

Forced Retirement: The Effects of Ending Participation in Elite Collegiate Sport

by

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I dedicate this research to my teammates. Without their passion, commitment, and unequivocal fitness endurance, none of this would have been possible. I love you all.

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ABSTRACT

Every elite intercollegiate student-athlete will face a forced retirement upon the ending of their NCAA career eligibility. It is hypothesized that many elite athletes identify as having strong and exclusive athletic identities. Identifying strongly or solely as an athlete may potentially make transitioning out of elite formal sport extremely difficult. Limited research has been conducted on the transitional experiences of team and individual sport athletes. The following research conducts a mixed-methods approach to analyze the retirement process and experiences of elite collegiate student-athletes. These findings build a foundation to further explore elite student-athlete's transitional experiences and creates a quantitative direction to move towards. Elite student-athletes experience transitional effects upon exit from formal sport while also using various coping mechanisms to acclimate to new identities and roles the stronger their identity is tied to athletic performance.

Keywords: forced retirement, athletic identity, transitioning, elite collegiate sport

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CHAPTER ONE

INTRODUCTION AND REVIEW OF LITERATURE

Very little research has studied the effects of no longer participating in elite athletics. Elite college athletes undergo abrupt endings of participation due to exhausting their NCAA eligibility and upon graduating college. The present research examines the transitional effects upon forced retirement to see if positive and/or negative experiences occur during this passage of time and role transition.

There are several interesting questions pertaining to the termination of college athletic participation. By researching this topic, I plan to answer questions such as: Is mental or physical conditioning likely to be lost upon termination? Are these conditioning losses likely to be noticeable or regretted by athletes post-participation? Might this transition be experienced as “traumatic” rather than just stressful or anxiety-provoking and possibly deemed as “Post-participation Stress Disorder?”

Identity issues and crises may play a crucial role in understanding the effects of forced retirement from formal participation and subsequent life goals following termination (Brewer, Van Raalte, & Linder, 1993; Webb, Nasco, & Riley, 1998; Werthner & Orlick, 1986). I also plan to answer identity-related questions such as: “Now who am I?” (finding and understanding new self-perceptions and identity elements such as changes in identity status); Are there effects of college graduation on students’ identities (role transitions)? Are there forced disruptions to identity due to age and time? Is there an inability to control thought processes due to rumination about participation and team as well as an inability to stop thinking about one’s playing days?

Review of Literature

The purpose of this literature review is to inspect contemporary research that examines the study of elite collegiate athletes transitioning out of formal sport as well as providing a strong base of knowledge for this area of study. I begin by including a short history of collegiate sports and the associated traits ascribed to collegiate athletes. A discussion of athletic identity will follow this brief introduction and the potential aftereffects related to the development of that identity. Next, I review research on termination from formal sport including studies pertinent to student-athletes and the intervention techniques implemented by collegiate institutions before and during this crucial transitory period. Lastly, I conclude this literature review by summarizing current research and exploring the possibilities this study has in overcoming present limitations and filling existing gaps in research on elite athletic identity and the transitional effects from exiting formal sport.

Beginnings of Sport

The beginnings of organized collegiate sport were founded in part by collegiate students seeking an organized athletic outlet. Backed by institutions of higher learning, the creation of organized sport contributed to the transition out of isolated academic institutions to the bridging of a national collegiate awareness (Lewis, 1970). Researchers have carried out systematic and formal inquiry towards the question of why individuals naturally and routinely participate in athletic events and sport. Physical contests date back roughly to the Upper Paleolithic period as witnessed by cave paintings depicting sprinting and wrestling (Capelo, 2010). Researchers generally believe that our participation in sport generates from our basic need of social and physical interaction.

Although ancient sport stems from Sumerian, Grecian, and Egyptian foundations, it is believed that modern sports are of Western origins. Whannel (2005) states, “We invented the majority of the world's great sports. 19th century Britain was the cradle of a leisure revolution every bit as significant as the agricultural and industrial revolutions we launched in the century before” (p. 72).

From our extensive ancestral sporting roots, organized sport created the ability to achieve success on the highest socially desirable collegiate platform for budding adolescents. Collegiate athletic rivalry brought about a rich student body life and simultaneously set the stage to further academic development, intellectual sparring, and great pride in one’s institution. Factors of competition, winning, moral improvement, and status came to the forefront of social life once again and have continued to grow exponentially (Lewis, 1970).

Athletic Identity

The majority of collegiate athletes begin playing organized sport at a young age. Due to these early athletic beginnings, a strong athletic identity is usually developed and continuously grows throughout the playing years. Brewer (1991), a leading investigator on identity, defines athletic identity as, “The degree to which an individual identifies with the athlete role. This cognitive structure, or self-schema, guides and organizes the processing of self-related information” (p. 237). These structures and constructs help to determine the best coping strategies when athletes eventually face inevitable career endings as well as potential injuries (Brewer et al., 1993).

Horton and Mack (2000) conducted research on athletic identity in marathon runners to find whether their identities served as functional foci or a dysfunctional commitment. A standardized measure of athletic identity was used to conduct research on elite athletes

transitioning out of formal sport. The researchers found no evidence of an association between high athletic identity (AI) and neglect of other important areas of life in order to fulfill this strong athletic role.

In Horton and Mack's (2000) study, marathon runners experienced negative effects due to strong athletic identity as well as financial difficulties, lessened occupational productivity, and a noticeable increase in susceptibility to illness. Marathon runners also indicated that they had less time to socialize with family and friends that were not involved in running. This lack of socialization led to increased feelings of isolation. Although there were some negative effects, this study challenged the belief that athletic identity is an unsatisfactory component of an athlete's self-concept. Athletes who participated in this study gained more positive attributes than disadvantages. Horton and Mack concluded that possessing a strong athletic identity was not harmful to participants, as they did not solely identify themselves as an athlete, and thus possessing a strong athletic identity did not hinder other important aspects of their identities and lives.

Cognitive factors of intellectual development (Perry, 1999) and moral development (Kohlberg, 1984) as well as social constructs influence the level of athletic identity instilled within an athlete. Family, friends, and coaches further influence these aspects and the degree to which an athlete identifies with this role. Athletes who identify more strongly with their athletic role may have a harder time transitioning out of formal sport (Pascarella & Smart, 1991).

There are positive characteristics associated with possessing a strong athletic identity. Brewer et al. (1993) found that both male and female athletes stated having high self-confidence, the ability to achieve and maintain physical acuity, and successful engagement in an active social life. There were also positive connections of athletic identity linked to interpersonal and

leadership skills, college satisfaction, social involvement, and motivation to successfully complete a degree compared to non-athlete peers.

Howard-Hamilton and Sina (2001) researched the impact of having a strong athletic identity for male and female student-athletes in relation to the development of their identities as a whole. The researchers studied the formation of athletic identities and the skill level required of elite athletes to successfully complete tasks involving developmental exercises associated with the college experience. Their study focuses on student development theory involving transition and the subsequent impact of student-athletes possessing a strong athletic identity in the areas of psychosocial and cognitive development.

A strong athletic identity can be hazardous when student-athletes statically define themselves as just an athlete. In order to compete as a top performer, it is nearly impossible to possess any other solid identity (Werthner & Orlick, 1986). Due to focus on one's athletic identity, it is common for elite athletes to shirk other necessary and prominent areas of life (Brewer et al., 1993; Horton & Mack, 2000). Over-identification with the role of an athlete (Adler & Adler, 1991) can lead to atrophy in other social roles, the neglect of higher education, and a lack of pursuing alternatives beyond the athletic circle (Baillie, 1993; Murphy, Petitpas, & Brewer, 1996). Crystallized commitment to an athletic identity can create dysfunctional performance that can be seen in overtraining, anxiety outside of practices, and the increased potential for use of performance enhancing drugs (Horton & Mack, 2000). Over-committing to the role of an elite athlete can also hinder the critical development of a "multidimensional self-concept" (Brewer et al., 1993) that is necessary in healthy identity transition (Horton & Mack, 2000).

Ogilvie and Howe (1986) found that elite athletes who solely identify as athletes develop a singularly identified self that lacks a complex nature; this identity can make them apt to suffer from depression following spontaneous or stressful situations (Brewer et al., 1993). Possessing high versus low “self-complexity” allows for the maturation of a more fluid self as well as the ability to create a barrier between high-stress situations and the subsequent risk of potential depression (Brewer et al., 1993; Horton & Mack, 2000). Social adaptation difficulties arise when athletes define themselves to only an athletic circle. These role-restrictions (Brewer et al., 1993) cause obstacles when exiting the sporting environment and cause great difficulty when inevitably transitioning into other social circles and environments (Ogilvie & Howe, 1986).

In summary, research on athletic identity emphasizes the potential hazards associated in possessing a strong athletic identity. Transitioning out of elite collegiate sport varies for each student-athlete. Studies suggest the stronger and more crystallized an elite athlete’s athletic identity, the more difficult transitioning out of formal sport may potentially be.

Athletic Identity and Transition from Formal Sport

Alfermann (2000) builds upon previous studies that focus on the elite athlete transitioning out of formal sport. She covers two main areas of study that focus on the continued social development of athletes following transition out of sport and the psychosocial processes that occur during and after retirement. This study focuses on future life satisfaction and the necessary transitions involved in securing occupational success following athletic participation. She proposes that elite athletes usually undergo positive adjustment following the transition out of formal sport. Overall, elite athletes are as equally successful as their non-athlete peers socially and occupationally following a complete exit from formal sport.

Alfermann's (2000) research states that many athletes positively adapt to life after elite participation in sport. However, Wylleman (1995) found that 15% of elite athletes grappled with the transition following retirement. Participants stated they experienced rigorous adjustment issues including psychological distress and feelings of powerlessness. Although the majority of studies suggest that only a small representation of elite athletes encounters issues after exit from formal sport, it is critical to examine the possible consequences of not successfully or fully transitioning out of elite collegiate athletics. These possible consequences will be the focal issue to be analyzed in this thesis.

Identifying the relationship between the transition from formal sport to career and the strength of identification with the role of elite athlete is vital to successfully transitioning (Petitpas et al., 2002). Researchers are currently exploring this transitory topic; however, most of the current and past literature primarily focuses on the involvement of professional male and female athletes (Brewer et al., 1993; Brewer, Mignano, Van Raalte, 2006). Studies on transition, participation, and the experiences of male and female elite athletes (Lavalley, Gordon, & Grove 1997; and Webb et al., 1998) weighed the influence of maintaining a firmly held sense of athletic identity and the impact this strong identity may have on the role transition into a quality career.

In summary, research centered on athletic identity is of specific interest to understanding the intersection between the role of student-athlete and the transition from elite sport to career. The ability to transition into another strong identity through occupational pursuits, family, or community involvement is vital to a successful role change.

Positive Transitions from Formal Sport

Past research has suggested that there can be both positive and negative effects of transitioning out of formal sport. In this section, I highlight some of the major positive transitions

that might occur. For example, Kerr and Dacyshyn (2000) stated that upon the transition out of formal sport, many elite athletes express relief and excitement towards future opportunities to branch out into new roles and life experiences. Allison and Meyer's (1988) study indicated that more than 50% of participants expressed comfort and solace in the fact they were retiring from formal competition, while 75% of elite athletes participating in Sinclair and Orlick's (1993) study specified that exit from competition positively altered their lives.

As I noted earlier, Brewer et al. (1993) stated that it is common for many elite athletes to have a positive transition out of formal sport and inevitably the majority of elite athletes do make this critical transition successfully. The positive transition population of elite athletes significantly differs from negatively adjusted athletes due to their reinforced "high-complexity" self (Brewer et al., 1993). Elite athletes with multi-dimensional identities seem to experience smoother role transitions compared to elite athletes with unidimensional identities (Brewer et al., 1993; Werthner & Orlick, 1986). Brewer et al., (1993) stated that possessing a strong yet unimpeded athletic identity is psychologically advantageous.

Elite athletes who undergo positive transitions upon retirement apply coping strategies of acceptance with the help of support services, role transition with the help of career planning services, and actively work towards social and emotional growth (Grove et al., 1997). Gaining a new focal point and staying connected to sport, through coaching or competing in an intramural league, can notably ease an elite athlete's transition from formal sport (Horton & Mack, 2000).

Negative Transitions from Formal Sport

In contrast to successful transition from formal sport, the forced retirement process can be an arduous and daunting phase of emotional hardships and intense psychological adaptation for elite athletes. McLaughlin (1981) argued that athletic retirement is a strenuous experience, one

that prompts varying levels of physical and psychological stress. Werthner and Orlick (1986) found that most athletes experienced a certain degree of strain when transitioning out of formal sport. Webb et al. (1998) stated that 50% of participants described retirement as a stressful or negative experience when exiting sport.

Individuals who identify solely as athletes may be hindered in the process of developing a beneficial and positive plan of action upon exit from sport, thus needing more resources and time to attain psychological adjustment (Brewer et al., 1993; Grove et al., 1997). By excluding all other roles, athletic identity becomes inflexible and damaging to an individual's outlook and self-concept (Brewer et al., 1993; Horton & Mack, 2000). Webb et al. (1998) also suggest that an athlete's transition out of sport involving an involuntary retirement is the most difficult due to a forced ending that has yet to be closely explored.

When an elite student-athlete's playing career ends beyond his or her will, it is deemed a forced retirement. Involuntary retirement is an unanticipated exit in which the athlete's collegiate career is inevitably terminated due to the exhaustion of eligibility, career-ending injury, or lack of financial resources to continue on professionally. These kinds of retirements are mainly experienced in women's collegiate sports as the chances of going professional are slim to none (Blinde & Stratta, 1992; Webb et al., 1998).

Forced retirement lessens an elite athlete's all-inclusive feelings of control over his or her life. Webb et al. (1988) found that participants' overall impressions of whether they have leverage over life's outcomes negatively affects their perception of efficacy and control, as well as abating their capacity to manage with defeatist life events. Forced retirement is usually not successfully anticipated without mental preparation and support. Therefore, elite collegiate athletes who are forced to retire may be less prone to contemplate and understand how life will

be altered following exit from sport, in contrast to elite athletes who intentionally choose to leave formal sport behind. Thus, many collegiate athletes may face an inevitable forced retirement from elite collegiate sport rather than a “natural” retirement from elite professional sport. Physical and mental challenges ensue due to this perceived loss of control and the plethora of changes that follow forced retirement from elite sport.

In summary, negative transition out of formal sport, such as the experiences associated with forced retirement, is potentially the most difficult transitory aspect for elite student-athletes to overcome. Further research is necessary in examining the strain of transition out of formal participation in association with the experienced negative effects.

Challenges after Termination of Participation

Elite athletes dedicate a significant majority of their life to sport and, in doing so, fall behind non-student-athlete peers in forming career goals and social networking outside of sport (Pritchard & Funk, 2010). Werthner and Orlick (1986) observed a deficiency of occupational experience in their study sample, indicating that these elite athletes frequently relinquished their school’s summer, winter, and spring breaks in pursuit of maximum success and preparation in their respective sport rather than building job experience and non-athletic networking. Due to rigorous year-round training, elite athletes are more often than not lacking in vocational skill when pursuing employment post-retirement. Collegiate athletes often feel reluctant to begin life as a “civilian” as they often feel unprepared in social, educational, and vocational areas (Werthner & Orlick, 1986).

In the aftermath of concluding formal sport, many elite athletes wrestle with the realities of post-retirement challenges and struggle to find meaning and new goal attainment in life, as most of their previous pursuits had been confined to sport-related endeavors (Pritchard & Funk,

2010). As a result of poor occupational planning and neglect of life skill training, many elite athletes are unsure of their subsequent purpose and plans after sport. Collegiate student-athletes are often uncertain about how to move forward and succeed from an athletic prowess that is now deemed useless to a society driven by occupational pursuits and experience (Webb et al., 1998).

Retiring elite athletes, upon discarding their athletic identities, must also face the loss of their athletic and social support system (Baillie, 1993). This foundational support system is composed of teammates, coaches, athletic administrators, and fans. With the exhaustion of playing eligibility, all of these crucial entities dissipate and immediately cease to exist (Baillie, 1993). Upon retirement, elite athletes often communicate feelings of solitude and alienation following the termination of formal sport (Blinde & Stratta, 1992; Horton & Mack, 2000).

Another prominent mental obstacle retiring elite athletes must overcome is the loss of regimen and structure. Student-athletes must adhere to a strict routine of class, practice, study, nutrition, and competition to ensure success. On top of this demanding schedule are the requirements set by coaches, professors, and family. With such challenging commitments and the necessity of possessing nearly flawless time management skills, little time and opportunity is left to reflect upon individual pursuits and personal goals (Kerr & Dacyshyn, 2000).

In summary, with the abrupt loss of athletic identity, social support systems, and the shedding of an intensely strict regimen, it comes as no surprise that exit from formal sport gives way to isolation, loss of direction, and possible depression (Stambulova, Stephan, & Jäphag, 2007). Taking both the physical and mental challenges associated with sport retirement into account, it is understandable that many elite student-athletes experience negative transitions out of sport and struggle to build new life goals and relationships post-retirement.

Life Goals after Elite Athletic Participation

It is not uncommon for elite athletes to experience taxing transitions out of formal sport. Researchers continue to study the detrimental effects exit from elite collegiate sport has on the well-being and prosperity of these individuals. Kleiber and Malik (1989) found that elite athletes who underwent a positive transition out of formal sport showed a link to successful undergraduate academic involvement and increased post-retirement life satisfaction as well as increased self-worth. Many researchers have stated the immediate stage following exit from collegiate sport is mentally and emotionally problematic. However, overall life satisfaction is believed to not be irrevocably affected past the initial post-retirement period (Brewer et al., 1993; Webb et al., 1998; Werthner & Orlick, 1986).

Solely identifying as an elite athlete makes an individual's identity rigid and more apt to developing psychological difficulties post-retirement (Brewer et al., 1993). Decades of intense sport involvement cause athletes to undergo identity foreclosure and, in return, can cause crises upon termination of formal sport (Brewer et al., 1993). Elite athletes with exclusive athletic identities are at considerable risk for experiencing psychological disturbance, mental and emotional issues, and diminished self-worth upon conclusion of their athletic careers (Werthner & Orlick, 1986).

Stephan et al. (2003) stated that life satisfaction of elite athletes during transition out of formal sport drops significantly upon the abrupt exhaustion of playing eligibility. Then a strong increase in life satisfaction occurs, followed by a period of stabilization and, lastly, one final increase. Initially, post-retirement, many elite athletes expressed perceiving a void in their life, subsequently followed by an awareness of being in a liminal (transitory) state amid their former

elite athletic identity and their current “civilian” or perceived status as “ordinary” (Werthner & Orlick, 1986). Life satisfaction and anticipated quality of exit from formal sport is a pertinent issue in present-day sport research. Specifically, researchers need to explore how positive and negative experiences of participation in formal sport and transition out of formal sport are analogous to current life satisfaction and the well-being of elite collegiate student-athletes.

Statement of the Problem and Hypotheses

The absence of awareness given to elite student-athletes transitioning out of sport as well as the lack of reflection on the experiences of elite collegiate athletes highlights the necessity for further research (Bradley, 1976). Fogarty and Albion (2014) asked a very important question: Why do certain elite athletes adjust well to life after sport while many other elite athletes struggle immensely with their transition? The need for studies exploring the effects of ending participation in elite sport is significant. Such research can possibly help coaches, athletes, and practitioners to understand the experiences and identity issues regarding elite athletes in navigating occupational transition. Conducting further study could benefit researchers and specialists in advancing more efficient ways to support elite athletes when handling their inevitable retirement from formal sport.

A limited field of research has explored the effects of student-athletes transitioning out of formal sport. The gaps associated between elite athletes’ ending participation and successfully transitioning out of formal sport have yet to be sufficiently researched. Elite intercollegiate student-athletes, unlike professional athletes, ultimately face a forced retirement from formal sport due to NCAA rules concerning eligibility. Student-athletes are granted four playing seasons within their collegiate career and are terminated from formal competition upon the completion of this quadrennial period. These elite athletes must make critical decisions concerning future

endeavors upon graduation and their exit from collegiate sport. One of the most common and perhaps more difficult decisions elite intercollegiate student-athletes face upon forced retirement is the transition into a new identity from the role of an elite athlete. Identity issues play a critical role in understanding the effects of forced retirement from formal participation and subsequent life goals following termination.

The purpose of this study is to employ a quantitative undertaking that investigates the effects of possessing a strong or exclusive athletic identity in association with forced retirement from elite collegiate sport. The research examines the question: Will elite student-athletes that greatly identify with possessing a strong or exclusive athletic identity experience a more difficult transition out of formal sport when faced with forced retirement than student-athletes who possess a weaker or non-exclusive athletic identity? This research also examines the competitive years of elite collegiate athletes to determine the level of difficulty undertaken while transitioning out of elite sport due to one's experiences and challenges while participating in collegiate athletics.

Extensive research has been conducted linking strong athletic identity and the difficulty of transition out of professional competition (Baillie & Danish, 1992; Coakley, 1983; Lally & Kerr, 2005; Sinclair & Orlick, 1993). However, very little research has explored the association between possessing a strong athletic identity and forced retirement from elite collegiate sport. The goal of this research is to close the gap by surveying the experiences of elite collegiate athletes who have previously undergone forced termination from elite sport. By studying identity and transitional issues experienced by student-athletes, athletic departments, NCAA affiliates, and professionals working within higher education can better prepare elite intercollegiate athletes

to handle this critical junction in their lives as well as help them to make the transition out of elite collegiate sport less strenuous and more successful.

Hypothesis 1: The more one's identity is tied to athletic performance, the more difficult the transition out of elite collegiate sport will be. A variety of studies (e.g., (Adler & Adler, 1991) (Baillie, 1993) (Brewer et al., 1993) (Brewer et al., 2006) (Horton & Mack, 2000) (Murphy, et al., 1996) (Werthner & Orlick, 1986)) offer rationale that supports the testing of this hypothesis.

Hypothesis 2: Team sport athletes will have a more difficult transition than individual sport athletes when facing forced retirement from elite sport. There are limitations in justifying this hypothesis in that no previous research, to my knowledge, is available to provide a rationale for this hypothesis and further research must be conducted.

I am predicting team sport athletes will have a more difficult transition than individual sport athletes due to my personal transition upon exiting formal sport. Upon retirement, I was not able to see my teammates every day as I had done for the previous four years. I also underwent a loss of athletic resources and a loss of team structure. I do not believe individual sport athletes experience such a drastic cut-off from athletic resources and team companionship as they are more accustomed to playing in an independent field.

Hypothesis 3: The more stressful one's competitive years were, the easier the transition out of elite collegiate sport will be. Allison and Meyer's (1988) study surveyed professional female tennis players' experiences and perceptions of their competitive years. They found that despite their expectations, the transition out of elite sport was not as traumatic as they may have initially expected based on previous research.

The researchers stated, “Many of the athletes had mixed emotions about their competitive years, and many indicated their first psychological response to retirement was one of relief. Many of the athletes perceived the end of their competitive careers as an opportunity to pursue a new set of roles and experiences that had not been as open or available to them while on the circuit. This is not to say that the athletes did not enjoy many aspects of their competitive days, or that some initial problems of readjustment may not have occurred. Rather, from the perspective of the athletes, retirement and the end to the pressures of the competitive tour opened up alternate avenues of personal investment” (p. 219).

This hypothesis is important in examining the collegiate student-athlete population as they inevitably face a forced retirement whereas the majority of professional athletes’ end elite performance on their own terms and potentially have more time to adequately prepare for retirement. Testing this hypothesis could present opposing results to that of Allison and Meyer’s (1988) study.

Hypothesis 4: Elite athletes will report having a harder time transitioning out of participation when they have not completed the goals they set out to achieve while playing. There are limitations in justifying this hypothesis in that no previous research, to my knowledge, is available to provide a rationale for this hypothesis and further research must be conducted.

I am predicting that elite athletes who have not completed their goals upon retirement will have a more difficult transition due to regret, negative and ruminating thoughts, and unachieved expectations. Coming to college, an elite athlete is usually at the top of their game and accustomed to being the best athlete in their hometown. If they do not garner the same playing time, accolades, or success at the collegiate level, I believe this will cause difficulty and frustration upon forced retirement.

CHAPTER TWO

METHOD

I studied the transitional effects experienced by elite athletes by expanding upon previous literature and measuring associated effects. The experiences and effects examined include: the loss of physical and mental conditioning; depression; anticipatory and coping aspects of termination from formal participation associated with perceptions of career transition; and aspects of resilience that affect one's transition out of participation as well as identity issues and crises. In creating a scale to measure subsequent effects of termination from elite athletics, I employed questions I have created as well as questions from previous scales measuring athletic identity.

For qualitative interview questions, I asked: "What suggestions do you have that may help other high performance athletes with their retirement transitioning process?"; "What suggestions do you have for your institution, athletic association, or coaches regarding athlete retirement (e.g., what they could do to help athletes through the transition)?"; "What suggestions do you have for student-athletes who are about to retire for positively transitioning into a new role/identity upon retirement?" and "How long did it take for you to successfully transition out of collegiate sport?" (see Appendix C-F)

Participants

Survey data were collected from 133 former elite athletes Male = 61 (50.4%); Female = 60 (49.6%) from a university in the NCAA Division I conference in the southeastern U.S. Missing data was not included as the result of participants not answering survey items completely. The President of the Varsity Club, a membership of retired elite collegiate student-athletes, was interviewed and asked to contact, via social media, members of the Varsity Club to

participate in the study. A former elite collegiate student-athlete also contacted, via social media, retired student-athletes to participate in the study. With respect to ethnicity and year in school, 68.9% identified as Caucasian and 50.4% had completed an undergraduate degree. Respondents' age ranged from 20 to 77 ($M = 36.03$, $SD = 13.02$).

Respondents were unevenly split by sport. Women's Soccer ($n = 24$, 17.9%), Women's Basketball ($n = 7$, 5.2%), Men's Basketball ($n = 5$, 3.7%), Women's Tennis ($n = 2$, 1.5%), Men's Tennis ($n = 2$, 1.5%), Football ($n = 37$, 27.6%), Softball ($n = 19$, 14.2%), Baseball ($n = 15$, 11.2%), Women's Golf ($n = 5$, 3.7%), Men's Golf ($n = 1$, 0.7%), Volleyball ($n = 3$, 2.2%), Women's Track and Field ($n = 5$, 3.7%), Men's Track and Field ($n = 4$, 3.0%), and multiple sports ($n = 4$, 3.7%) were all included in this study. These teams represented every team and individual sport at the aforementioned university.

Team sport and individual sport are defined by number of participants, objectives, and the differing ways team sport and individual sport achieve success. Team sports must contain at least two athletes. Team sport athletes' objective is to work together to achieve a win over the opponent. Unlike, individual sport, if team sport is not made up of individually talented and strong athletes, a team will very likely not be successful and lose. Individual sport is a single competing athlete that represents part of the team as a whole. The objective of individual sport athletes is competing with themselves to be better and to beat one or many opponents. Unlike team sport, an individual sport athlete can win; while overall, their team loses. Based upon these definitions, I separated all sports included in this study as either team sport or individual sport (Lorimer and Jowett 2009).

Retired elite student-athletes also provided their employment status. Their employment status ranged from unemployed (5.4%), employed part-time (10.8%), and employed full-time

(83.8%). These teams represented all team sport ($n = 110$, 85.3%) and individual sport ($n = 19$, 14.7%). Four respondents indicated they participated in multiple sports. These four respondents did not state whether their multiple sports were a team sport or individual sport or a combination of both, and were therefore labeled as missing data.

Instrumentation

The Athletic Identity Measurement Scale (AIMS; Brewer et al. 1993) measures athletic identity in retired elite student-athletes. This scale was designed to assess certain aspects of how strongly elite athletes identify themselves as athletes based upon the measures of decisiveness (e.g., “I had many goals related to sport”), involvement (e.g., “I needed to participate in sport to feel good about myself”), independence (e.g., “Most of my friends were athletes”), and compromise (e.g., “I spent more time thinking about sport than anything else”). Brewer et al. (1993) defined athletic identity as the degree to which an individual identifies with an athletic role. AIMS is a 10-item questionnaire, with participants using a 7-point Likert scale (1 = *strongly disagree*, 7 = *strongly agree*) to answer survey items such as, “I considered myself an athlete.” A composite score is obtained by summing the scores on the 10 items, with higher scores indicating a stronger athletic identity.

Brewer et al. (1993) indicated evidence of construct validity for the AIMS by identifying outcomes of college students who had participated in a psychology course that were significantly correlated with outcomes on the Perceived Importance Profile (PIP), specifically the sports competence scale section, $r(124) = .83$, $p < .005$. Brewer et al. (1993) also established high internal consistency, displaying an alpha coefficient of .93, as well as a test-retest reliability coefficient of .83. Martin, Mushett, and Eklund (1994) demonstrated internal consistency with the AIMS measurement with Cronbach’s alpha coefficients between .80 to .93. Data in the

current study also confirmed an acceptable level of internal consistency for the scale with a Cronbach's alpha coefficient of .86.

I also used a second measure of athletic identity. Allison and Meyer (1988) created an instrument with items measuring frustration, stress, challenge/excitement, and the longing to return to sport after retirement. Perceptions of Competitive Years (PCY) is a 5-item questionnaire using a 5-point Likert scale (1 = *strongly disagree*, 5 = *strongly agree*) to answer survey items such as, "My competitive years were very frustrating." Completion of sport goals is measured by the PCY score. A composite score is obtained by summing the scores of the five items, with higher scores indicating the desire to return to competitive years. Internal consistency was not acceptable, $r = .56$. Therefore, the five individual items were analyzed separately rather than in an index. These items appear in Table 1. It should also be noted that missing data affects each scale.

I created a third instrument adapted from Sinclair and Orlick's (1993) Athletic Retirement Questionnaire. The revised ARQ (ARQ-r) (see Appendix A) was developed to explore the transitional experiences of elite athletes. Sinclair and Orlick developed the ARQ from qualitative interview questions given to high-performance athletes in pursuit of better understanding identity, role changes, and transitions within the elite athlete population. The original 35-item survey is divided into subsections of: reason for retirement; difficulties during transition; and the ability to cope. The ARQ uses a 5-point rating scale (1 = *Very high extent*, 5 = *Not at all*) with survey items such as, "My life has changed since retirement." For the adapted scale, ARQ-r served as the transitional experiences of elite athletes. A higher score indicates more difficulty transitioning.

I shaped open-ended survey items based upon elite athletic participation and personal experience. Items I dropped from the ARQ-o were geared towards athletes still currently playing

or that were playing on a professional level. The ARQ-r was condensed to represent what I speculated as the most important questions to ask elite collegiate athletes who had already transitioned out of formal sport. From the ARQ-r my open-ended questions furthered the importance of transitional experiences and to potentially help current collegiate athletes when they undergo transition out of formal sport. My items were based on a 7-point Likert scale (1= *Strongly disagree*, 7= *Strongly agree*) using survey items such as, “During my participation as a high performance athlete, I generally felt stressed”. The actual items appear in Appendix A. Data in the present study also confirmed an acceptable level of internal consistency for the scale. With the current sample, Athletic Identity reliability statistics reported an acceptable Cronbach’s Alpha, $r = .79$.

Procedure

I obtained permission from the participating university and the head of the Varsity Club. I contacted two members within the Athletic Association. I made contact with the president of the Varsity Club. I sent an email that explained the exact plans for this study and I also asked if he would contact retired elite student-athletes to participate in this study. The president of the Varsity Club agreed to post my survey on the Varsity Club Facebook page for retired student-athletes to participate in the study. I also contacted two retired student-athletes of the women’s soccer team and they also agreed to post my survey on their personal Facebook pages. Retired elite student-athletes were provided a statement on the first page of my survey that stated their participation was voluntary and anonymous.

Participants gained access to the survey by selecting the provided link within my recruitment statement (see Appendix B). Upon accessing the link, participants were able to anonymously complete the survey through the use of Survey Monkey. All procedures were

approved by the Middle Tennessee State University Institutional Review Board (see Appendix G).

CHAPTER THREE

RESULTS

Hypothesis One: Athletic Identity and Ease of Transition

According to this hypothesis, the more one's identity is tied to athletic performance, the more difficult the transition out of elite collegiate sport will be. The Pearson's correlation between athletic identity (AIMS) and the ease of transition (ARQ-r) (see Appendix A) from collegiate sport was negative and significant, $r(124) = -.34, p < .001$. Thus, hypothesis one was supported.

Hypothesis Two: Team Sport versus Individual Sport and Ease of Transition

Hypothesis 2 stated that team sport athletes will have a more difficult transition than that of individual sport athletes when facing forced retirement from elite sport. An independent-samples *t*-test was run to compare the mean ARQ-r scores between team sport athletes ($M = 38.57, SD = 6.99, n = 102$) and individual sport athletes ($M = 32.79, SD = 9.31, n = 19$). The result of this comparison indicated a significant difference between the two groups, $t(119) = 3.13, p = .002$. However, the direction of the difference was opposite from what I predicted.

Hypothesis Three: Competitive Stress and Ease of Transition

According to my third hypothesis, the more stressful one's competitive years were, the easier the transition out of elite collegiate sport will be. A Pearson's correlation was run to measure the strength and direction between PCY and ARQ-r. As Table 1 indicates, the "best years" and "go back" items were significantly and negatively correlated with the ARQ-r.

Contrary to Allison and Meyer's (1988) results, my hypothesis was confirmed and results were found to be statistically significant. The more elite collegiate athletes agreed with the provided statements, the harder it was for them to transition out of formal sport when facing

forced retirement. If participants reported a yearning to return to playing days, transition was harder. If participants reported these were the best years they experienced, then they would be more likely to reminisce on returning to their collegiate playing years and report difficulty transitioning.

Table 1
Correlations between Competitive Years Experiences (PCY score) and Difficulty of Transition

PCY items:	Difficulty of Transition (ARQ-r)
My competitive years were the best years of my life	-.190*
My competitive years were frustrating	.099
My competitive years were filled with much stress	.140
My competitive years were filled with challenge/excitement.	-.135
I would give anything to go back to my competitive years.	-.352**

Note. $N = 123$; * $p = .042$, ** $p < .000$

Hypothesis Four: Completion of Collegiate Sport Goals and Ease of Transition

According to my fourth hypothesis, elite athletes should report having a harder time transitioning out of participation when they have not completed the goals they set out to achieve while playing. A Pearson's correlation was run to measure the strength and direction that existed between the completion of sport goals as measured by PCY score and the ease of transition out of elite collegiate sport.

My hypothesis was shown to be supported, with participants reporting that when they had accomplished their goals they had an easier transition upon exiting formal sport, $r(124) = .449$, $p < .000$. In other words, if athletes had not accomplished the goals they had set out to achieve while playing, it was harder to transition out of formal sport.

In my survey, I presented three open-ended questions on transitioning out of formal sport. One question was, “What suggestions do you have for your institution, athletic association, or coaches regarding athlete retirement (e.g., what they could do to help athletes through the transition)?” Responses to this question were varied yet insightful. Some elite athletes’ responses included: “Address college/retirement as part of the NCAA life skills program”; “Helping some athletes with self-awareness. This isn’t going to last forever, so set yourself up to be successful after your sport is all said and done.”; “Depends on the coach’s relationship with the players. I didn’t get along with my coach, so nothing [they] could say or do could help me”; “Educational classes on transitioning. I’m military now and we have programs that help with transitioning out into the civilian world. It should somewhat parallel our programs.”

Participants in my study were also asked, “What suggestions do you have for student-athletes who are about to retire for positively transitioning into a new role/identity upon retirement?” Some responses included, “Have an idea of what you want after your sport. Hold tight to your relationships and continue to work out. Take time for yourself.”; “Work in your role/identity like you did on the field- hard. Sports teach you more than just the game. They teach you the game of life on and off the field. Take what you learn and fit it in your everyday routine and career and you’ll be just fine”; “Have a strong support system like your family and friends. These will be some tough times in your life as you competed at the highest level of a collegiate sport. Don't be discouraged about your life and continue to get better.”; “Explore other interests while still in college, don't give up on playing in other leagues or for different teams, figure out what your strengths are and what you learned from school and find another team to be a part of (through leisure or in your career)” (see appendix C-F for all responses).

CHAPTER FOUR

DISCUSSION

In the introduction, I stated one inclusive research question: Do elite intercollegiate student-athletes experience difficulty when transitioning out of formal sport? The analysis of this research question furthers the advancement and understanding of the experiences elite student-athletes undergo when facing forced termination from collegiate sport. In this section, I will answer this central research question and discuss the implications of the findings for future research and practice.

Tests of Hypotheses

My findings support the conclusion that elite student-athletes experience transitional effects upon exit from formal sport. I also found that elite student-athletes experience difficulties acclimating to new identities and roles the stronger their identity is tied to athletic performance (Brewer et al., 1993). The findings of this study showed that elite student-athletes who held a strong athletic identity had a more difficult transition out of collegiate sport than those with weaker athletic identity. By mainly, or solely, identifying as a collegiate athlete and not developing another role or beginning the transitional process into a new identity before forced retirement was reached, student-athletes struggled to transition out of elite collegiate sport. My findings were consistent with previous research on athletic identity and the ease of transition out of formal sport (Brewer et al., 1993).

Comparison of elite student-athletes' ability to transition out of individual and team sports when facing forced retirement showed a statistically significant difference between individual and team sport participants. I initially predicted that team sport athletes would have a more difficult time transitioning out of elite sport compared to individual sport athletes. I

predicted this due to personal experience and the presumed more-extensive relationships with teammates for team sports. I believed it would be harder to transition due to the unavoidable loss of one's "sport family" that is built over the four years of collegiate play. However, my findings showed that individual sport athletes experienced greater difficulty in transition when exiting formal sport. I believe this is due, in part, to lacking a "sport family" and the loss of a social network, as seen with the loss of the overall team encompassing individual sport, coaches, and institutional support, after retirement to help one cope and ease transitional difficulties upon retirement. Individual sport athletes must face this transition without the support of a team or the confidence in knowing that although elite playing days must inevitably end, one's "sport family" relationship does not.

Research was also undertaken to examine competitive stress and the ability to transition out of elite sport (Allison & Meyer, 1988). Against my expectations, only partial support was achieved for this hypothesis. However, I found contrary results to that of Allison and Meyer's study. Their study found that elite athletes did not struggle when transitioning out of formal sport when faced with challenging or stressful variables presented in their survey. However, the present study did find that when elite collegiate student-athletes agreed that their playing days were the best years of their life, or that they longed to return to their playing days, they experienced a difficult transition out of formal sport when facing forced retirement. In other words, if elite collegiate student-athletes reported that transitioning was easier than that of their counterparts, they reported that these were not the best years of their life and that they did not yearn to return to their playing days and they did not have as much or any difficulty transitioning out of collegiate formal sport (Ogilvie & Howe, 1986).

The importance of these findings is seen in the opposing results of Allison and Meyer's study and my results. Given the varying results, further research must be undertaken. Many elite student-athletes view their playing years as the best years of their life. In conducting further research on the ways in which elite athletes may be able to see future goals as even better than these playing years and how to successfully move past playing days, transitioning out of formal sport may be smoother and less difficult.

For my last hypothesis, I tested whether the completion of collegiate sport goals was positively correlated with the ease of transition out of formal collegiate sport. I expected that elite collegiate student-athletes should have a harder time transitioning out of competitive sport when they did not complete the goals they sought out to achieve while playing. Results were supportive when elite student-athletes stated that they did not complete their goals within the allotted four-year NCAA eligible period reported greater difficulty transitioning out of formal collegiate sport. I explain these results by speculating that when an elite athlete does not achieve the goals and expectations they set out to achieve on the field, they become disheartened and question their ability as an elite athlete and may long to recreate a collegiate experience that is one of success and satisfaction on the field.

As previously stated, Alfermann (2000) focused on social development and psychosocial processes following transition out of formal sport as well as future life satisfaction. She found that the majority of elite athletes make positive transitions upon exit from sport. However, elite collegiate athletes undergo a forced retirement rather than a gradual process that is usually involved when playing professionally. Most professional players spend more than four seasons participating in their sport. Therefore, they are provided with more time to achieve their goals. Professional athletes also have the ability to mature throughout their career and come to

understand and overcome failures and expectations. The mean age of elite collegiate athletes when forced to retire is twenty-one. Combining a short span of time to complete goals with young adulthood, may result in a more difficult transition than research has previously, or ever, found. Future research should be conducted to investigate any differences in life satisfaction between elite collegiate athletes that face forced retirement and professional athletes that usually retire on their own terms.

Implications for Future Research

I believe statistically significant results were achieved when having difficulty transitioning out of formal sport due to elite athletes experiencing difficulties with coaching staff, the athletic department, and even teammates. I believe injuries are also a crucial hurdle to transitioning positively out of participation. If an elite athlete's career is cut short before completing all four years of eligibility, this presents profound difficulties and must be further researched (McLaughlin, 1981). Academic difficulties also present significant challenges when transitioning. If elite student-athletes cannot find a balance between athletics and academics, they will find themselves forced to retire even sooner than expected. Time management must be stressed and institutional support must be in place.

The results from my study greatly expand upon elite student-athlete's difficulties and successes transitioning out of formal sport. The outcomes of my study can be beneficial to many fields within Psychology, Health and Human Performance, and several other disciplines. Based on these findings, elite student-athletes can positively transition by finding or expanding upon another identity role prior to ending their athletic careers. Schools, athletic departments, and coaches can facilitate the transition of their student-athletes by implementing transitory programs that allow student-athletes to adequately adjust to life after sport. By beginning to prepare

student-athletes by the sophomore year of their career, these elite athletes can begin a planned and structured process of role transition. With help provided by a professional health care team, faculty, and coaching staff, elite student-athletes can be provided a foundation and tools for a successful transition into life after collegiate sport.

Limitations of the Current Study

This research was not conducted without difficulties. Upon reflection, I had to eliminate two research questions due to the limits within my data. My employed measures provided generalized rather than specific questions to assess elite collegiate student-athletes' transitional experiences. The methodology primarily focused on professional and Olympic athletes transitioning out of sport. Limitations of this study also included accessibility to participants. As a former NCAA Division I women's soccer player, I used my personal network to locate participants matching the inclusion criteria of the particular study. Outside of personal contacts, I accessed retired athletes by contacting the President of the Varsity Club. Although the participant response I received was strong and contained a nice variety of different team and individual sport participants, I was denied access to the Varsity Club mailing list and could have potentially reached far more retired athletes.

Other potential limitations included the fact that participants were asked to recall information when completing the AIMS. I attempted to minimize this limitation by confirming that respondents, in fact, completed the AIMS as if still competing in intercollegiate sport. Recall bias may have been present due to differences in accuracy of memory recall. For example, for some respondents, it has been several years or even decades since they retired. Recalling transitional feelings may be more difficult as well as no longer feeling the same way they once did upon retiring. Some respondents may have reported they had no difficulty transitioning,

when in fact, they did. Lastly, I was unable to control for all potential confounding variables. A confounding variable that may affect an elite student-athlete transitioning out of formal sport is sustain a career-ending injury. This variable would influence my findings by cutting elite playing time even shorter. An elite athlete would not undergo forced retirement, but would undergo a potentially traumatic transition from never finishing their collegiate career as they planned or by not achieving some, if not any, of their sought after goals. Elite athletes that experience a career-ending injury may have extreme difficulty transitioning out of formal sport.

From this presented confounding variable and participants who responded that they have difficulty in transitioning out of formal sport or that they have yet to transition successfully, may be represented, as previously stated in the review of literature, by the term post-participation stress disorder. I created this term based upon post-traumatic stress disorder that is seen in individuals who undergo a traumatic experience and find difficulty moving past this event or stressors successfully. Elite athletes who undergo post-participation stress disorder by not successfully transitioning into a new identity or role, may be a unique and valuable population to understanding why individuals get stuck, so to speak, in a certain identity or role in various areas of life. By understanding the roots of this identity fracture and stagnation, may result in further understanding of depression, loss of identity, and social and/or personality disorders. Further research should be conducted.

The next logical steps for future research are to pose new questions and hypotheses. Further studies should be implemented due to the limits of current research on the transitional effects experienced by elite student-athletes. Further research should be undertaken to understand how transitional experiences affect retired elite athletes with the end result of helping current student-athletes and the collegiate generations to come successfully transition out of formal

sport. Suggestions for future studies include: Will student-athletes with a strong athletic identity and who had primarily positive rather than negative experiences during their competitive years be less likely to take advantage of (non-athletic) career services than student-athletes with weak athletic identity and negative experiences? How do the experiences of elite collegiate athletes transitioning out formal sport compare to military veterans transitioning to the civilian world?

In summary, statistical significance was found for all four of my hypotheses. Elite student-athletes experience transitional difficulties upon exit from formal sport the stronger their identity is tied to athletic performance. I found that individual sport athletes experience greater difficulty in transitioning compared to team sport athletes and when elite collegiate student-athletes agreed that their playing days were the best years of their life or that they longed to return to their playing days, they experienced a more difficult transition out of formal sport upon forced retirement. Lastly, analysis showed to be statistically significant when elite student-athletes reported accomplishing their goals while participating in elite collegiate sport that transition was easier upon exit from sport. Future research must be conducted to further understand the transitional effects elite collegiate athletes undergo when transitioning out of formal sport.

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APPENDICES

APPENDIX A

Revised ARQ-r

Items adapted from Sinclair and Orlick (1993) in the current study.

1. I accomplished my personal goals in sport.
2. My life has changed since retirement.
3. The physical changes I have experienced since retirement have generally been positive.
4. The mental changes I have experienced since retirement have generally been positive.
5. During my participation as a high performance athlete, I generally felt stressed.
6. During the first six to eight months following retirement, I generally felt stressed.
7. At this point, I would classify my general outlook on life as positive.
8. My current situation is just as fulfilling as my elite collegiate experience.
9. Since retiring from formal athletic participation, I have been satisfied with my life.
10. I have successfully handled my transition out of sport.

APPENDIX B

Recruitment Statement

“Hello, my name is Erynn Murray and I am an alumna of the Women's Soccer Team at Middle Tennessee State University. I am currently conducting research on the effects of ending participation in elite collegiate sport. I am inviting you to complete an online survey containing 28 questions that will take approximately 10 minutes to complete. I am contacting you to gain insight into your experiences and thoughts towards your previous retirement from formal competition. Through your participation, I hope to further understand this transitional process and build upon previous research with the potential to help elite student-athletes better transition out of formal sport. Please follow the provided link to complete this survey. Thank you for your time and valuable participation!”

www.surveymonkey.com/r/eamurray

Respectfully,

Erynn Murray

APPENDIX C

Retirement Suggestions

1. Do whatever makes you happy.
2. Find value in yourself not in any smaller portion of identity... sexuality, relationship status, athletic status, job, awards accolades.
3. Set for goals for after graduation. Search out new experiences.
4. Therapy and educational stress/change/loss.
5. Learn to accept your next stage in life.
6. Find another passion.
7. N/A
8. N/A
9. Seek out counseling (i.e. life coach).
10. N/A
11. Find work
12. Focus on life after college sports. Have a plan.
13. N/A
14. Find team like activities you can participate in.
15. N/A
16. N/A
17. N/A
18. My suggestion would be finding a major/field of study that sparks your interest, so that the time that was invested in your sport can now be invested in your field of study.

19. Continue to play sport and focus on building your life.
20. Financial Responsibility
21. Continue to stay involved with a fitness program that relates to sports and gain a positive circle of friends (or other athletes) within the workforce to help you with your transition to having a full job.
22. N/A
23. Recreational sports clubs are great for coping with retiring. If you flat out are done with your sport, you should stay as busy as possible.
24. Stay active. Volunteer coach if you are able to.
25. If you stop working out, stop eating the way you did when you were working out.
26. Stay active, stay busy.
27. Have new goals for your future and your life. Family goals, career goals outside of your sport.
28. Pray about things and God will show you the direction you need to go.
29. Find a hobby. Workout, but workout for enjoyment.
30. Utilize lessons learned on the field in life.
31. N/A
32. N/A
33. Try to play around as much as you can.
34. Make goals while you are playing that do not include athletics.
35. N/A
36. Play every game like it's your last and leave it all on the field! If you can play the sport recreationally after college do it.
37. Find something that you enjoy, whether it is playing your sport recreationally or finding a new passion.

38. N/A
39. N/A
40. N/A
41. Leave no regrets. Give it everything you have while you can.
42. Keep busy. Try to continue to do some of the things you did as an athlete such a training.
43. N/A
44. Have a plan.
45. Find something that allows you to release energy and a purpose.
46. Be yourself.
47. Understand there is life after sport. Athletics is a transitional phase.
48. Talk to someone about it. Find something you feel strongly about. Try coaching the sport you just retired from.
49. Find something competitive to stay involved in. Sales, the gym, sports.
50. Keep conditioning and working out
51. N/A
52. Give it everything you have. Use the experience to power your next successes. Know that you have endured some real sh*t and that skill will serve you well in the real world. I was a changed person and truly thankful for it.
53. Life goes on
54. Plan for life after sports.
55. Find a hobby
56. Take it one day at a time.

57. Stay positive and approach all other scenarios as you would an athletic performance. The same courage you have to perform athletically is the same courage you must use to accelerate in your career. While being an athlete might define you at a particular point in time it's not who you are, it's what you do. Take time and reflect on your life as an athlete and look for the many embedded teachings and lessons that your coaches taught along the way. Accept.
58. Job assistance.
59. Find other interests.
60. Go at retirement like you went at athletics.
61. Get a degree.
62. Take care of your body.
63. N/A
64. N/A
65. Get a degree in something you truly want to do.
66. Learn how to golf
67. Gain interest outside of their sport
68. Find another passion and people who love you regardless of your athletic accomplishments.
69. Stay busy, find other hobbies.
70. N/A
71. Pick you college that has the major to fit your career and the transition will be effortless.
72. Learn proper nutrition
73. First accept, that fact that your sports career is over.
74. Stay active, stay involved.

75. Make sure you have another career in mind that you know you will enjoy. Find hobbies and other activities to enjoy.
76. Focus on family and career happiness.
77. N/A
78. Study harder
79. Eventually it happens to everyone
80. Do other things besides your sport
81. Have realistic expectations of staying involved in the sport and venture outside of your box to create new friendships in your environment.
82. Continue to find ways to compete and get involved in sports some way or another.
83. Stay active and in shape.
84. Faith
85. That if they put the same effort and determination into there life after sport, they will be successful.
86. N/A
87. Be well rounded
88. Pick a major in college that will ensure you will be marketable for jobs
89. Build relationships with everyone.
90. Pray read your Bible
91. Continue to exercise lightly but give yourself time to relax.
92. Prepare early
93. Learn to exercise for life fitness not sport training. Big difference.
94. Stay competitive

95. Push yourself as an athlete so you do not look back and regret not giving your all when you had the chance.
99. Plan ahead, always look to the future because it may come to an end at any moment...
100. Question yourself honestly as to what will you do pending a career-ending injury or end of collegiate eligibility and how you will move on.
101. Leave it behind and set life goals. Give those goals the same attention
102. N/A
103. N/A
104. Be more prepared for the future as your career is coming to an end. Once it's over you're already starting life as a non-athlete. Be prepared to compete with yourself more than compete against others.
105. Find a way to continue participating in sports unless you are injured. I am right at 70 and still compete.
106. Find another outlet. For me, it was golf.
107. Balance your life spiritually
108. N/A
109. The sooner you get involved with another group/job the better. less time spent wondering all of the what ifs and actively engaged in a positive direction moving forward.
110. Always have a positive outlook. Have a backup plan
111. Continue some form of exercise and training!
112. Stay active
113. Always have goals outside of sports and a good support system
114. Continue to look for "team" opportunities in life after college.
115. N/A

116. Just continue sport on regular basis for fun and find passion in other stuff like work.
117. Get over it and don't live in your person try to realize you are not a competitive athlete any more.
118. Have something else in life to focus on.
119. Be positive and believe in yourself-
120. Find new passions
121. Keep in mind athletics is most likely a means to an end. They have a full life ahead of them where they can make their own choices. College is simply the last step in adolescents. Life is about to get a lot better!
122. Find something else that keeps you occupied and fills your time. It's a tough transition to go from playing full-time to stopping.
123. Make sure you balance your diet and exercise on a regular basis.
124. Athletics steals focus from academics- funnel your focus back to academics so the intensity doesn't go to waste.
125. Make sure you have other hobbies, values, commitments, etc. to fall back on
126. Don't always focus on sport, have goals outside of your athletics.
127. Join a summer league and stay active.
128. There is more to life than sports.
129. Find other active hobbies.
130. Find a non-athletic goal to pursue before retirement.
131. Set new life goals.
132. Stay motivated in something.
133. Keep playing.
134. N/A

135. Encourage involvement in the sport in a leadership role. Such roles may need to be offered/encouraged by coaching staff and athletic departments. If athletes are expected to pursue such roles following retirement they may not see them. In my case, I felt a loss of identity, but if I was offered a role that made feel like I still had value, I may not have felt completely useless and gone on to destroy everything, lose it all, and end up on the street as a 24-year-old woman.
136. If you're going to give up completely, don't quit cold turkey. Transition to your new career slowly as it is a big change.
137. Hang out with people other than athletes.
138. Keep involved in the sport you played in college
139. Find new passion, intramural sports
140. N/A
141. Focus on other things while playing a sport. Focus on school so you can find a good job.
142. N/A
143. Connection to a team (In some form), more focus on extracurricular activities and studies throughout time in school, post season counseling or access to an autonomous team therapist throughout there years as a player and for graduating seniors, help for coaches in finding new outlets or leagues to play in.
144. Keep busy.

APPENDIX D

Institutional Suggestions

1. Use all of college to prep for life values not just short term winning.
2. Address graduation/retirement as part of the NCAA life skills program.
3. Maybe have an intervention team to help with the transition.
4. N/A
5. Not sure
6. Provide more assistance to transitioning athletes
7. N/A
8. Service opportunities
9. Coach always preached to think about the future and what your plans are.
10. N/A
11. Stay in touch with them. Invite them as alumni.
12. N/A
13. N/A
14. Networking the athletes to help with finding jobs after graduation.
15. Helping some athletes with self-awareness. This isn't going to last forever, so set yourself up to be successful after your sport is all said and done.
16. Encourage education and develop the whole person.
17. Invite a financial adviser to speak on the importance of budgeting.
18. Provide personal finance and interview prep classes
19. N/A

20. Make their last games great ones.
21. N/A
22. How to eat when not working out all the time.
23. Encouragement for the real world and starting a career.
24. Talk to athletes throughout the process about their future after sports. Make them think about life after ball. Help them reach out and make connections for their future during their collegiate career.
25. Post-athletic advising.
26. Stay in touch.
27. N/A
28. N/A
29. Have alumni games.
30. Make them do mock interviews and apply for jobs in the summer.
31. That very few will ever play at the professional level
32. Have outings to stay In touch with friends
33. Teach student athletes how to eat and workout post collegiate career
34. N/A
35. N/A
36. N/A
37. Depends on the coaches' relationship with the players. I didn't get along with my coach.
So nothing she could say or do could help me.
38. Have alumni games/events.
39. Prepare them for real life by providing opportunities to connect with businesses and corporations.

40. Keep them involved.
41. Nothing- the transition is up to athlete.
42. Programs to help transition athletes into the work force.
43. Make sure they graduate with a degree and help them get to work quickly. Finding a new passion.
44. Let them know education is the most important part of being a student athlete. You can lose your skill but not your education.
45. Keep them in touch with the program.
46. Encourage continued involvement with the program.
47. Life's a b**ch, keep sucking it up and making plays!
48. How to deal with retirement
49. Create funding for former athletes to complete their degree.
50. Job placement
51. Reach out to them much more.
52. Embrace them! I felt very discarded from MTSU...it felt as if I wasn't any good to them any longer since they couldn't use my athletic abilities any longer. A type of transition program is very much in need!
53. More alumni efforts.
54. Provide counseling.
55. Welcome them back to their respective sports and have them interact with current athletes.
56. Make sure players get a degree.
57. Educational classes on transitioning. I am military now and we have programs that help with transitioning out into the civilian world. It should somewhat parallel our programs.
58. N/A
59. N/A

60. Alumni support and acknowledgment

61. N/A

62. N/A

63. Help them stay somewhat involved early on to make the tradition a little more gradual.

64. Keep them involved with the team somehow.

65. N/A

66. Be support and provide resources for transition. No one asked me "so what is next for you?" before

I graduated. They just handed me my diploma and said thank you for your time on the field.

No alumni support what so ever.

67. N/A

68. Keep and high standard on education and be sure athletes are not stressed about money to buy simple

things like house hold supplies.

69. Keep them involved, as alumni. Continue to recognize their accomplishments.

70. Have a speaker talk about the importance of life after your sport and how to transition.

71. Most of my feelings were just regret of not fulfilling my potential due to injury and/or performance.

Nothing they could have done.

72. N/A

73. Job search

74. Continue to emphasize the importance of life's responsibilities after sports.

75. Nothing in general.

76. Greater help with the physical transition of your body no longer being pushed daily.

And to help in transitioning outside of the athletic responsibilities.

77. Teach the players that there's more to life than just sports. The majority of players won't reach the professional level, so learning to work hard in every area of life is important. Set goals, work hard and achieve the goals.
78. Perhaps a financial, wellness, and family class.
79. To help each athlete obtain the best education possible to be prepared for life after sport.
80. N/A
81. N/A
82. Don't focus on how the athletes can work their classes to fit practice but to be sensitive to an athlete's class requirements in order to have a successful career. Don't make suggestions of courses that will be easy or majors that will be way in order to participate in practices and games.
83. Pray
84. N/A
85. N/A
86. More emphasis on the rest of life.
87. MTSU was great to me after I got hurt. I briefly transitioned to a student athletic trainer.
88. Communication with the program.
89. Make sure they speak with the academic advisor in their concentration and not just the athletic advisors to ensure they are on the right path to graduate and obtain gainful employment.
90. Same as above, future goals..
91. Know that only a few will go on to be professional athletes, and to have your degree/a career in place to fall back on.
92. Help with job placement and bring them back to celebrate their contributions
93. N/A

94. N/A
95. Help the student athletes prepare for this by having a career advisor to help get the athletes ready for a job and for what life is like after sports.
96. Just talk about it. I don't think this is a function of MTSU, Coaches, or faculty to perform.
97. Mentor program.
98. Support and help with career development
99. While still playing, actively push for non-athletic involvement in groups that are aligned with chosen major. Bring in industry reps/speakers that have the same athletic background to begin the process of thinking about the future. Setup internships with area businesses that are friendly to athlete's schedule and circumstances to allow a student athlete to be able to experience what every student is able to do internship wise. Make this an athletic/academic partnership rather than leave that completely up to academic colleges and advisors who generally don't understand the athlete's schedule/time commitments.
100. Nothing. It's not their responsibility.
101. Better job placement.
102. Prepare them to graduate.
103. Get them involved more in community activities or programs around their major.
104. Possible counseling. You are dropped after your senior season is finished.
105. Offer classes or maybe even continue to meet with us as former athletes to help us better make the transition.
106. Programs and alumni events.
107. Nothing, the institution or coach have nothing to do with it. The only role of a coach and institution is to make the best athlete they can, after that they have nothing to do with it.

108. Prepare for life outside college
109. Guidance counselor!!!! Someone to talk to about transitioning or to help build a network- promote these awesome programs that are out there!!
110. N/A
111. Keep them involved.
112. Help with more career development outside of sports. I have a bunch of teammates that have problems finding jobs because they were so focused in their sport.
113. During the fifth year they can help athletes transitioning by giving them other types of workouts and a diet that works for people who don't exercise as much.
114. N/A
115. N/A
116. Nothing-- they did a great job supporting academics first rather than athletics.
117. Stay in contact with players.
118. Stop lying to them by saying companies love hiring athletes. Companies like experience and as an athlete you are unable to gain that experience throughout college.
119. Staying involved with ex-athletes.
120. Exit interview.
121. Stronger focus on academics and what your degree and career path will provide for you.
122. Goals!
123. N/A
124. N/A
125. Offer opportunities for retired athletics in the sport that make them feel valued (mentoring, coaching).

126. Talk to athletes after their last season to see what their plans are. Make suggestions and offer help if they can.
127. More career fairs.
128. Alumni events with current athletes.
129. N/A
130. N/A
131. Have career fairs, etc.
132. N/A
133. Treatment as a whole person- relationship is not just based on athletic performances
134. As coaches, don't abandon players as soon as they aren't playing anymore. Allow them to stay involved.
Check in a see how they're doing.
135. Help them apply everything they are doing to life rather than just the sport.

APPENDIX E

Adaptation Time

1. 1 year
2. 1 year
3. Not quiet... still in athletics as a coach.
4. 3-4 years
5. Can't put a time table on that.
6. N/A
7. Not there yet
8. 3 years
9. 1 year
10. 1year
11. 1year
12. 1year
13. 6 months
14. 3 years
15. It didn't feel like an adaptation to me; I was ready for a break.
16. 1 year
17. Two years
18. Immediately
19. 2 1/2yrs

20. 1 month
21. 2 weeks
22. 1 year
23. 1 year
24. 6 weeks
25. 1 year
26. 2 months, but I think I will forever miss playing.
27. 2 years
28. 5 years
29. 3 years
30. 4 years
31. 4 months
32. 20 years
33. 2 years
34. Not adapted yet. Been out of college for 4 years
35. 6 months
36. 3 months
37. N/A
38. 3 years
39. Still haven't let it go. Question myself everyday if I should've tried harder and pushed more
40. 1.5 years
41. 6 months
42. 4 years

43. 3 years
44. 1 month
45. 2 years
46. 1 year
47. About 3 years
48. 1 year
49. 2 years
50. 30 days
51. 8 years
52. N/A
53. 10 years
54. 1 month
55. 10 years
56. 4 Years
57. 3-5 years
58. 30 days
59. 2 years
60. 5 years
61. Still ongoing
62. 2 years
63. 2years
64. I still have not adapted .
65. Only been retired for 5 months.

66. 5 years

67. 1 year

68. 6 months

69. Immediate

70. Right away

71. Approximately 2years

72. 5-6 years

73. 2 years

74. 1 year

75. 2 years or so

76. 2 years

77. 365 days

78. 1 year

79. 2 years

80. 1.5 years

81. 2 years

82. 1 year

83. About a year

84. 1-2 years

85. 3 years

86. 3 years or so

87. 3 years

88. 6 months

- 89. 6 months
- 90. Ongoing
- 91. 18 months
- 92. 1 year
- 93. 0 days
- 94. A couple of weeks
- 95. 2 years
- 96. 5 years
- 97. 6 months
- 98. 6 months
- 99. 12 months
- 100. 18 months
- 101. 60 days
- 102. 3 months
- 103. 2-3 years
- 104. 2-3 years
- 105. 4 years
- 106. Day 1!
- 107. 1 year
- 108. 6-8 months
- 109. 3 months
- 110. Still playing recreationally
- 111. 3-4 months

112. Right away

113. 2 years

114. 1-2 years

115. Immediately

116. 14 months

117. Around 2 months.

118. 2 years

119. 3 months

120. Roughly two years

121. 5 years

122. 12 months

123. 6 months.

124. 8months

125. 2 years

126. I don't remember

127. A week

128. 1 year

129. 1 month

130. 4 years

131. 2 years

132. 3 months

133. 1 year

134. 1 year

135. N/A

136. 1 month

137. N/A

138. 5 years

139. 3 years

APPENDIX F

Suggestions for Current Athletes After Retirement

1. Nothing
2. It takes time and that's ok.
3. Set new goals.
4. Take the same passion that you had for sports in the role that you're in into your career and attack that role everyday as if you were playing sports.
5. N/A
6. N/A
7. Knowledge that it will be an empty space that needs to be filled.
8. Stick with it. You will excel.
9. N/A
10. Find work.
11. Stay active, find fun hobbies, and have a plan of the future.
12. N/A
13. Have a positive outlook to find a new goal. As athletes we are goal oriented.
So find a goal that pushes you just as much as sports.
14. N/A
15. N/A
16. It is an end to mean. Use the sport to get to where you want to be in life.
17. Finding a career that they are willing to treat as their sport. Have a willingness to put preparation, and effort in their career.

18. It's important to focus on their value's and to seek out their options.
19. Stay focused on the career plan.
20. Go into a role that's going to make you happy and focus on your personal finances.
21. N/A
22. Stay busy and stay fit.
23. N/A
24. Set a new goal and work towards it; do not live in the past, cut back on eating.
25. Find new activities to get in to
26. Don't be afraid to try new things. Don't be afraid to not be the best at everything.

Sports were our thing, but we can be successful at other things too with time. Remember what made you the athlete that you are. Hard work, countless hours practicing, and the love for what you were doing.

Apply those 3 things to everything you do in life and you will win every time. ;-)
27. Find and set new goals in life.
28. Foster relationships.
29. N/A
30. N/A
31. Stay in school and keep busy.
32. Make sure you have the sport out of your system.
33. N/A
34. Don't think it's over you can find other things you love and focus on those.
35. Find new ways that you enjoy working out. Find a hobby that you can take up to fill that competitive void.
36. N/A

37. N/A

38. Your hard work and dedication to the sport is what you have and you should be proud of that.

Not everyone can be a D1 collegiate athlete.

39. Keep in touch with teammates and make something of yourself. Work just as hard at your new life as you did at your sport.

40. N/A

41. N/A

42. Find something to help you move forward and don't worry about what you didn't accomplish.

43. Get an academic degree .

44. Every work task is not a competition.

45. Find a schedule that you could stick to. It was unsettling not having anyone tell me where to be and when.

46. Same as above

47. Attack your working career as you did athletics

48. Have no regrets.

49. You have the skills to succeed, use them. No one gives two shits about how good you were in college but your ability to deal with pressure and prepare will serve you well.

50. Find something to take athletics place.

51. Retirement doesn't change your accomplishments.

52. Place your hope in Jesus.

53. Surround yourself with good people.

54. Find supporters, not enablers. Surround yourself with people who won't allow for sulking and feeling sorry for yourself. Find people that will push you and coach you to the next level of professional success.

55. The sky is the limit. Never give up.

56. Do not live in the past.

57. Stay positive and have a great attitude

58. Find something to do that you can pour the same passion you have for sports.

And volunteer to teach others your passion for sports.

59. N/A

60. N/A

61. N/A

62. Find a new love.

63. Stay competitive.

64. Stay involved in the game.

65. Don't let sports define who you are. Sport is what you do, not who you are.

66. Find other hobbies.

67. N/A

68. Work in your role/identity like you did on the field...hard. Sports teach you more than just the game.

They actually teach you the game of life on and off the field. Take what you learn and fit it in your every day and career and you will be just fine.

69. Figure out what makes you happy in life and career and go all in on the goal.

70. Have several back up plans, do not assume the first or second plan will work out because they usually don't.

71. Continue to do the things that made you successful on the field, off the field. Life is a game.

72. Understand it is normal to miss your sport, but understand living your life to the fullest and moving forward is most important. Get help with managing stress. Try to have positive thoughts. Keep exercising and a clean diet. Find something you can enjoy. An activity that can help fill voids.

73. Focus on new and different goals and pursue them as diligently as you did sports.

74. N/A

75. Accept the change.

76. Continue to use your competitive nature to be successful in the world.

77. Get involved in something else that you love to do.

78. Have an idea of what you want after your sport. Hold tight to your relationships, and continue to work out.

Take time for yourself.

79. Work hard for everything and don't give up!

80. Take things slowly and still seek being a part of the game.

81. The same answer as question 19.

82. N/A

83. N/A

84. Focus energies used to become competitive in sport in your goals for career. Use skills learned in sports to deal with people and to set goals for achievement.

85. Do what you love

86. Keep playing and stay active

87. N/A

88. Find ways to stay involved in the sport if possible

89. Take what you learned as a competitive athlete and use it in the real world. Hard work and discipline will take you far in life.

90. Stay connected with teammates.

91. Continue to challenge yourself in life and be a leader for those around you.

92. Challenge yourself to be the best person you can be.

93. Keep the same preparation/drive, but become focused on career moves/objectives instead

of collegiate competitiveness.

94. Don't linger and move on.

95. N/A

96. N/A

97. Have a strong support system like your family and friends. These will be some tough times in your life as you competed at the highest level of a sport. Don't be discouraged about your life and continue to get better.

98. Find some way to participate, like coaching or continuing in the sport. ABA, NABA, church or YMCA basketball, Coach youth football, City Tennis Leagues, etc.

99. Focus on life balance. Still will need a physical outlet so find an alternative sport/exercise program.

100. Maintain life skills learned from athletics in other parts of your life.

101. N/A

102. Get involved with alumni groups and network events.

103. Keep a positive outlook, apply your drive to your new role.

104. Love yourself and be proud of what you did accomplish.

105. Focus on something that excites you about your future.

106. Life is always a competition...just a new team and sport to play.

107. Find "team" environments or physical outlets.

108. N/A

109. Keep yourself busy and active and in touch with people who can support you.

110. Go for it. Life is made of phases and you just ended one and are now starting a brand new one.

111. Have A job, a network.

112. Create goals for yourself, network, think about a plan B and be positive! Repurpose that energy

- you have for sport into positive, motivating energy about life after sport.
113. Stay positive and keep working hard.
 114. It's FINALLY a new chapter, welcome it with open arms!
 115. Find something else you're passionate about. Also, finding another way of working out besides what was done during the off season. Change can be a good thing but it needs to be viewed as positive.
 116. It is important to transition into something that you like as much as you like sports and that also keeps you busy.
 117. Take pride in your skillset, as not many people have accomplished such feats with such discipline. The mental abilities you have developed will serve so much good in your life, lasting way longer vertically, but integrating in your life horizontally, bridging gaps and opening doors that other less driven, less durable, less coachable, less focused, less you. You aren't a lesser version of you, you have worked your life to become the best version of you and that cannot be taken away so use the mental development to now accomplish mental feats. You are a fighter that other people can't relate to, but they envy. Feel pride, not sadness that it is over.
 118. N/A
 119. Life goes on, embrace this new journey in your life.
 120. Set goals and stay in contact with teammates
 121. Find a hobby. Could be a sports league or could be completely different from what you have been doing for the past 4+ years.
 122. Find something else to be competitive with.
 123. Keep active.
 124. Set new life goals
 125. Goals and a plan!

126. Be thankful for the opportunity
127. N/A
128. Take the courses you want for what you want to be/do not because they allow you to get to practice or go to your favorite school (athletically). If you do you will be left with an isles education and no identity.
129. The start of a new chapter is sometimes difficult, but you will apply what you have learned being a college athlete on a daily basis.
130. Stay active and busy.
131. Keep involved with the sport.
132. Leave everything you have left on the court/field.
133. N/A
134. N/A
135. N/A
136. Explore other interests while still in college, don't give up on playing in other leagues or for different teams, figure out what your strengths are and what you learned from school and find another team to be a part of(through leisure or in your career).
137. Take a break and enjoy the freedom, but then find something to do because it gets boring.
138. Focus on what you want to do with your life that doesn't have to do with the sport.
139. N/A

APPENDIX G

IRB Approval Form

Friday, September 23, 2016

Investigator(s): Erynn A. Murray (Student PI) and Tom Brinthaup (FA) Investigator(s')

Email(s): eam3h@mtmail.mtsu.edu; tom.brinthaup@mtsu.edu

Department: Psychology

Study Title: The effects of ending participation in elite collegiate sport

Protocol ID: 16-2287

Dear Investigator(s),

The above identified research proposal has been reviewed by the MTSU Institutional Review Board (IRB) through the EXPEDITED mechanism under 45 CFR 46.110 and 21 CFR 56.110 within the category (7) Research on individual or group characteristics or behavior A summary of the IRB action and other particulars in regard to this protocol application is tabulated as shown below:

IRB Action APPROVED for one year from the date of this notification

Date of expiration 6/20/2017

Sample Size 500 (FIVE HUNDRED)

Participant Pool Former MTSU student athletes who are 18 years or older

Exceptions (1) Online informed consent is permitted; (2) Recruitment through email, telephone and social media using personal contact is permitted as long as proper informed consent and autonomy to deny or withdraw is respected; AND (3) HIPS training is waived as the health-related questions are minor Restrictions No identifiable information of the participants must be recorded or used Comments NONE

Amendments Date 9/23/2016 Post-approval Amendments Amendments listed in page 3 have been approved This protocol can be continued for up to THREE years (6/20/2019) by obtaining a continuation approval prior to 6/20/2017. Refer to the following schedule to plan your annual project reports and be aware that you may not receive a separate reminder to complete your continuing reviews. Failure in obtaining an approval for continuation will automatically result in cancellation of this protocol. Moreover, the completion of this study MUST be notified to the Office of Compliance by filing a final report in order to close-out the protocol.

Continuing Review Schedule: Reporting Period Requisition Deadline IRB Comments First year report 5/20/2017 INCOMPLETE Second year report 5/20/2018 INCOMPLETE

The investigator(s) indicated in this notification should read and abide by all of the post-approval conditions imposed with this approval. Refer to the post-approval guidelines posted in the MTSU

IRB's website. Any unanticipated harms to participants or adverse events must be reported to the Office of Compliance at (615) 494-8918 within 48 hours of the incident. Amendments to this protocol must be approved by the IRB. Inclusion of new researchers must also be approved by the Office of Compliance before they begin to work on the project. All of the research-related records, which include signed consent forms, investigator information and other documents related to the study, must be retained by the PI or the faculty advisor (if the PI is a student) at the secure location mentioned in the protocol application. The data storage must be maintained for at least three (3) years after study completion. Subsequently, the researcher may destroy the data in a manner that maintains confidentiality and anonymity. IRB reserves the right to modify, change or cancel the terms of this letter without prior notice. Be advised that IRB also reserves the right to inspect or audit your records if needed. Sincerely, Institutional Review Board Middle Tennessee State University Email: irb_information@mtsu.edu (for questions) irb_submissions@mtsu.edu (for documents)

APPROVED PROTOCOL AMENDMENTS – 09.23.2016

- A. Consent form updated: 1) Removal of current elite athletes as participants from description 2) Corrected number of survey items to be answered (see attached) B. Recruitment statement: 1) Updated number of survey questions to be answered 2) Removal of current elite athletes as participants from description (document in file) C. Change to IRB application: 1) Anticipated completion date April 2017 2) all information about present athletes should be removed; only using alumni; 3) all participants will be recruited through Mr. Jim Simpson's Varsity Club Facebook account access; (see attached recruitment letter) D. Survey: 1) Updated informed consent (removal of current elite athletes as participants and updated number of survey questions to answered) 2) Updated debriefing form (removal of current athletes as participants and Dr. Brinthaup's email address) 3) Deleted survey items- 2, 6, 20, 21, 22, 23, 24, 25, 26, 27, 28, 29, 30, 31, 32, 33 4) Corrected survey items (placed in bold text)- 2, 3, 4, 5, 6, 7, 18,

APPROVED PROTOCOL AMENDMENTS – 09.23.2016