sports is fun' and they dropped out of sports when they no longer felt the same way. This study showed that starting at a young age, parental influence and the fact that the sport was enjoyable seemed to keep them involved. One interpretation of the teenagers' statements is that a prerequisite for enjoying and having a sense of meaningfulness in club sports is that one is raised within a club sports environment and can handle an elite-oriented practice even if one does not have elite ambitions. The results indicate that club sports seem to include teenagers who appreciate and can handle and understand competitive elite-level sports (Green 2006; Fraser-Thomas, Cote', and Deakin 2008). The conclusion is that doing sports seems to be manageable for and understandable and meaningful to the teenagers in this study, but what is meaningful seems to differ in some aspects. Meaning, that even though the teenagers realize they may not be elite in the sport, they will stick with the sport because they enjoy it in their own way. As mentioned above this coincides with the fact the teenagers were introduced to the activity at a young age, like the social aspects of athletics. Also an important factor is parental influence and support was readily available to the athletes.

Youth sports is growing rapidly and keeps growing year after year. In fact, there are over 20 million children between the ages of 6 and 16 years participating in non-school sports programs' (Stern, Bradley, Prince & Stroh, 1990). Although it is estimated that nearly 60 percent of children ages 7 to 11 spend 5 or more hours per week in organized activities, little research has been conducted in this area (Stern et. al. 1990). Children's motivations regarding participation have been recognized as one of the most critical needs for present research in children's sports, but little is known about any age group. Almost no information is available regarding children 6 to 10 years old. This is an issue because, it is when most youth start partaking in organized and unorganized physical activity or sport. In another study about youth sport participation in recreational athletics, it was shown even at a young age, males do not differ much from their motivations later in life. For example, two of the most popular responses for boys were, "win games" and "become popular. This overlaps with other studies that have shown similar motivations. For example, "competition level", "athletic achievement" and "social aspects". Although this sample is a younger cohort, it does not stray all that much from an older group in their motivations to participate in athletics in a recreational setting or in an organized sport at any level. As can be seen, even at a young age "becoming a star" which is similar to "athletic achievement" is relevant even in recreational competition.

### **High-School Sport Participation**

High School sports are a major factor in the lives of many adolescents. Athletics can be a huge influential factor in school moral, social standing and so forth. Garcia (2015) examined the perceptions of the value and challenges of the experience of participating in high school sports. As well as factors that influence students' initiation and maintenance of high school sports participation. The results indicated that friendship and the opportunity to participate in a

competitive activity were the main positive experiences the interviewees got from their high school sports participation. While the responses of fans and the experience of performing in public, and the experience of being on a team were also fairly common positive aspects of this participation, love of the sport was only occasionally mentioned and did not seem a central motivating factor for these students. Problems with coaching were prevalent for high school athletes, and were more problematic a negative factor than were injuries or conflicts with other activities. Family members, in particular parents, were the most important source of influence on students deciding to initiate or maintain their participation in a sport while in high school (Garcia, 2015). This study used a retrospective viewpoint, by surveying college aged students, similarly to what was done in this study.

Another study, using a sample size of 1,333 secondary school students (762 boys, 565 girls) from the Hong Kong sought to understand participation motivation and barriers in rowing (Ng, R. K. ,2011). Interestingly enough, about one-fifth (20.2%) of male adolescents expect to be trained to a more advance level than the female counterparts (8.0%). Another factor in the NG, R.K. (2011) study was, the top 5 reasons the adolescents would not be interested in rowing/physical activity (PA) were the exact same for males and females. The top four factors for lack of motivations were, 1. Lack of interest; 2. Poor swimming skill; 3. Academic problems; 4. Not fit enough. The only difference was the fifth factor, which was lack of confidence for females and time constraint for males. The data shows, males and females do not differ by much from one another. Adversely in terms of motivational factors, female adolescents emphasized the social benefits or enjoyment orientations like “to have fun”, while male adolescents stressed on psychological enhancement or achievement orientations such as “like the challenge”. This shows

that even across the world motivation in sport does not differ entirely from here in the United States.

### **College/Adult Motivation**

Physical activity has many benefits for health, social and physical reasons. Research on PA has included interventions that focus on encouraging individuals to engage in exercise and establish habits for continual exercise adherence (Dishman & Buckworth, 1996). PA is a complex behavior, and is defined as body actions produced by skeletal muscles that expend energy past normal physiological requirements needed at rest (Caspersen, Powell, & Christenson, 1985). On the other hand, sport is difficult to define, because the concept is not concise (McBride, 1975). Sports can vary from Professional Leagues, like the NFL all the way to amateur athletics, like high school track and field. There is also another category of sport, unorganized sports. For example, you could participate in a pick-up basketball game or summer church league softball. These are individuals just playing for the love of the sport, within the rules, but without a governing body per say. The individuals that participate in these organized or unorganized activities, all have something in common, that is the motivation for participation. Motivation is a psychological construct that gravitates an individual toward a desired goal and is considered a psychological force that can reinforce action (Schacter, 2011). All of the individuals that play are motivated to be there, but not all by the same reasons or ideals. Motivation can come from an intrinsic force or an extrinsic force. Intrinsic, to put it simply is, something that comes from inside a person. An extrinsic force is an external push, something from the outside that makes an individual get going. This research is looked at the differentiating motivators for exercise, sport and recreational sport and what they mean in the terms of college/adult participation.

In a sample done at a Mountain West University, 443 student and faculty participants completed a sample questionnaire. Adult Physical Activity was assessed using the International Physical Activity Questionnaire (IPAQ). The IPAQ short version examined the participants' level of PA over the last seven days and consisted of a total of seven questions (Maddison et al., 2007). The Exercise Motivation Inventory (EMI) was originally developed by Markland and Ingledew (1997) and modified (EMI-2) by Kilpatrick et al. (2005). This study used the modified EMI-2. The EMI-2 is comprised of 51 items and represents 14 different motivational subscales that include stress management, revitalization, enjoyment, challenge, social recognition, affiliation, competition, health pressures, ill-health avoidance, positive health, weight management, appearance, strength and endurance, and nimbleness. Different scales allow researchers to differentiate between the motivational factors. Item responses were made on a 5-point scale ranging from 0 (not true of me) to 5 (very true for me). A total of 443 participants (33.4% males and 66.6% females) completed the survey. Primary PA for study participants included exercise (n = 272; 61.4%), sport (n = 55; 12.4%), and recreation (n = 81; 18.3%); 7.9% (n = 35) indicated that they did not participate in any PA listed. A total of 41.3% of participants (n = 183) were ages 18 to 24, which made this study more relevant within the research. Overall, participants were motivated to partake in PA for strength and endurance, stress management, weight management, enjoyment, and appearance. In summary, the study examined many different factors. Motivational factors for PA, sport or recreation did not differ much from other studies or age groups. This study also used a broader age range because it encompassed college students and faculty. Regardless of age, motivations seemed to be similar to one another.

Lastly, it is well known that the transition from high school to college is a big step in the athletic spectrum. It is also known that, most individuals' level of PA decreases after high

school. This happens for a multitude of reasons. The lack of motivation to participate in PA can be hard to come by if you're no longer participating in multiple sports, like some do through their high school careers. Understanding the factors that contribute to physical activity changes upon entering college are important for identifying effective tools for health promotion in college-aged males and females. One such factor that can be a predictor of future physical activity behavior is past physical activity behavior (Madonia, Cox & Zahl, 2014). Self-determination theory suggests that autonomous reasons for participating in physical activity are more likely to lead to physical activity adherence (Madonia, 2014). In other words, that the more intrinsically motivated a person is, the more frequently an individual will partake in PA. Results from an online questionnaire completed by first year students living on campus at a mid-size university in the Midwest showed that the students who reported participation in competitive sport and aerobic exercise during their senior year of high school seemed to continue these activities in college (Madonia, 2014). In addition to this, it was more common to see high school students participating in athletics for their own school instead of an outside source like AAU or travel teams. Additionally, seniors were the most active grade of high school students when it comes to participation in athletics, clubs and so on. The following students reported no involvement in each physical activity mode: competitive sport (26.6%), recreational sport (30.6%), aerobic exercise (19.4%), resistance exercise (40.3%), organized physical activity (64.5%), and recreational physical activity (58.9%). The research hypothesized, that if an individual participated in PA or sports frequently during their senior year of high school they would be more likely to participate in PA or sports during their freshman year of college. These hypotheses were partially confirmed in that students who spent more time participating in competitive sport during their senior year in high school, felt more competent and autonomous

with respect to physical activity pursuits during their first year of college and, thus, experienced more autonomous motivation. This information is important for various reasons. Statistics, like these, speak volumes to the participation in sport and in recreational activity. Seen all over the news, internet and preached in health classes, is that America are overweight, especially our youth. Motivational tactics to help with participation in athletics can be a catalyst leading to a thinner America. If there are indicators that point to the fact that individuals who participate in recreational or organized sports are more likely to carry PA traits to college, PA should be a main focus for high school students to help reverse the trend of obesity. Also it sheds light on to why some individuals continue to participate in athletics when they reach college. This can help with money, social life factors, health and more. Athletics can open many doors for an individual and it starts in youth sport and carries on throughout high school.

### **Scholarship and Gender Differences**

Scholarships and gender have been hot button topics in athletics for years. A study by, Cremades, Flournoy & Gomez (2012) was done to find the scholarship status and gender differences in motivation among U. S. collegiate track and field athletes. The purpose of their study was to determine differences in motivation between scholarship and non-scholarship collegiate male and female athletes. The sample consisted of 78 male and 84 female collegiate student athletes who participated in NCAA Division I track and field teams in the Colonial Athletic Association and the Mid-Eastern Athletic Conference (U.S.A). The participants consisted of scholarship males (n = 37), non-scholarship males (n = 41), scholarship females (n = 37), and non-scholarship females (n = 47). The participants included freshmen, sophomores, juniors, and seniors. The age range of the participants was typical of college athletes, 18-24 years. The Sport Motivation Scale (SMS) was used to assess participant's motivation (Pelletier

et. al., 1995). The SMS contains seven subscales that measure three types of intrinsic motivation, three types of extrinsic motivation and amotivation toward sport participation (Pelletier et. al., 1995). Athletes' responses were assessed on a 7-point Likert scale (1 = strongly disagree; 7 = strongly agree). A handout with a brief description of the study was mailed electronically to NCAA Division I track and field coaches to invite their participation in the study. The handout contained a link that allowed participants to gain access to the online survey.

In conclusion, this study shows that, non-scholarship athletes have more intrinsic motivation than scholarship athletes. Therefore, scholarship athletes have more extrinsic motivation compared to a non-scholarship athlete. Also, non-scholarship athletes had slightly high levels of amotivation, but amotivation wasn't found to be significant in this study. Likewise, results supported the hypothesis which was, female athletes show the greatest levels of intrinsic motivation, as well the lowest levels of extrinsic motivation. To conclude, non-scholarship female athletes have greater levels of intrinsic motivation and lower levels of extrinsic motivation when compared to non-scholarship male athletes.

### **Gender Differences in Sport Participation**

Sport participation will always be a relevant topic in the sport management world, along with gender. Gender always plays a factor in the sports, whether it is a participant, reporter, broadcaster, administrator or coach, gender is also involved. Interest in sport leads to participation and curiosity in the sport itself. Inquisitiveness can lead an individual to participate in or at least try out for a sport. Smith, Thurston, Green and Lamb (1997) showed that the reported levels and forms of participation in different sports and physical activities in extracurricular physical education of young people (15 and 16 year olds) varied significantly and differentially according to gender and, to some extent, social class. In other words, boys are more

likely to participate in a sport for the competition and improvement performance in their sport, while girls tend to prefer social interaction and friendship. Even if the sport and physical activities were combined with a social activity, the girls were significantly more likely to choose the game-like rather than the competitive activity (Chase & Dummer, 1992; Prusak & Darst, 2002). A study done in 2006-2007 school year by, Soares, Antunnes, & Van Den Tillaar (2013) had a population of 5,129 pupils from 32 schools studying at the 2nd and 3rd stages of elementary and secondary education (from 10 to 18 years old) who were engaged in school sport activities. From that group of 5,129, a representative sample of 1,317 (722 boys and 595 girls) athletes from all schools and sports involved in school sport. This tallied to 25.7% of the population. The results of the study showed that, boys and girls similarly participated in sports for “the fun of it” (98.5% of boys and 96.6% of girls). Conversely, boys were more likely to participate in a sport “to be a star or champion”. Therefore, the results have shown that boys tend to prefer the activities related to competition and the girls tend to lean towards the motives of health and fitness and wanting to make friends. Additionally, mentioned was, “My parents want me to practice sport” which was higher for boys (57.7%) than for girls (46.5%). This goes back to parental influence, and also can overlap with burnout effect. Parental push can be a positive factor in athletic participation, but as previously stated, it needs to be monitored and regulated. Proximity is an enormous factor. Parents need to manage a solid distal and proximal relationship with their children and the sport itself.

The following research looked at university students, which examines a different age demographic. Motivation is a complex process that influences individuals to begin, pursue, and persist in an activity. Crandall (1980) stated that needs and motivation can be treated as forces that cause people to seek certain behaviors. This type of activity or behavior would be, sport and

exercise participation with college aged students. Research has determined, that there are motivational differences between male and female sport and exercise participation. It has been quantified that male and female athletes have different strengths and weaknesses within the motivational environment. Recent studies suggest, that involvement in physical activity is mediated by motivation and perceived sports competence (Ames, 1984). Motivation is key in finding what motivates different individuals. College-aged students have been criticized over sedentary life styles, binge drinking and the dreaded freshman 15, but this study tries to focus on, what motivates a college student to exercise or participate in a sport. It is assumed that understanding motivation is key to health-promotion efforts by sports practitioners and exercise advisers (Dishman & Sallis, 1994). A descriptive survey research design was utilized to unearth the motivational orientations of the sport science students. The study targeted sport science students in a university with 180 participants. However, through stratified random sampling with the representation of every year of study only 60 students took part in the study. Self-administered questionnaires were used for data collection. The questionnaire was divided into four sections where **Section A** focused on demographic details (age, gender, year of study), **Section B** consisted of items on perceived physical status and competencies, and **Section C** was concerned with motivation and amotivation factors while **Section D** extracted the constraints to sports participation. The reasons which spurred participation in physical activities were positive attitude (38%), followed by both motivational and goal achievement and perceived personal ability was the least at (6%). For the male students, perceptual reasons declined from positive attitude, goal achievement, motivational climate and perceived physical ability. The female's perception declined from motivational, climate, positive attitude, goal achievement and perceived personal ability. Also shown, males enjoyed ball games and weight training while

female students preferred aerobics, walking and swimming. This is interesting information and could be used in any type of facility management. These findings are supported by Siegel (1999), where females preferred individual life time activities whereas males seemed to prefer team sport activities. Lastly, this research mentioned males and females selecting certain sports because they're more masculine or more feminine. This information not seen in other studies. The masculine or feminine factor was something that most research did not measure in their statistics or surveys. It was interesting to see how one gender specifically selected sports from which are perceived to be feminine or masculine. Masculinity and feminism are mainstream topics heard throughout the media, but not specifically for selection preference in sport, at least not at the collegiate level. One would assume, that a person has been committed to a certain sport and would carry through with it regardless of outside perceptions, but this study leans in the other direction.

### **Male and Female Differences in Sport Participation**

Gender differences in sports motivation has always been a debate. What motivates females compared to males? In a study done by, Flood & Hellstedt (1991), wants to know the factors that influence or motivate male and female athletes to participate in college athletics. Participants in this study were male (n = 116) and female (n = 45) athletes who are students at a public university in the Northeastern United States with a student body of 10,000 students. Male students on the basketball (n =10), ice hockey (n = 20), baseball (n =25), crew (n = 25), track (n = 16), and lacrosse (n = 19) teams participated. Females on the basketball (n = 11), softball (n = 14), and crew (n = 21) teams also participated. Students ranged in age from 18 to 28 with a mean age of 20. Most subjects were Caucasian, with only seven African American students participating in the study. Most of the teams in this study participate at the Division II level of

the National Collegiate Athletic Association (NCAA). Participants were administered questionnaires either during team practice or team meetings. The questionnaire was an adaptation of the participation motivation instrument developed by Gill, Gross, and Huddleston (1983). Several items were added to assess the importance of affiliation to the university community. Participants were asked to rate the items on a 9-point Likert-type scale. Scores were examined to determine which motives were most and least important to the athletes. Staying in shape, skill improvement, winning, the challenge, excitement and competition were ranked highest. Items ranked lowest were significant-other influence and fulfilling scholarship requirements. Fulfilling scholarship requirements being that low is very surprising, with school being so expensive one would tend to think that would weigh heavily on why an individual would attend a specific university or college. Other motives such as parental or peer influence, liking the coach, and using the facilities also ranked near the bottom. Gender differences showed a tendency for females to value the social aspects of participation, while male athletes preferred a more competitive orientation. This matched up with other studies seen throughout the research process.

With a similar objective research was conducted by, Kilpatrick, Hebert & Bartholomew (2005) to see college students' motivation for physical activity while differentiating male and female motives for sport participation and exercise. This study's primary purpose was to compare sport participation and exercise motivation through the use of a highly differentiated scale of physical activity motivation within a college sample. A secondary objective was to investigate the impact of gender on motivation for exercise and sport participation. The participants in this study were enrolled in undergraduate health and kinesiology courses at a university in the southeastern United States. Approximately 15,000 attended the school, 7 lower

level health content courses (e.g., Personal Health, Human Sexuality, Drugs and Society) were surveyed and they enrolled between 30 and 40 students each. Students often take these courses as electives and come from a variety of academic majors. The study sampled a total of 233 students (132 females, 101 males) aged from 18 to 47 years old. Respondents indicated greater motivation to exercise than to participate in sport. Appearance, strength and endurance, stress management, weight management, and all 3 of the overtly health-related variables were low when looking at motivation. In contrast, respondents rated affiliation, challenge, competition, enjoyment, and social recognition higher as motivations to participate in sport. Males reported higher levels of motivation than did females for challenge, competition, social recognition, and strength and endurance, with the largest effect size difference for competition. Females rated one motive, weight management, higher than did males. Affiliation and health pressures were the highest reasons for motivation for men and health pressures and weight-management is the highest for females. This study like others, looked at in this research has shown, males and females differ in their motivations for athletic participation. This shows college students would rather participate in recreational physical activity than actually compete in a team or individual sport. Causes for this could be for a multitude of reasons. Coaching, burnout effect, lack of recruitment, level of competition or lack of interest. Information about this topic needs to be continuously researched and made evident so athletic participation can be on this rise instead of the decline.

### **Factors in Female Athletic Participation**

Motivation in general will always been a question in sports. Taking the next step from high school to college sports can be over whelming and the motivations for this aren't always clear and concise. Females who begin sports younger in life are more likely to continue being active as they get older (Crouter, 2007). Also, females who participate in sports experience

physical, mental, and behavioral benefits (Blinde et al., 1993; Staurowsky et al., 2009). It has been suggested that females who participate in sports at elite levels feel a sense of empowerment and increased body image and self-esteem (Robinson & Ferraro, 2004; Staurowsky et al., 2009). This is the general idea behind the research done by, Pacheco, Mas, Olivarez & Avila (2012) where the motivational factors related to female participation in collegiate sports were studied.

A convenience sampling was used in selecting participants for this study. Only female student-athletes over the age of 18 were recruited. All met the criteria of being currently enrolled in college classes and actively participating in a collegiate level sport. Of the 117 students asked to participate in this study, 85 (72.7%) completed the Modified Sports Participation Survey. The results of this study indicate that females participate in sports at the collegiate level because of a combination of motivational factors, which are supported by Flood & Hellstedt (1991) findings. Inconsistent with other studies on parental influence and sport motivation, the participants in this study did not report parental support as a significant motivator to why they participate in sports. Mentioned is the fact that females are in college and are separated from their parents, so they are not as reliant on them for the motivational push, however wanted or unwanted it may be. It was hypothesized that there would be differences in motivational factors according to race/ethnicity and eligibility status. As the results show, all of the partakers scored the motivational subscales very similarly, with the exclusion of fitness. It seems that the importance of fitness is perceived in a different way as female athlete's move through their college careers. The research in this article took some different avenues and lead to different findings. This also developed specific information on female collegiate athletes which is becoming more and more important in today's world. With the idea that there are not many studies done with a retrospective look on motivation for sport participation, this topic has relevance. This current research is a contribution to the

already scarce knowledge base. This examination of sport motivation has provided detailed information about sport motivation from a variety of levels and perspectives. In addition, the research takes a modestly used view point, that being retrospective. A retrospective view point lets current college students, who have already been through the decision of to continue athletic participation or to stop, focus on academics, do intramurals and so on. Their viewpoints allow for a more precise assessment, when being compared to a prospective study, if current high school students were asked. Also, since current college students (between the ages of 18 and 23) are being asked this removes some of the negatives when looking at a retrospective self-reporting study. Finally, the results of this current study will offer vital and current information on this specific this view point. This data will help coaches, colleges/universities, administrators and parents with kids involved in athletics.

## CHAPTER III

### METHODOLOGY

The purpose of this study was to seek out information about motivational factors that relate to athletic participation and motivation to participate in sport. This study focused on the examination of motivational factors, specifically, intrinsic, extrinsic, burnout factor, gender differences in motivation and participation, self-determination theory, along with others as well. This chapter presents specific information about participants, survey questionnaire, data collection procedures and statistical analyses.

#### **Participants**

The participants for this study were drawn from Indiana University of Pennsylvania (IUP) and more specifically from the Kinesiology, Health and Sport Science (KHSS) department. The cohort was age specific; participants fell between the ages of 18 to 23. Gender nor race was an inclusion or exclusion factor, but was recorded to find differences in motivations. To qualify for this study individuals, needed to be current IUP students between the ages of 18-23, current or former NCAA athletes at IUP or former high school athletes currently enrolled in the KHSS program. The KHSS program was chosen as a convenience sample. Those who had never participated in a varsity sport, were over the age of 23 or are under 18 years, or were not a current student in the KHSS department were excluded from this study.

## **Recruitment Strategies**

Participants in this research were identified by a few particular characteristics. Current enrollment in a degree housed within the KHSS department and be of graduate student standing or lower. Access was gained through the IUP directory and contact was made through email. Since the information for this study was obtained through a survey and all contributors are 18 and older, consent was assumed by completion of the survey. An informational email was attached to the survey to provide the appropriate information for the prospective individuals to help with their decision on whether to participate or not. Site Approval has been obtained through the IRB.

## **Instruments**

A cover letter (Appendix A) was distributed along with the questionnaire (Appendix B) and was used to collect the information from the participants that contributed to this study. This was followed up with a follow up email, (Appendix C) which gave all individuals who did not partake in the first time a second chance to complete the questionnaire. The data was obtained through the use of a survey that was made online in Qualtrics, IUP's Surveying System. The surveys were distributed in February and the collection process continued throughout the month. The survey consisted of 34 questions, most of which are from an established instrument, The Sport Motivational Scale (SMS-28). The questionnaire was sent to the Kinesiology, Health and Sport Science department (KHSS) at Indiana University of Pennsylvania (IUP), which is comprised of male, female, undergraduate and graduate students. The survey contained a set of 28 Likert scale questions, three self-developed questions and eight demographic questions. The 28 Likert scale questions ranged from 1-7 (1- does not correspond at all, 2- corresponds a little, 3, 4 and 5 – corresponds moderately, 6- corresponds a lot and 7- corresponds exactly). The

information was recorded with the use of Qualtrics, which is IUP's Online Surveying System. Skip logic in the Qualtrics survey allows the primary investigator to have participants skip certain questions if they do not meet the requirements to answer them. The survey was sent via email to any active student in the KHSS department at IUP. In connection to the research "What motivations lead to your continued participation in collegiate athletics?" which was an example of a survey question. Parental Influence, Fitness, Social Aspects/Friends, Interested in the Sport, Affiliation, Environment, Skill Mastery, Academic Rewards, Love of the Sport, Other and Not Applicable, were the available options for selection to answer the above listed question. An individual would have selected 3 of the options, ranking them in order of most to least importance. If "other" is selected, the individual will have a few lines for an open ended response. Leaving the open ended response option has left no doubt that every potential motivation is covered. Also, an individual could have selected 2 of the listed motivations and select other as well, for their last option and explain, for clarification purposes.

### **Statistical Analysis**

Descriptive statistics were used along with independent *t*-test when analyzing the data collected from the participants in the research. Participants are categorized into two separate groups, Athlete and Non-Athlete and Male and Female. Of the 28 Likert Scale questions, the overall mean was taken from each individuals' responses as a whole and compared their means in an Independent-Samples *t*-test. In the Independent-Samples *t*-test the means were compared between, males/females and athletes and non-athletes. The first Independent-Samples *t*-test ran by the primary investigator was for gender. The rest were comprised of eight demographic and three self-developed questions. Research questions 1, 2 and 3 will be answered using descriptive statistics. The Athlete and Non-Athlete data is shown on frequency tables and or bar graphs.

Independent *t*-test statistics were used to identify the different motivational factors between genders and athletes/non-athletes within the SMS-28. IBM SPSS Statistics 23.0 was used to analyze all data.

## CHAPTER IV

### RESULTS

The purpose of this study was to investigate the difference in motivational factors for sport participation, specifically, between males and females and athletes and non-athletes. Five research questions were addressed in this study: 1.) What are an individual's motivational factors to participate in high school athletics?; 2.) What motivations lead to continued participation in collegiate athletics?; 3.) What motivation(s) or lack of motivation(s) lead to discontinued participation in collegiate athletics?; 4.) Is there a difference between male and female athlete's motivation in terms of sport participation?; 5.) Are collegiate athletes motivated differently than former high school athletes?

#### **Response Rate**

An online survey was sent to the entire Kinesiology, Health and Sport Science department (KHSS) at Indiana University of Pennsylvania (IUP), which is comprised of male, female, undergraduate and graduate students. Of the total of 641 students, 14.98% (n=96) responded to the survey. However, after excluding those who did not meet inclusion criteria the final sample was comprised of (n=59) resulting in a 9.2% response rate.

## Demographic Information

### Gender and Athletes and Non-Athletes

Of the 59 students that fully participated in the study, 14 (23.7%) indicated that they are current collegiate athletes at Indiana University of Pennsylvania, while 45 (76.3%) students indicated that they were only former high school athletes. Of those 59 students who qualified, 25 were male (42.4%) the remaining 34 (57.6%) participants were female. Out of the 59 eligible respondents 11 (14.7%) were freshmen, 8 (10.7%) sophomores, 16 (21.3%) juniors, 13 (17.3%) seniors, and 11 (14.7%) graduate students. A majority of the sample was Caucasian (94.9%), (2.7%) were African American and (1.3%) individual was of Asian or Pacific Islander (Table 1).

Table 1

*Demographic information*

	Descriptive	Frequency	Percentage
<i>Gender</i>	Male	25	42.3
	Female	34	57.7
<i>Grade Level</i>	Freshmen	11	14.7
	Sophomore	8	10.7
	Junior	16	21.3
	Senior	13	17.3
	Graduate	11	14.7
<i>Ethnicity origin (or Race)</i>	White	56	94.9
	Black or African American	2	3.4
	Asian or Pacific Islander	1	1.7
<i>Current IUP athlete and non-IUP athlete</i>	Yes	14	23.7
	No	45	76.3

In addition to the above demographic information, the number of participants in each high-school sport were recorded.

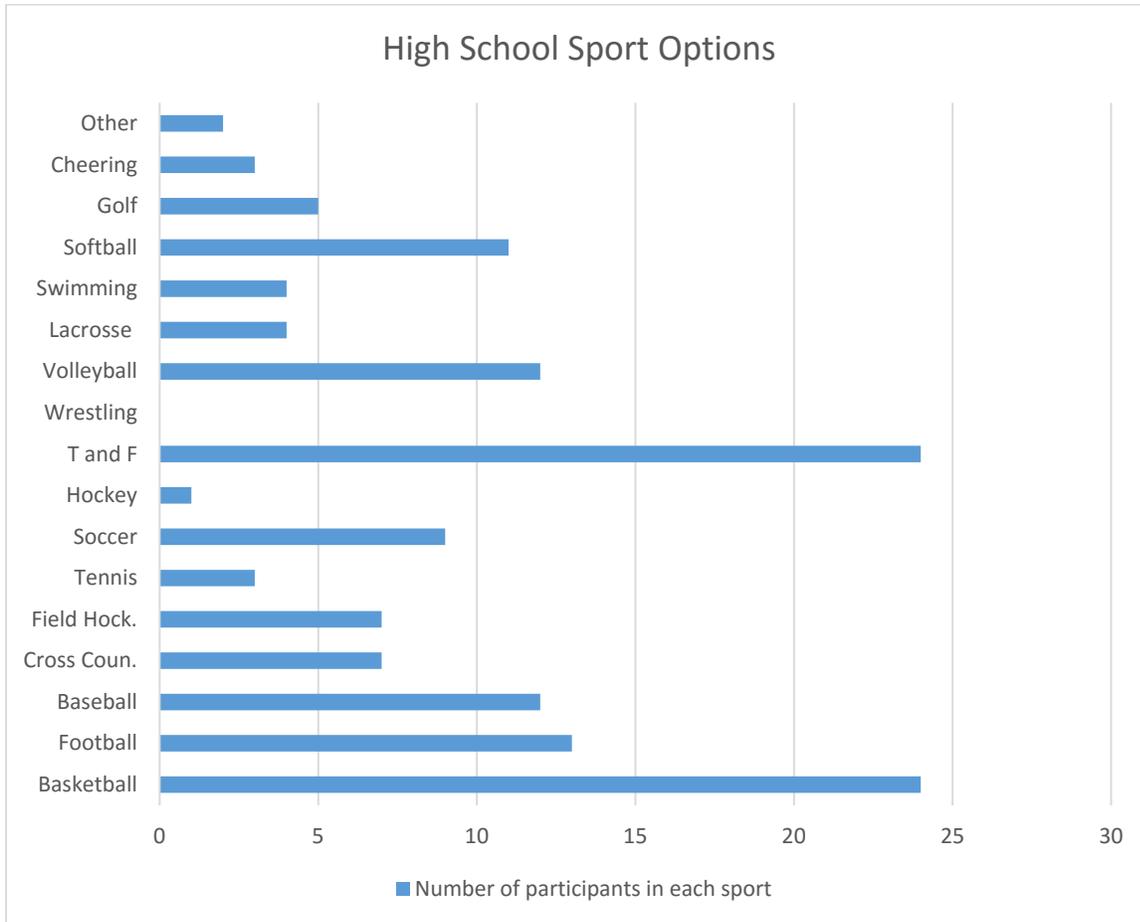


Figure 1. Number of individuals in each sport.

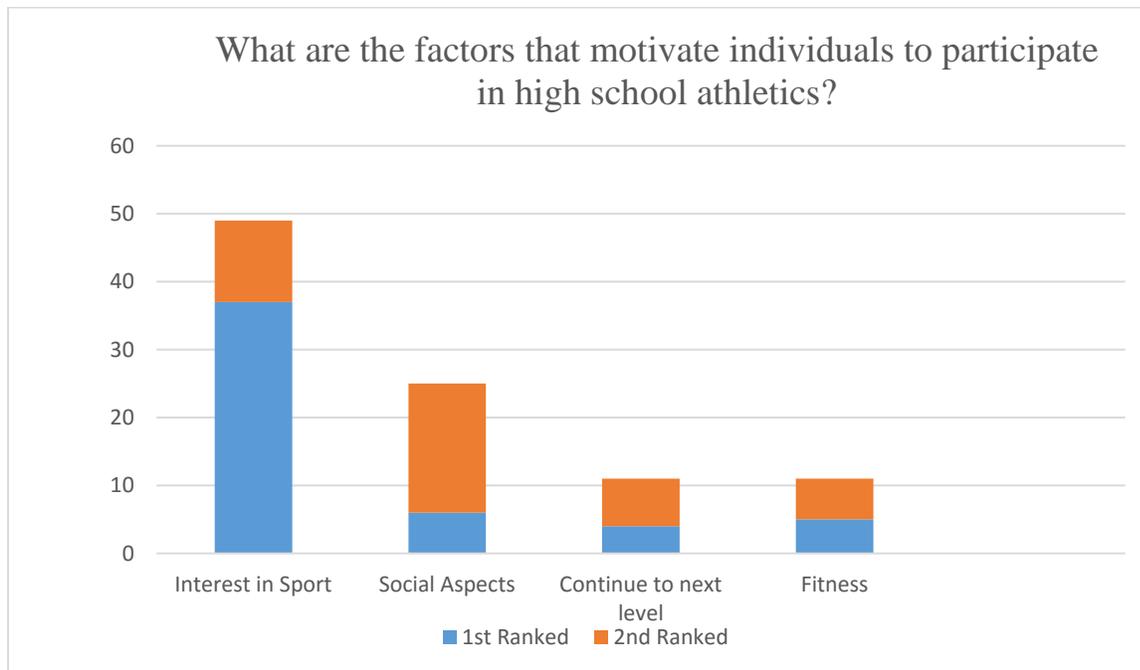
The figure above illustrates the number of individuals that participated in each of the high school sports. Basketball had 24 participants, football was at 13, baseball 12, cross country 7, field hockey 7, tennis 3, soccer 9, hockey 1, track and field 24, wrestling 0, volleyball 12, lacrosse 4, swimming and (or) diving 4, softball 11, golf 5, cheering (Spirit Squad) 3 and other was 2. The 2 specific sports listed as “other” by 2 individuals were, rugby and water polo.

## Descriptive Information

### Individuals Motivational Factors to Participate in High School Athletics

The following presents results that address the first research question of the study. “What are individual’s motivational factors to participate in sports high school athletics?”

Of the 96 respondents, only 59 indicated that they participated in high school athletics, and therefore were included in the study. Of the said 59 individuals, the top four responses or reasons for participation will be presented (Figure 2). The blue represents the number one choice, the important most to the participant and the orange represents the second ranked choice of the participant.



*Figure 2.* Top 4 rated selections for motivational factors that lead individuals to participate in high school athletics.

The research question “What are individual’s motivational factors to participate in high school athletics” was asked to all of the 59 participants. The participants were instructed to select

their top two choices for participation, in ranking order, number one being the most important to them.

The selections were 'Parental Influence', 'Fitness', 'Social Aspects/Friends', 'Interest in the sport', 'Affiliation' (e.g., being involved with the sport/team), 'Environment' (e.g., the surroundings or conditions in which the sport is in), 'Skill Mastery' (e.g., the skill or knowledge that makes one master of a subject (sport)), 'To Hopefully Continue Participation at the Collegiate Level' and 'Other'. Out of these nine choices, four of the responses demonstrate the top ranked selections made by participants. 'Fitness' (third choice) and 'Continue to the next level' (fourth choice) were tied at 11 selections each. Five individuals selected 'Fitness' as their number one response and six as their number two (Table 2). 'Continued Participation', on the other hand, had four individuals select it as their number one choice and seven as their number two choice (Table 2). The second most popular response was 'Social Aspects' (Table 2). This amounts to 25 responses overall. A total of six of the contributors made it their number one choice, which meant 19 others selected it as their number two. The highest ranked response was 'Interest in the sport' (Table 2). Of the respondents, 37 selected this as their number one reason to participate in high school athletics. In addition, 12 other individuals made it their second choice.

Table 2

*Motivation for High School Participation*

	Rank Order	Frequency	Percentage
<i>Fitness</i>	1	5	8.5
	2	6	10.2
	3	34	81.3
<i>Continued Participation</i>	1	4	6.8
	2	7	11.9
	3	48	81.4
<i>Social Aspects</i>	1	6	10.2
	2	19	32.2
	3	34	57.6
<i>Interest in Sport</i>	1	37	62.7
	2	12	20.3
	3	10	16.9

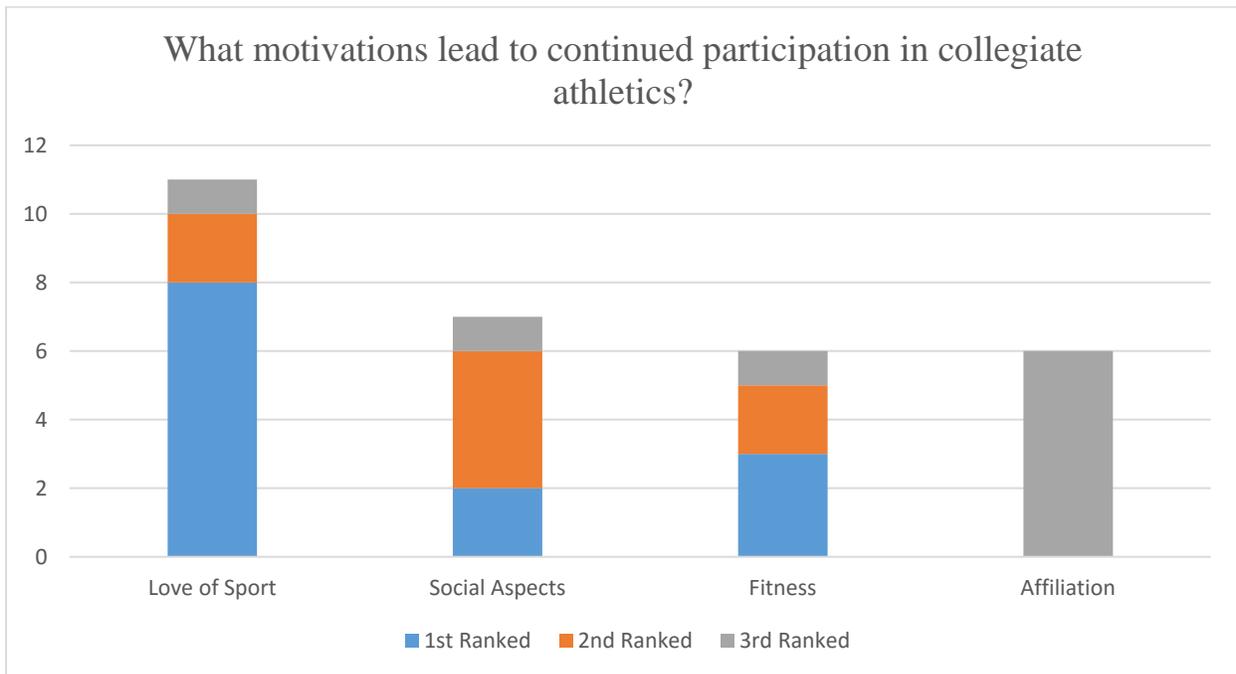
Therefore, it can be concluded that the majority of the students (n=49, 83%) selected ‘Interest in the sport’ as their first or second choice. ‘Parental Influence’, which is not listed on the bar graph above (Figure 2), was the least selected by participants. Only one individual chose ‘Parental Influence’ as a factor in their participation in high school sports.

**Motivations that Lead to Continued Participation in Collegiate Athletics**

The following presents results that address the second research question of the study. “What motivations lead to continued participation in collegiate athletics?”

To be considered an NCAA athlete in this study an individual must currently participate in an NCAA sport at IUP. Club sports do not count for the purpose of this study. The sports that met the inclusion criteria were basketball, football, baseball, cross country, field hockey,

women’s tennis, women’s soccer, track and field, women’s volleyball, women’s lacrosse, softball, men’s golf and cheerleading. These sports are the current NCAA sports offered here at IUP. As indicated in Table 1, 14 (23.7%) indicated they were current collegiate athletes, while 45 (76.3%) students were only former high school athletes. The former high school athletes did not participate in this question. The top four choices were chosen for inclusion and placed in a bar graph for presentation (Figure 3). There are four bars in this figure (Figure 3) to display participant’s top three reasons why they continued participation in collegiate athletics. The figure below demonstrates the participants’ selections within the different categories. The blue represents the number one choice, the most important to the participant, the orange represents the second most important and the grey represents the third most important reason for continued participation.



*Figure 3.* The top 4 rated selections for motivations that lead to continued participation in collegiate athletics.

The selections were 'Parental Influence', 'Fitness', 'Social Aspects/Friends', 'Interest in the sport', 'Affiliation' (e.g., Being involved with the sport/team), 'Environment' (e.g., The surroundings or conditions in which the sport is in.), 'Skill Mastery' (e.g., The skill or knowledge that makes one master of a subject (sport)), 'Academic Reward', 'Love of the Sport' and 'Other'. Of the four selections made, the third and fourth were tied once again. The two selections were 'Fitness' (third) and 'Affiliation' (fourth). 'Affiliation' was selected as the third most important factor in participation for all six of the times it was designated. 'Fitness' had three selections as its number one reason for continued participation, two as its second choice and one as its third. The second most popular choice among the participants was, 'Social Aspects'. It was chosen by participants seven times: one time as the third most important factor, four times as the second and twice as their number one choice overall. 'Love of the sport' was the number one. Overall, it was selected by 11 of the 14 students that are current athletes at IUP. It was chosen eight times as the number one reason, twice as the second and one as the third. This can be interpreted as 78% of the current athletes think 'Love of the Sport' was the main reason for continued participation. (Table 3)

Table 3

*Motivation for Collegiate Sport Participation*

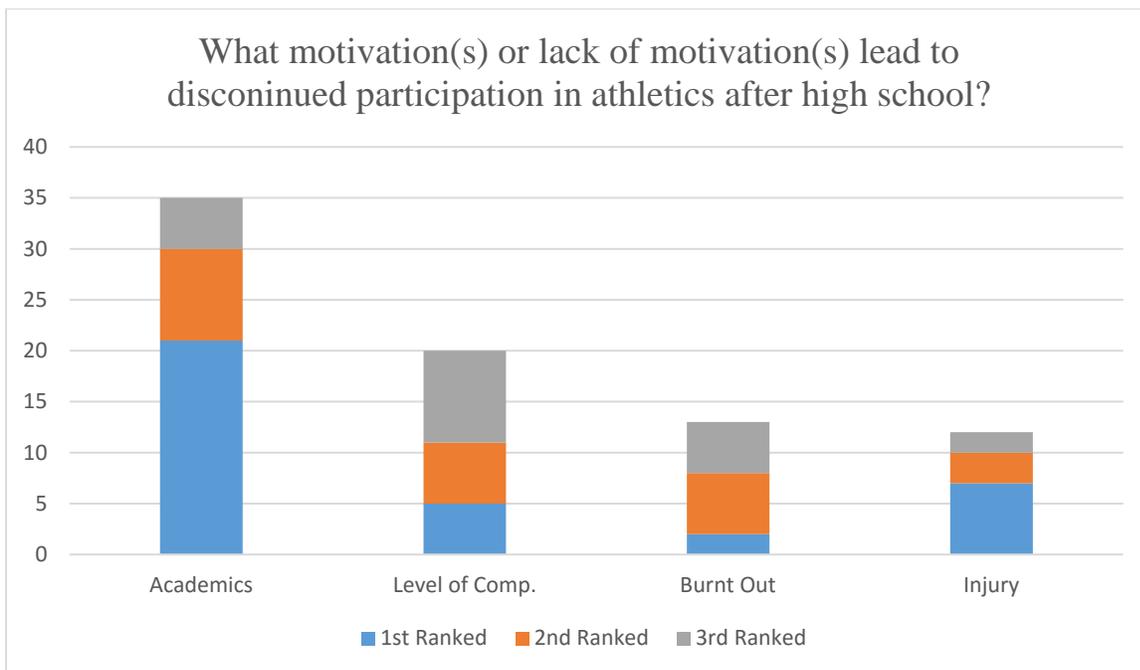
	Rank Order	Frequency	Percentage
<i>Affiliation</i>	1	0	0.0
	2	0	0.0
	3	6	42.9
	4	8	57.1
<i>Fitness</i>	1	3	21.4
	2	2	14.3
	3	1	7.1
	4	8	57.1
<i>Social Aspects</i>	1	2	14.3
	2	4	28.6
	3	1	7.1
	4	7	50.0
<i>Love of the Sport</i>	1	8	57.1
	2	2	14.3
	3	1	7.1
	4	3	21.4

Conversely, when compared to Love of the sport, Environment was the least selected by survey participants. Environment was only selected one time as the third reason to participate in collegiate athletics.

**Motivation(s) or Lack of Motivation(s) That Lead to Discontinued Participation in Collegiate Athletics?**

The following presents results of is the third research question of the study. “What motivation(s) or lack of motivation(s) lead to discontinued participation in athletics after high school?”

Only those who indicated that they were a former high school athletes were included in this analysis (n=45). This is the category the majority of the participants 45 (76.3%) fall into, being former high school athletes, as displayed in (Table 1). There are four bars in this chart to display participant’s top three reasons why the individuals discontinued their participation in athletics after high school. Figure 4 below demonstrates the participant’s selections within the different categories. The blue represents the number one choice, the most important to the participant, the orange represents the second most important and the grey represents the third most important factor.



*Figure 4.* The top 4 rated selections for, motivation(s) or lack of motivation(s) that lead to discontinued participation in athletics after high school.

The selections that were made available to the participants were: ‘To Focus on Academics’, ‘Level of Competition too Great’, ‘Burnt Out on Sport’, ‘Parental Influence’, ‘Injury Would No Longer Allow You to Participate’, ‘Cumulative Injuries Lead to Lack of

Motivation to Participate’, ‘None of Your Friends Play Sports’, ‘Recruited Somewhere but Wanted to Attend IUP’ and ‘Other’.

Again, the top four selections out of the nine made by the survey participants are represented. The fourth ranked selection was, ‘Injury Would No Longer Allow the Individual to Participate in Their Sport of Choice’. This particular selection was chosen 12 times, seven times as the number one factor for discontinued participation, three as the number two choice and two as the third overall selection. The third selection was, ‘Burnt out on Their Sport’ of choice. Two individuals said this for the number one choice, six as their number two and five as their third inclusive selection. The second most designated reason for discontinued participation in athletics was, ‘Level of Competition too Great’. This selection was chosen 20 times. Of those 20, nine being the third ranking reason, six being the second and five being first reason for non-continued participation. The number one ranked reason for non-continued participation was, ‘Focus on Academics’. ‘Focusing on Academics’ was cited for being a reason to stop participation 34 times. An astounding 21 of those times it was chosen as the number 1 reason. It was picked 9 times as the number 2 and 5 times as the number 3. (Table 4)

Table 4

*Motivation(s) or Lack of Motivation(s) for Discontinued Athletic Participation*

	Rank Order	Frequency	Percentage
<i>Injury would no longer allow you to participate</i>	1	7	21.9
	2	3	9.4
	3	2	6.3
	4	20	62.5
<i>Burnt out on Sport</i>	1	2	6.5
	2	6	19.4
	3	5	16.1
	4	18	58.1
<i>Level of competition too great</i>	1	5	14.7
	2	6	17.6
	3	9	26.5
	4	14	41.2
<i>To focus on Academics</i>	1	21	58.3
	2	9	25.0
	3	5	13.9
	4	1	2.8

Selected only three times by participants as a response was ‘Parental Influence’. ‘Parental Influence’ was also the least selected option for the first research question, “what motivations lead you to participate in high school athletics?” Below the frequency table displays the results for ‘Parental Influence’.

In summary, from research question three, one can determine that IUP students who decided after high school to no longer participate in athletics, did so for mainly academic purposes, with all but one individual selecting that as an option. Also illustrated were the lack of

effect parental influence played in the decision making process of individuals who decided to discontinue their athletic careers.

### Total Student Population Means

#### Sport Motivation Scale (SMS-28)

The overall mean for the SMS-28 for males and females was 4.76 and 5.13 for males and females, respectively ( $p = .076$ ). This being their average scores for the Likert scale test. As a result, female students overall, seem to correspond more with the Likert scale questions when it comes to motivation for sport participation. (Tables 5)

Table 5

*Likert Scale Questions SMS-28 Males vs. Females*

Males	Females	$t(57)$	$p$
(n=25) M (SD)	(n=34) M (SD)		
4.76 (.72085)	5.13 (.83672)	-1.810	.076

**Males and Females.** An independent-samples  $t$ -test was calculated comparing the mean score of participants who identified themselves as males to the mean scores of the individuals that identified as females. No significant difference was found between these groups ( $t(57) = -1.810, p > .05$ ). The mean of the males ( $M = 4.76, SD = .72085$ ) was not significantly different from the mean of the females ( $M = 5.13, SD = .83672$ ) (Tables 5)

**Athletes and Non-Athletes.** Overall mean scores of the SMS-28 survey where athletes ( $n = 14$ ) were compared to non-athletes ( $n = 45$ ) using an independent samples  $t$ -test were examined in an attempt to find significance. A significant difference was found between these

groups ( $t(57) = -2.129, p < .05$ ). The mean of the athletes ( $M = 4.58, SD = .90227$ ) was significantly different from the mean of the non-athletes ( $M = 5.13, SD = .74259$ ) (Table 6)

Table 6

*Likert Scale Questions SMS-28 Athlete vs. Non-Athlete*

Athlete	Non-Athlete	$t(57)$	$p$
(n=14) M (SD)	(n=45) M (SD)		
4.58 (.90227)	5.13 (.74259)	-2.129	.038

The result of the Levene’s Test when comparing males vs. females and athletes vs. non-athletes revealed that equal variances could be assumed for both. When comparing male and female students the difference between their motivations were not significant at the .05 level. Conversely, when looking at athletes vs. non-athletes a difference at the  $p < .05$  a significance was found ( $p = .038$ ). (Table 6)

**Significant Likert Scale Questions.** With only one of the two research questions being significant at the .05 level (RQ5) individual Likert scale questions were examined to see if any other significance was found. When comparing male and female participants’ responses, two questions were found to be significant at the  $p = .05$  level. (Tables 7)

Table 7

*Significant Likert Scale Questions Males vs. Females*

	Gender	N	Mean	Std. Deviation	Std. Error Mean
Because it is absolutely necessary to do sports if one wants to be in shape.	Male	25	3.12	1.943	.389
	Female	34	4.38	1.985	.340
For the satisfaction I experience while I am perfecting my abilities.	Male	25	4.76	1.332	.266
	Female	34	5.74	1.238	.212

Mean gender comparisons were made using independent *t*-test. For the question, “because it is absolutely necessary to do sports if one wants to be in shape” a significant difference between the means was found ( $t(57) = -2.435, p < .05$ ). The mean for the males was significantly lower ( $M = 3.12, SD = 1.943$ ) than the mean for the female group ( $M = 4.38, SD = 1.985$ ). When the same gender comparison was made for the question “for the satisfaction I feel when perfecting my abilities” a significant difference between the means ( $t(57) = -2.895, p < .05$ ) was found. The mean for the males was significantly lower ( $M = 4.76, SD = 1.332$ ) than the mean of the females group ( $M = 5.74, SD = 1.238$ ). (Table 7).

Comparisons were also made using athlete vs. non-athlete affiliations and three questions were found to have a significantly different mean score between the groups.

Using an independent samples *t*-test to compare the mean scores of three separate Likert scale questions between athletes and non-athletes, significant differences were found. For the question, “for the pleasure it gives me to know more about the sport that I practice”; a significant difference between the means was found ( $t(57) = -2.808, p < .05$ ). The mean for the athletes was significantly lower ( $M = 4.07, SD = 1.639$ ) than the mean of the non-athlete group ( $M = 5.33, SD$

= 1.414). As for the Likert scale question, “for the excitement I feel when I am really involved in the activity” a significant difference between means was also found ( $t(57) = -2.793, p < .05$ ). The mean for the athletes was significantly lower ( $M = 5.07, SD = 1.730$ ) than the mean of the non-athlete group ( $M = 6.18, SD = 1.134$ ). For the last Likert scale question (“because it is a good way to learn lots of things which could be useful to me in other areas of my life”), significance was found, ( $t(57) = -2.546, p < .05$ ). The mean for the athletes was significantly lower ( $M = 4.36, SD = 1.151$ ) than the mean of the non-athlete group ( $M = 5.38, SD = 1.353$ ). (Table 8)

Table 8

*Significant Likert Scale Questions Athletes vs. Non-Athletes*

	Are you a current IUP athlete?	N	Mean	Std. Deviation	Std. Error Mean
For the pleasure it gives me to know more about the sport that I practice.	Yes	14	4.07	1.639	.438
	No	45	5.33	1.414	.211
For the excitement I feel when I am really involved in the activity.	Yes	14	5.07	1.730	.462
	No	45	6.18	1.134	.169
Because it is a good way to learn lots of things which could be useful to me in other areas of my...	Yes	14	4.36	1.151	.308
	No	45	5.38	1.353	.202

Therefore, it can be concluded that when comparing overall means scores for males versus females there was no significance found at the  $p=.05$  level. Conversely, when looking at athletes versus non-athletes significance was found at the  $p=.05$  level. In addition to this,

specific questions inside of the Likert scale, were significance at the  $p=.05$  on five different occasions.

### **Additional Findings**

Additional findings were established when looking into the section of, “other” or open-ended. This category was included as an open ended option for individuals that needed it. Most individuals seemed to be covered by the selections made, but not all. In two instances when the question was asked, “What high school sport(s) did you play” two participants used the ‘Other’ category, which is an open-ended section where participants can list sports that weren’t listed. The first individual wrote in Rugby and the second wrote in Water Polo.

The next question that individuals used the ‘Other’ section (open-ended) was, “What motivations or lack of motivations lead to your discontinued participation in athletics after high school?” This particular option was used 6 times by 6 separate individuals (each response in quotations is by a separate individual). The first being, “No help being recruited”, “Coaches”, “My coach was an A\*\*hole”, “Transferred 3x and did not know what I was doing with my life”, “Stopped playing because of going to school” and “Not offered at IUP”.

In conclusion, all of these factors need to be taken into account as reasons why participation was stopped after high school sports. An athletic administrator could look at these results and see coaches seem to play a negative role in a few cases. Something to keep in consideration moving forward.

## CHAPTER V

### DISCUSSION

#### **Summary of the Study**

Deci & Ryan (2000) developed the Self-Determination Theory. This theory is based on the idea that an individual has three psychological needs that promote motivation. These needs are, 1) Autonomy, or the need to feel self-dependent on the activity; 2) Competence, or the need to experience mastery of the activity; and 3) Relatedness, or the need to experience social interactions from the activity (Deci & Ryan, 2000). The theory suggests that a person is more motivated to participate in an activity when one or more of the psychological needs are met (Lox, Martin-Ginis, & Petruzzello, 2006). This ideal as a whole can be assumed as a solid representation of why individuals participate in athletics at a Division II university. Motivation has been defined as, the intensity and direction of effort (Weiss & Ferrer Caja, 2002). This “direction of effort” is the main piece of this study. Taking a retrospective viewpoint on what motivations lead to the individuals’ initial and continued participation in athletics.

The sport industry is forever changing and will continue to change year in and year out. This study took a specific viewpoint at the topic of participation. This viewpoint being, a retrospective one. The primary reason for this research was to give an updated and more in-depth look at Indiana University of Pennsylvania students’ motivations for their participation in high school sport, continued sport into college or why they stopped their involvement in athletics after high school. Extensive research has been done on sport motivation and sport participation, however, only a few studies have been done from the retrospective viewpoint and even less with current college students who are either still actively involved in their sport or just recently

removed. This study provides practical information about the motivations for participation and rational of the individuals who stopped.

Initial participants of this study were 75, but only 59 of those participants met the inclusion criteria and provided useful data (25 males and 34 females). In addition to this, the participants were separated into athlete and non-athlete categories (45 non-athletes and 14 athletes).

### **Hypotheses Results**

*Five a priori* hypotheses were formed based on five research questions of the study.

1. Affiliation in the sport itself will be the largest motivation for participation, followed by Social aspects/friends.
2. The highest motivation for continued athletic participation will be financial gain, followed by affiliation with a team.
3. The main lack of motivation will be wanting to focus on academics, followed by level of competition.
4. Males will score higher on the SMS-28 survey than females, when looking at motivation for athletic participation.
5. Collegiate athletes will score higher on the SMS-28 survey than former high school athletes.

#### **Hypothesis One**

The first hypotheses predicted that, 'Affiliation in Sport' would be the largest motivation to participate in high school sports, followed by Social 'Aspect/Friends'. Participants were asked to answer a descriptive question about their motivations for participation. "What were the 2 main reasons you participated in high school sports?" They were instructed to select 2 of the available

options and put them in ranking order. The results indicated that the top selected choice was, 'Interest in sport', followed by 'Social Aspects'. Therefore, the data does not support the initial hypotheses and the research failed to reject the null-hypotheses. Even though the second preliminary selection was correct, the entire hypotheses was not.

### **Hypothesis Two**

The second hypothesis of the study anticipated that the highest motivation for continued athletic participation would be 'Financial Gain', followed by 'Affiliation with a Team'. Participants were asked "What motivations lead to your continued participation in collegiate athletics?" This specific question was only answered by those who indicated that they were current IUP NCAA athletes, unlike the first question, which was answered by all participants in the research study. They were instructed to select three of the available options and again asked to put them in ranking order. The results indicated that social aspects were the second most popular choice, followed by, love of the sport. Concluding, that current IUP NCAA athletes think social aspects and love of their current sport to be the main reasons they continued participation in athletics. These results indicate that the primary investigator failed to reject the null-hypotheses.

### **Hypothesis Three**

The third hypothesis of the study predicted that the main lack of motivation will be wanting to 'Focus on Academics', followed by 'Level of Competition'. Participants were asked "What motivations or lack of motivations lead to your discontinued participation in athletics after high school?" Again, this question was not asked to all respondents of the survey. This question was only asked and answered by the individuals categorized as, non-athletes. They were

also instructed to select three of the available options and again asked to put them in ranking order. The results exhibited that 'Focus on Academics' was the number two choice for discontinued participation, followed by 'Level of Competition'. These findings support the initial prediction by the primary investigator. The results show a rejection of the null-hypothesis.

#### **Hypothesis Four**

The fourth hypotheses in this study was, that males will score higher on the SMS-28 survey than females, when looking at motivation for athletic participation. Participants were asked to answer 28 questions of the SMS-28 using a 1 through 7 Likert. These questions were asked of all participants. Results indicated among to 59 respondents that females scored higher on the SMS-28 survey than males; however this difference was not significantly different between the groups ( $t(57) = -1.013, p > .05$ ). The mean of the males ( $M = 4.3172, SD = .78916$ ) was not significantly different from the mean of the females ( $M = 4.5355, SD = .83777$ ). This resulted in an inability to reject the null-hypothesis.

#### **Hypothesis Five**

The fifth and final hypothesis was that collegiate athletes will score higher on the SMS-28 survey than former high school athletes. Results showed that non-athletes scored higher the SMS-28 survey than current athletes. Consequently, significance was found between the groups ( $t(57) = -2.129, p < .05$ ). The mean of the athletes ( $M = 4.58, SD = .90227$ ) was significantly different from the mean of the non-athletes ( $M = 5.13, SD = .74259$ ). The results indicated the inability to reject the null-hypothesis.

## Conclusion

Overall, the results of this research suggested that motivations for participation in athletics predominantly fell into a few categories. For instance, 'Interest in Sport', was the overwhelming number one selection for research question one. 'Love of the Sport' also had similar results for research question number two and to 'Focus on Academics' for research question number three fell in line as well. This shows, while there were other motivations, the participants seemed to have similar feelings towards specific options in all of the first three research questions.

As for the SMS-28 (research questions 4 & 5), the results indicated that males and females did not have a significant difference in their overall mean scores when looking at motivations to participate in athletics, indicating that even though males and females play different sports or are in different social groups, their motivations for sport are closely related. In opposition, for athletes and non-athletes, significance was found in the mean scores.

Also, when looking at a few particular questions out of the Likert scale, significant differences were found. A total of 5 Likert scale questions were found to have significance at  $p=.05$  level.

For those reasons, this study should be applied to provide information to further advance the sport industry as a whole. In addition to this, an application can be made when looking at motivations to participate in athletics for both males and females and also current and former athletes alike.

The results obtained from this study cannot be generalized to all males and females, former and current NCAA athletes as it only includes results from students currently in the

Department of Kinesiology, Health and Sport Science at Indiana University of Pennsylvania.

Another limitation of this study was the small sample size.

### **Directions for Future Research**

It is recommended that future researchers focus on motivational factors for athletic participation in male and female groups. Additionally, it is suggested that more research be conducted to examine the reasons for continued and discontinued participation in sport. A larger sample size from a variety of NCAA institutions is recommended. Previous studies analyzed cross-sectional viewpoints, along with different age ranges, therefore it is recommended to research other age ranges and to also use different research methods. Furthermore, it is not recommended to conduct research online as response from participants is difficult and sometimes not evenly distributed when conducting research investigating gender differences or when comparing athletes to non-athletes.

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## Appendix A

### Cover Letter

You are invited to participate in this research study because you are a student at Indiana University of Pennsylvania. The following information is provided in order to help you to make an informed decision whether or not to participate. If you have any questions, please do not hesitate to ask.

The information will be recorded with the use of Qualtrics, which is IUP's Online Surveying System. The survey will be sent via email to any active student in the KHSS department or select groups of student athletes across IUP. The main purpose of this research is to distinguish the motivational differences in sport participation at the collegiate level between, male and female athletes and non-athletes. Participation in this study will include completion of a 34 question survey on motivational factors. This questionnaire will take approximately 10 minutes to complete. The survey itself will include 8 demographic questions, 28 Likert scale questions from the Sport Motivation Scale (SMS-28) and 3 ranking questions that will allow the individual to select a specified number of answers. If "other" is selected, the participant will have the option to also answer in an open ended style. The answers in this questionnaire will be kept completely anonymous along with the results. To only be reviewed by the primary and co-investigator of the study.

Participation in this study is entirely voluntary and you can choose not to participate or withdraw at any time. If an individual chooses to participate, all of the collected information will be confidential and will not have any effect on your admittance or academic standing at IUP. The names of the participants will not be released at any time during or after the conclusion of this study. There will be no compensation for the participation in this study and all

questionnaires will be safety kept in a file only to be accessed by the primary and co-investigators. There is no adherent risk to participation in this study and by completing the survey you are giving consent.

Thank you for your time and support in the efforts to expound upon this research.

<p>Primary Investigator: Mr. Nick Raymond Graduate Student in Kinesiology, Health and Sport Science Office: Zink 235 Indiana University of Pennsylvania Indiana, PA 15701 E-mail: <a href="mailto:MNLR@iup.edu">MNLR@iup.edu</a> Phone: 724.549.1981</p>	<p>Co-Investigator: Dr. Richard Hsiao Professor of Kinesiology, Health, and Sport Science Office: Zink 114 Indiana University of Pennsylvania Indiana, PA 15701 E-mail: <a href="mailto:HSIAO@iup.edu">HSIAO@iup.edu</a> Phone: 724.357.0123</p>
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This project has been approved by the Indiana University of Pennsylvania Institutional Review Board for the Protection of Human Subjects (Phone: 724/357-7730).

## Appendix B

### Sport Motivation Survey

1. Are you between the ages of 18 to 23? Select Yes or No.
  - Yes
  - No (this response will take participant to the end of the survey)
2. Have you every participated in a High-School Varsity Sport(s)? (AAU or other similar applications are included)
  - Yes
  - No (this response will take participant to the end of the survey)
3. Select your gender
  - Male
  - Female
4. Ethnicity origin (or Race): Please specify.
  - White
  - Hispanic or Latino
  - Black or African American
  - Native American or American Indian
  - Asian / Pacific Islander
  - Other
5. Select your grade level.
  - Freshman (Fewer than 30 credits)
  - Sophomore (30-59 credits)
  - Junior (60-89 credits)
  - Senior (90+ credits)
  - Graduate

6. What sports did you play?

Sport	Choices
<input type="checkbox"/>	<input type="checkbox"/>
<input type="checkbox"/> Basketball	<input type="checkbox"/> Track and Field
<input type="checkbox"/> Football	<input type="checkbox"/> Wrestling
<input type="checkbox"/> Baseball	<input type="checkbox"/> Volleyball
<input type="checkbox"/> Cross Country	<input type="checkbox"/> Lacrosse
<input type="checkbox"/> Field Hockey	<input type="checkbox"/> Swimming and (or) Diving
<input type="checkbox"/> Tennis	<input type="checkbox"/> Softball
<input type="checkbox"/> Soccer	<input type="checkbox"/> Golf
<input type="checkbox"/> Hockey	<input type="checkbox"/> Cheerleading (Spirt Squad)
<input type="checkbox"/> Other	

7. What were the 2 main reasons you participated in high school sports? Select 2 in ranking order. The number 1 being most important. (Rank order item)

- Parental Influence
- Fitness
- Social Aspects/Friends
- Interested in the Sport
- Affiliation (Ex. Being involved with the sport/team)
- Environment (Ex. The surroundings or conditions in which the sport is in.)
- Skill Mastery (Ex. The skill or knowledge that makes one master of a subject (sport))
- To hopefully continue participation at the collegiate level
- Other, \_\_\_\_\_

8. Are you a current NCAA IUP athlete? (Club sport participation at IUP does not count as an NCAA IUP Athlete for the purposes of this research). If your answer is “No”, then skip question 9.

- Yes
- No

9. What sports do you participate in?

Sport	Choices
<input type="checkbox"/>	<input type="checkbox"/>
<input type="checkbox"/> Basketball	<input type="checkbox"/> Track and Field
<input type="checkbox"/> Football	<input type="checkbox"/> Women's Volleyball
<input type="checkbox"/> Baseball	<input type="checkbox"/> Women's Lacrosse
<input type="checkbox"/> Cross Country	<input type="checkbox"/> Swimming and (or) Diving
<input type="checkbox"/> Field Hockey	<input type="checkbox"/> Softball
<input type="checkbox"/> Women's Tennis	<input type="checkbox"/> Men's Golf
<input type="checkbox"/> Women's Soccer	<input type="checkbox"/> Cheerleading

10. What motivations lead to your continued participation in collegiate athletics? Select 3 in ranking order. The number 1 being most important. Then select in ascending order. (If you are not an NCAA IUP athlete, select N/A)

- a. Parental Influence
  - Fitness
  - Social Aspects/Friends
  - Interested in the Sport,
  - Affiliation (Ex. Being involved with the sport/team)
  - Environment (Ex. The surroundings or conditions in which the sport is in)
  - Skill Mastery (Ex. The skill or knowledge that makes one master of a subject (sport))
  - Academic Reward
  - Love of the Sport
  - Other, \_\_\_\_\_
  - Not Applicable

**THE SPORT MOTIVATION SCALE (SMS-28)**

**WHY DO YOU PARTICIPATE IN SPORT?**

Using the scale below, please indicate to what extent each of the following items corresponds to one of the reasons for which you are presently practicing your sport.

Does not Correspond At all	Corresponds a little	Corresponds moderately	Corresponds a lot	Corresponds exactly		
1	2	3	4	5	6	7

**WHY DO YOU PRACTICE YOUR SPORT?**

1. For the pleasure I feel in living exciting experiences. 1 2 3 4 5 6 7
2. For the pleasure it gives me to know more about the sport that I practice. 1 2 3 4 5 6 7
3. I used to have good reasons for doing sport, but now I am asking myself if I should continue doing it. 1 2 3 4 5 6 7
4. For the pleasure of discovering new training techniques. 1 2 3 4 5 6 7
5. I don't know anymore; I have the impression of being incapable of succeeding in this sport. 1 2 3 4 5 6 7
6. Because it allows me to be well regarded by people that I know. 1 2 3 4 5 6 7
7. Because, in my opinion, it is one of the best ways to meet people. 1 2 3 4 5 6 7
8. Because I feel a lot of personal satisfaction while mastering certain difficult training techniques. 1 2 3 4 5 6 7
9. Because it is absolutely necessary to do sports if one wants to be in shape. 1 2 3 4 5 6 7
10. For the prestige of being an athlete. 1 2 3 4 5 6 7
11. Because it is one of the best ways I have chosen to develop other aspects of myself. 1 2 3 4 5 6 7
12. For the pleasure I feel while improving some of my weak points. 1 2 3 4 5 6 7
13. For the excitement I feel when I am really involved in the activity. 1 2 3 4 5 6 7
14. Because I must do sports to feel good myself. 1 2 3 4 5 6 7
15. For the satisfaction I experience while I am perfecting my abilities. 1 2 3 4 5 6 7
16. Because people around me think it is important to be in shape. 1 2 3 4 5 6 7
17. Because it is a good way to learn lots of things which could be useful to me in other areas of my life. 1 2 3 4 5 6 7
18. For the intense emotions I feel doing a sport that I like. 1 2 3 4 5 6 7
19. It is not clear to me anymore; I don't really think my place is in sport. 1 2 3 4 5 6 7
20. For the pleasure that I feel while executing certain difficult movements. 1 2 3 4 5 6 7
21. Because I would feel bad if I was not taking time to do it. 1 2 3 4 5 6 7
22. To show others how good I am good at my sport. 1 2 3 4 5 6 7
23. For the pleasure that I feel while learning training techniques that I have never tried before. 1 2 3 4 5 6 7
24. Because it is one of the best ways to maintain good relationships with my friends. 1 2 3 4 5 6 7
25. Because I like the feeling of being totally immersed in the activity. 1 2 3 4 5 6 7
26. Because I must do sports regularly. 1 2 3 4 5 6 7
27. For the pleasure of discovering new performance strategies. 1 2 3 4 5 6 7
28. I often ask myself; I can't seem to achieve the goals that I set for myself. 1 2 3 4 5 6 7

29. What motivations or lack of motivations lead to your discontinued participation in athletics after high school? Select 3, the number 1 being most important. Then select in ascending order. (If you are a former high school or NCAA IUP athlete, fill out question below. If you are a current NCAA IUP athlete, select N/A to conclude the survey)

- To focus on academics
- Level of competition too great
- Burnt out on sport
- Parental Influence
- Injury would no longer allow you to participate
- Cumulative injuries lead to lack of motivation to participate
- None of your friends play sports,
- Recruited somewhere, but wanted to attend IUP
- Other, \_\_\_\_\_
- Not Applicable

## Appendix C

### Follow-Up Email

Dear student,

This is a reminder that you can still participate in the study concerning the motivational factors for athletic participation. The questionnaire will take approximately 10 minutes to complete.

To those who have not completed the questionnaire, if you wish to participate in the study, please click the link below. Participation is completely voluntary. You can choose to not participate in the study by simply deleting this email. All information collected will remain confidential and will not have any effect on your attendance or participation in academics or sport at IUP. All electronic data will be safely stored on a secure, password protected server. Only the primary investigator and co-investigator of the study will have access to the data. Your response will add valuable information in the topic of sport motivation.

If you have any questions, please do not hesitate to contact the primary investigator or co-investigator of the study. **THIS PROJECT HAS BEEN APPROVED BY THE INDIANA UNIVERSITY OF PENNSYLVANIA INSTITUTIONAL REVIEW BOARD FOR THE PROTECTION OF HUMAN SUBJECTS (PHONE 724.357.7730).**

If you are interested in participating in this study, please click the following link: \_\_\_\_\_

Primary investigator:

Nick Raymond  
Graduate Assistant, Sport Management  
Indiana University of Pennsylvania  
Phone: 724-549-1981  
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Co-Investigator:

Dr. Richard Hsiao  
Professor  
Indiana University of Pennsylvania  
Phone: 724-357-0123  
Email: hsiao@iup.edu

Thank you for your time and participation!

Sincerely,

Nick Raymond  
Graduate Assistant, Sport Management  
Indiana University of Pennsylvania

This project has been approved by the Indiana University of Pennsylvania Institutional Review Board for the protection of human subjects (Phone 724.357.7730).