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# The Final Whistle: An In-Depth Analysis of How Elite Transfer Student-Athletes Adapt to Life After Intercollegiate Sport

Julianne Hubbard

*University of Connecticut - Storrs*, [julianne.hubbard@uconn.edu](mailto:julianne.hubbard@uconn.edu)

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The Final Whistle:  
An In-Depth Analysis of How Elite Transfer Student-Athletes Adapt to Life After Intercollegiate  
Sport

Julianne Hubbard  
B.S., University of Connecticut, 2013

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Master of Science Thesis

The Final Whistle:  
An In-Depth Analysis of How Elite Transfer Student-Athletes Adapt to Life After Intercollegiate Sport

Presented by

Julianne Hubbard, B.S.

Major Advisor \_\_\_\_\_  
Jennifer E. Bruening Date

Associate Advisor \_\_\_\_\_  
Laura J. Burton Date

Associate Advisor \_\_\_\_\_  
Joseph N. Cooper Date

University of Connecticut

2014

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### Abstract

Since elite intercollegiate student-athletes often elect to transfer institutions for reasons of athletic dissatisfaction, it was hypothesized that members of this population have strong, exclusive athletic identities, making the transition out of sport extremely troublesome. The following research study utilized a mixed-methods approach to examine the athletic retirement experiences of elite transfer intercollegiate student-athletes. Nine former NCAA Division I women's soccer players provided quantitative and qualitative information regarding athletic identity, transferring, and retirement from elite sport. Using the Athletic Identity Measurement Scale (AIMS) developed by Brewer et al. (1993), 'at-risk' individuals likely to have experienced negative transitions from sport were identified. All subjects were then asked to participate in individual in-depth interviews. Upon data analysis, it was found that only one of nine participants experienced a "negative" transition out of sport. However, many themes consistent with the literature review were ascertained, including divestment from athletic identity, psychological and emotional disturbance upon athletic retirement, and high life satisfaction following career termination. Due to a lack of exclusively identified participants and the overall idiosyncratic nature of athletic retirement, this study produced inconclusive evidence as to whether or not the AIMS can be used to predict difficult career transitions in elite transfer intercollegiate student-athletes. After discussing the study's findings, this paper then concludes with implications for professionals working in intercollegiate athletics and/or higher education. Though CHAMPS/life skills programs were not necessarily supported by this specific research, there are other suggestions and strategies that coaches, advisors, and administrators should implement when facilitating smooth retirements for their elite intercollegiate student-athletes.

*Keywords:* athletic identity, AIMS, athletic retirement, career termination, identity foreclosure, intercollegiate athletics, student-athlete, transferring, higher education



## Chapter 1: Introduction

A student-athlete is a participant in an organized competitive sport sponsored by the educational institution in which he or she is enrolled. The term is somewhat controversial in nature, however, as “student” comes first and “athlete” comes second. In a sports culture that emphasizes athletics over academics, researchers argue that perhaps a more accurate nomenclature would be the “athlete-student” model (Coakley, 2004), as the term “student-athlete” actually masks the need for structural change in United States higher education (Staurowsky & Sack, 2005). Within collegiate athletics, there are multiple governing bodies including the National Association of Intercollegiate Athletics, National Christian College Athletic Association, United States Collegiate Athletic Association, National Junior College Athletic Association, and perhaps the most prestigious National Collegiate Athletic Association (NCAA).

The NCAA is a nonprofit association comprised of approximately 1,281 institutions, conferences, organizations, and individuals that oversee the athletic programs of many colleges and universities in the United States and Canada. This organization oversees athletic scholarships and enforces rules to which athletic departments and student-athletes must comply in order to stay eligible to compete. Eligibility is finite, as the NCAA enforces rules limiting a student-athlete’s competition. For example, student-athletes at NCAA Division I institutions have a “five-year clock.” The five-year clock states that these athletes are allotted a five-year time period to compete in four competitive seasons. The clock can be extended for circumstances beyond the student-athlete’s control (i.e. extensive injury), however, once the clock expires, the student-athlete can no longer participate in intercollegiate sport.

According to the 2007 NCAA public service campaign, “there are over 400,000 NCAA student-athletes, and just about all of [them] will be going pro in something other than sports” (Christianson & Geren, 2007). This PSA was meant to elucidate the statistic that only about 1% of NCAA athletes pursue professional sports careers (Christianson & Geren, 2007; NCAA Research, 2013). With such a small percentage of intercollegiate athletes making the pros, the expiration of finite collegiate eligibility marks the end of elite sport for most student-athletes. Retirement from intercollegiate sport has been classified as a long and painful transitional period for student-athletes (Baillie, 1992; Stephan & Bilard, 2003; Werthner & Orlick, 1986). These athletes are faced with both practical and psychological challenges upon sport career termination, often making the transition extremely difficult.

Practically speaking, many elite athletes forgo basic life skills, as they dedicate most of their time and energy to sport. This often leaves student-athletes at a disadvantage, as they tend to lag behind the general student body in the formation of career goals and plans (Haerle, 1975; Svoboda & Vanek, 1982; Werthner & Orlick, 1986). Psychologically speaking, these individuals are faced with the loss of teammates, structure/routine, and the support of their coaches and athletic departments. Perhaps the largest psychological obstacle, however, has to do with the shedding of their athletic identities. According to Brewer, Van Raalte, and Linder (1993), athletic identity is “the degree to which an individual identifies with the athlete role and looks to others for acknowledgement of that role.” Research has identified both benefits and potential risks of having a strong athletic identity. Benefits of having a strong athletic identity include having a salient self-identity, increased self-confidence, improved health and fitness, and enhanced athletic performance (Horton & Mack, 2000). Potential risks include emotional difficulty when dealing with injury and difficulty adjusting to life after the end of an athletic

career (Kerr & Dacyshyn, 2000). It has been concluded that the higher the level of athlete, the higher the athletic identity, and the harder the transition is out of sport (Brewer et al., 1993; Pearson & Petitpas, 1990; Werthner & Orlick, 1986).

### **Statement of Problem**

Just like professional athletes, elite intercollegiate student-athletes are often faced with difficult decisions that can impact the rest of their athletic careers. Although these decisions do not typically include lucrative endorsement offers, signing bonuses, or elevator clauses, these athletes must make important choices regarding future endeavors like where they would like to attend college or where they believe they could physically compete. One of the most common and perhaps difficult decisions elite intercollegiate student-athletes face is whether or not to transfer schools. Transferring institutions is a crucial decision for student-athletes, as they must consider a variety of factors including academics, athletics, campus life, and personal preferences (National Collegiate Athletic Association, 2014). The NCAA has various rules to safeguard the process of transferring, as student-athletes who elect to transfer are statistically much less likely to earn a degree than those who remain at their original schools (National Collegiate Athletic Association, 2014). According to Tom Paskus of the NCAA Research Department, approximately 14,636 NCAA student-athletes transferred into Division I institutions during the 2012-2013 school year alone (E. Summers, personal communication, October 24, 2014). Of these, approximately 8,217 transferred to Division I institutions from other 4-year institutions (E. Summers, personal communication, October 24, 2014). Although there has been a decreasing trend in the number of elite intercollegiate student-athletes who elect to transfer (Alexander, 2011), it is important for researchers to identify the potential challenges that members of this unique population may face.

Many elite student-athletes choose to transfer institutions for reasons of athletic dissatisfaction, potentially giving way to the development of stronger and more exclusive athletic identities. The purpose of this research was to utilize a mixed methods approach to investigate the following research question: How strong and exclusive is the construct of athletic identity in elite transfer intercollegiate student-athletes, and how exactly do these individuals deal with athletic retirement following their college careers? Much research has been done linking strong athletic identity to difficult athletic retirements in intercollegiate student-athletes (Greendorfer & Blinde, 1985; Lally & Kerr, 2005; Murphy, Petitpas, & Brewer, 1996); however, no such research has been completed examining these constructs in transfer student-athletes. This research aims to fill that gap by examining the experiences of elite intercollegiate student-athletes who elected to transfer institutions at least once during their collegiate careers. Understanding some of the potential issues members of this unique population may face can better equip professionals working in intercollegiate athletics and/or higher education to serve these student-athletes.

### **Hypothesis**

The research hypothesis for this particular study was that elite transfer intercollegiate student-athletes, who often elect to transfer institutions for reasons of athletic dissatisfaction, will possess strong and exclusive athletic identities, making the transition out of collegiate sport extremely difficult.

### **Delimitations**

Delimitations of this study included inclusion and exclusion criteria, methodology, and sample size. In order to participate in this particular study, subjects must have participated in NCAA Division I women's soccer, transferred institutions at least once during their collegiate

careers, and retired from elite sport upon the expiration of their intercollegiate eligibility within the past five years. Athletes who retired involuntarily (i.e. due to injury, being cut from the team, or having their program terminated) or who attended institutions outside of NCAA Division I (i.e. transferred from NCAA Division II to NCAA Division I or vice versa) were excluded from this study. This effort was made to minimize potential confounding variables. The study was restricted to (a) NCAA Division I student-athletes to ensure the enrollment of only elite-level athletes and (b) women's soccer players to ensure that all participants came from similar sporting backgrounds and environments.

I did not choose an entirely quantitative research study, as the main objective was not to quantify data and generalize results from a sample to a population of interest, rather to uncover prevalent trends and gain an understanding of the underlying reasons and motivations surrounding athletic identity and retirement. Mixed methods were utilized however, as generalizability was not the intent of this research. Since athletic retirement is multidimensional and idiosyncratic in nature, I did not find it necessary to observe a large sample of participants. Instead, the experiences of nine elite transfer intercollegiate student-athletes were examined to shed light on the potential issues such individuals may face upon career termination.

### **Limitations**

Limitations of this study included accessibility to participants. Since I am a former NCAA Division I women's soccer player, I used my own personal network to find participants matching the inclusion criteria of this particular study. This being said, I did not have unlimited access to NCAA data identifying random former elite transfer intercollegiate student-athletes. Furthermore, it is important to note that all participants retired from elite sport after the fall of 2012. While this was not my intent, the data collected in this cross-sectional study might

somewhat be reflective of the conditions of the time, also known as the cohort effect (Cozby, 2009). Again, since generalization was not the intent of this study, I did not foresee this factor greatly affecting the outcome, but felt it prudent enough to mention.

Other potential limitations included the fact that participants were asked to recall information when completing the Athletic Identity Measurement Scale (AIMS). I attempted to minimize this limitation by confirming that subjects, in fact, completed the AIMS as if still competing in intercollegiate sport. Recall bias is a systematic error due to differences in accuracy or completeness of recall to memory of past events or experiences (Last, 2001). Since quantitative analysis of the AIMS was primarily used to identify participants who may have experienced negative transitions from sport prior to qualitative data collection, recall bias did not adversely affect the outcome of this study.

Lastly, as in all studies, it is impossible for researchers to eliminate all potential confounding variables. One such confounding variable that greatly affects an athlete's transition out of sport is extensive injury. Though not the direct cause of athletic retirement, various participants cited injury as playing a role in their transitions. I have made a point of noting this in the results section and discuss the impact of injury on athletic retirement in detail.

## **Chapter 2: Review of Literature**

Sport has been a prominent component of society for centuries, with the first documented evidence of physical contest dating back nearly 17,300 years ago (Capelo, 2010). With such a long enduring history, it can be argued that athletic competition is somewhat embedded in both human nature and society. Numerous researchers have investigated the question of why human beings routinely participate in sport, with the general consensus stemming from our need for social interaction. According to Gould and Horn (1984), motives to participate in sport differ according to age, with early involvement being promoted by the potential for improving skills, having fun, playing with friends, experiencing certain thrills and pleasures, achieving and maintaining levels of fitness, and achieving success in socially desirable activities. It is only in adolescence when factors like winning, status, and other extrinsic variables become important (Gould & Horn, 1984).

### **The Athletic Identity**

Since sport is generally started at a young age, athletes tend to develop an athletic identity early in life. According to Brewer et al. (1993), athletic identity is 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 (Brewer et al., 1993). The construct also determines how an athlete will cope with career-threatening situations and injuries, as well as inspires behavior consistent with the athlete role (Brewer et al., 1993; Horton & Mack, 2000). By participating in sport, individuals make a social statement or expression about whom they are and how they wish to be perceived by the people around them (Sadalla, Linder, & Jenkins, 1988). The perceptions of close others – including friends, family, and coaches – play a significant role in how athletes define themselves (Horton & Mack, 2000), and because of this,

sport is often the locus of their social roles or “occupational self-images” (Astle, 1986).

According to Stephan, Bilard, Ninot, and Delignieres (2003), athletes typically acquire a socio-professional status. This distinct social rank is attributed to the physical skills and athletic prowess demonstrated to help reach sport-specific goals (Stephan et al., 2003). Athletes are typically visible figures in the public eye (Werthner & Orlick, 1986), making the athlete role unlike any other (Webb, Nasco, Riley, & Headrick, 1998). Athletes often internalize positive social recognition as part of their overall elite identity (Stephan et al., 2003; Webb et al., 1998).

**Outcomes of Strong Athletic Identity.** Positive reputations of athletic competence often provide competitors with strong athletic identities (Brewer et al., 1993). Research has found that possessing a strong athletic identity can have various positive effects on an individual. These benefits include having a salient sense of self (McPherson, 1980), developing athletic skills, engaging in social interaction, and having a means by which to measure physical abilities and build confidence (Brewer et al., 1993; Petitpas, 1987). Individuals with strong athletic identities also often demonstrate enhanced athletic performance (Baillie & Danish, 1992; Danish, 1983; Horton & Mack, 2000; Werthner & Orlick, 1986), and reap the benefits of physical activity. According to Fox and Corbin (1986), the perceived importance of physical abilities predicts the involvement in physical activity, reinforcing the idea that individuals who identify with the athlete role are more likely to engage in exercise and maintain healthy lifestyles (Brewer et al., 1993). Individuals with strong athletic identity have also reported having a sense of subjective well-being (Stephan et al., 2003; Werthner & Orlick, 1986). Athletes have attributed this high life satisfaction to the “living, loving” relationship they have developed with their respective sport (Werthner & Orlick, 1986), along with the euphoric effects of exercise (McAllister,



Motamedi, Hame, Shapiro, & Dorey, 2001) and the intensity emerging from the athletic lifestyle (Gearing, 1999).

In 2000, Horton and Mack studied 236 marathon runners to observe the effects of athletic identity on life priorities and athletic experiences. After analyzing various questionnaire data, including Brewer et al.'s (1993) AIMS, the researchers found that strong athletic identity was often associated with better athletic performance (Danish, 1983), greater enjoyment of running, more commitment to sport, expanded social networks, enhanced body image, increased self-confidence, positive overall self-image, increased energy levels, and decreased anxiety levels (Horton & Mack, 2000). The link between athletic identity and increased social relationships and confidence (Petitpas, 1978) was supported, as well as the association between athletic identity and health/fitness benefits (Anderson & Cychosz, 1994; Fox & Corbin, 1986; Kenziarski, 1988).

The marathon runners in Horton and Mack's (2000) study also experienced general negative consequences as a result of strong athletic identity, including financial difficulties, increased susceptibility to illness, and decreased occupational performance (Horton & Mack, 2000). They also reported having less time for family and non-running friends, which occasionally lead to feelings of social isolation (Horton & Mack, 2000). While some negative effects were clearly observed, this study challenged the notion that athletic identity is a damaging aspect of an athlete's self-concept. These athletes actually reaped significantly more benefits than disadvantages. Horton and Mack (2000) concluded that strong athletic identity was not detrimental to their runners, as they were not exclusively identified, and thus did not neglect other aspects of their lives.

Athletic identity becomes dangerous when an athlete exclusively defines him/herself as an athlete. Athletes often dedicate 100% of their time and resources to sport, as the demands of being a competitive amateur athlete are extremely high (International Olympic Committee, 2014). In order to be a world-class athlete, it is almost impossible to be anything else (Werthner & Orlick, 1986) and because of this, athletes typically neglect other important areas of life (Brewer et al., 1993; Horton & Mack, 2000). “Over-identification” with the athlete role often leads to lack of experimentation in and atrophy of other roles, and education and social pursuits often become subordinate to athletic endeavors (Adler & Adler, 1991; Baillie, 1993; Murphy, Petitpas, & Brewer, 1996). Over-commitment to the athlete role can foster dysfunctional practices within the athlete (i.e. overtraining, anxiety when not training, the use of performance enhancing drugs), as well as restrict the development of a multidimensional self-concept (Horton & Mack, 2000). Exclusively identified athletes, or “uni-dimensional” individuals (Ogilvie & Howe, 1986), develop a low-complexity self, making them more prone to depression following high levels of stressful events (Brewer et al., 1993). High self-complexity protects the self from failure in one domain, and acts as a buffer against stress-related depression (Brewer et al., 1993; Horton & Mack, 2000). When an athlete’s socialization occurs primarily in the sport environment, deeming him/her as “role-restricted,” there is a much greater likelihood of adaptation difficulties (Brewer et al., 1993; Kerr & Dacyshyn, 2000; Ogilvie & Howe, 1986). Stress-related depression and other adaptation difficulties can occur when injury sidelines an athlete for prolonged periods of time and/or initiates athletic retirement.

### **Athletic Retirement**

Retirement from high-level sport is an inevitable part of life, and significantly differs from that of other typical retirements. Strong athletic identity, as well as special circumstances

(i.e. highly competitive selection procedures, expiration of collegiate eligibility, injury), often force athletes into early career termination (Webb et al., 1998) – a retirement that occurs much earlier in the lifespans of athletes when compared to the general population (Baillie, 1993). Athletic retirement is seen as a dynamic process as opposed to a discrete isolated event (Blinde & Stratta, 1992; Grove, Lavellee, & Gordon, 1997; McPherson, 1980; Stephan et al., 2003), as it usually takes athletes approximately two years to fully adjust (Baillie & Danish, 1992). Some individuals, however, have reported struggling for up to ten years after career termination (Baillie & Danish, 1992). The duration of this adjustment is heavily dependent on the perceptions of the involved athlete (Schlossberg, 1981). Schlossberg (1981) suggested that an individual's view of transition will affect his/her adaptation, and that fostering fear or other negative perceptions will likely adversely affect the process of change. Other variables in the perception of an individual include the source of change, timing, onset, duration, and degree of stress – all of which can contribute resistance to and inhibit smooth adjustment (Schlossberg, 1981). Coakley (1983) argued that the complexity of these variables must be appreciated in order to understand the personal impact of athletic retirement (Kerr & Dacyshyn, 2000).

Since no one person is the same, it is rare that athletes experience retirement in identical contexts. Kerr and Dacyshyn (2000) argued that athletic retirement is idiosyncratic in nature, noting that multiple situational factors vary from athlete to athlete. Because of this multidimensionality, every athlete experiences the transition out of sport differently (McPherson, 1980). Some adjust without any difficulty, viewing the transition as opportunistic and liberating (Allison & Meyer, 1988; Coakley, 1983), while others experience significant emotional disruption and trauma characterized by feelings of failure, depression, disillusionment, and isolation (Baillie & Danish, 1992; Blinde & Stratta, 1992; Stephan & Bilard, 2003; Werthner &

Orlick, 1986). Athletic retirement often affects well-being; as it changes the way individuals perceive themselves, their abilities, and the quality of their lives (Kim & Moen, 2001).

Understanding the multifactorial interaction of variables at play in athletic retirement can elucidate why some athletes experience significant emotional trauma upon career termination, while others seem to adjust with ease.

**Negative Transitions from Sport.** The retirement process can be a long and painful period of emotional adjustment for athletes (Baillie, 1992; Stephan & Bilard 2003; Werthner & Orlick, 1986). McLaughlin (1981) described athletic retirement as a “difficult experience – one that triggers varying degrees of emotional and physical stress.” Werthner and Orlick (1986) found that the majority of their interviewed athletes felt some degree of difficulty when making the transition out of their respective sport careers. Other researchers found that nearly half of the respondents in their sample described a difficult sport retirement as “quite characteristic” or “very characteristic” of their experience (Webb et al., 1998). As mentioned above, multiple factors influence how an athlete adapts to life after sport. Perhaps the most important factor influencing an athlete’s perception of retirement is whether or not he/she voluntarily elects to exit sport (Blinde & Stratta, 1992; Web et al., 1998). Webb et al. (1998) determined that the reason for athletic retirement significantly effects an athlete’s transition to the outside world – with involuntary retirements being the most difficult (Kerr & Dacyshyn, 2000; Ogilvie & Taylor, 1993).

When an athlete’s career ends against his/her will, it is deemed an involuntary retirement. Involuntary retirements are unanticipated exits where the athlete suffers a career-ending injury, the athlete is cut from the team (also known as “deselection”), or the athlete’s sport program is terminated (Blinde & Stratta, 1992; Webb et al., 1998). All of these situations force athletes out

of sport and diminish their overall sense of control in life. An individual's belief of whether or not he/she has influence over life's outcomes adversely affects his/her sense of efficacy and mastery, as well as diminishes his/her ability to cope with negative events (Webb et al., 1998). Since involuntary retirements are usually not anticipated events, these athletes are less apt to consider how life might be different following retirement, as compared to athletes who consciously elect to exit sport.

In 1998, Webb et al. surveyed 92 current students and alumni from Notre Dame. The researchers aimed to explore the relationships between athletic identity, psychological adjustment to retirement, and reason for retirement from sport. The subjects had participated in sport at the high school, collegiate, or professional levels, and were asked to fill out a number of assessments relative to life satisfaction post-retirement, perceived difficulty of the actual retirement event, and the extent to which the future seemed vague or uncertain. Upon analysis, Webb and colleagues (1998) found that injury-related retirements were significantly more problematic for athletes. This can be attributed to a number of factors, the first being that injuries are not foreseeable events. Since injuries are unanticipated, athletes are often psychologically unprepared to give up their sport careers (Baillie, 1993). Furthermore, these athletes do not have time to divest from athletic identity and reinvest in other identity pursuits. They are often left stripped of their only source of self-competence and worth (Brewer et al., 1993; Stephan et al., 2003; Webb et al., 1998). Strong, exclusive identification with the athlete role is a risk factor for emotional disturbance in the event of injury (Brewer et al., 1993; Pearson & Petitpas, 1990; Webb et al., 1998). Injury-related retirees often report feeling a loss of control and vagueness about the future, which significantly decreases self-esteem (Webb et al., 1998; Werthner & Orlick, 1986). Furthermore, injury is seldom immediately recognized as career ending, leaving

athletes to endure a period of rehabilitation believing that they will one day play again. This false sense of hope prolongs the process of psychological healing and may have detrimental affects on identity reformation (Lally, 2007).

Researchers have also investigated the remaining two types of involuntary exits: deselection or having an entire sport program terminated. These retirements vary from injury-related retirements in that some athletes who are deselected or whose programs have been cut might not be entirely caught off guard. Though not always the case, some anticipation might exist due to perceptions of decreased playing time, negative coaching attitudes and interactions, changes in relationships with teammates, changes in athletic department priorities, or decreases in organizational budgets (Webb et al., 1998). Furthermore, a deselected athlete must also face the limitations of his/her physical abilities, diminishing self-confidence and presenting him/her with a unique and challenging transition out of sport (Webb et al., 1998).

In 1992, Blinde and Stratta aimed to examine the social psychological process characterizing the experiences of athletes following involuntary exits from collegiate sport. The researchers extensively interviewed twenty athletes who had either been cut from their sport team or whose entire sport program was suddenly eliminated. These researchers found that retiring athletes experience a great amount of emotional trauma and disruption in their lives immediately following retirement, with sixteen of twenty participants equating feelings with that of death and dying. According to these researchers, responses often paralleled Kübler-Ross's (1969) stage theory of death and dying. Athletes moved through stages of shock and denial, anger, bargaining, depression, and acceptance at different rates, with feelings of shock and denial being relatively short-lived compared to other stages. Depression, on the other hand, was the most prolonged stage for athletes in the study, generally characterized as a period of

unproductiveness and unusual personality and behavioral change (Blinde & Stratta, 1992). These athletes also experienced physiological changes such as loss of appetite, weight fluctuations, irregular menstrual cycles, and insomnia. Psychological changes related to athletic retirement included mood changes, a sense of being out of control, sadness about the loss of teammates, decline in motivation, and overall lack of trust in others. This lack of trust in others directly stemmed from feelings of betrayal by teammates, coaches, and sport administrators, and often leads to isolation upon career termination (Blinde & Stratta, 1992). It is important to note that this lack of trust carried over into other domains of the athletes' lives (Blinde & Stratta, 1992).

A voluntary retirement is one where the athlete consciously elects to exit sport. Athletes often choose to retire when they feel that they have accomplished all that sport has to offer. Athletes also sometimes choose to retire when alternative opportunities become more appealing, when family interests preclude exhaustive training and travel schedules, or when the intrinsic value of competition is no longer meaningful (Baillie, 1993). Perhaps the most frequent reason athletes voluntarily retire from sport is the perception that they cannot physically compete at the next level (Kerr & Dacyshyn, 2000). Webb et al. (1998) found that almost half of their participants elected to retire for this reason. Individuals who voluntarily elect to retire from sport usually have more time to prepare themselves for the real world and plan for future endeavors (Webb et al., 1998). Although it has been stated that voluntary retirements generally make for easier transitions (Baillie, 1993), choosing to retire does not always preclude termination difficulties (Kerr & Dacyshyn, 2000). These difficulties may be a direct result of maladaptive coping mechanisms.

Individuals who employ coping strategies like venting of emotions, mental disengagement, and behavioral disengagement often experience negative transitions from sport

(Grove et al., 1997). These individuals tend to heavily rely on denial. Although these four strategies may be adaptive in the early stages of retirement, researchers generally agree that prolonged use of these approaches can be detrimental and maladaptive (Carver et al., 1989; Grove et al., 1997). Denial, for example, may alleviate emotional turbulence at certain points in the transition process, however prolonged use of this strategy can exacerbate and even prolong feelings of distress (Baillie, 1992; Blinde & Stratta, 1992; Carver et al., 1989). These mechanisms fall into the category of avoidant coping strategies, or strategies that lead people into activities or mental states that keep them from directly addressing stressful events (Taylor, 1998). Retiring athletes often used avoidance coping strategies to avoid boredom and compensate for the rhythm of elite sport (Stephan et al., 2003). Stambulova (1997) reported that these athletes often spend their free time on distracting activities to countervail feelings of emptiness (Stephan et al., 2003). According to Holahan and Moos (1987), avoidant coping strategies appear to be a psychological risk factor for adverse responses to stressful life events (Taylor, 1998).

***Psychological Challenges.*** Exclusively identifying as an athlete makes an individual much more prone to psychological difficulties when dealing with career termination (Brewer et al., 1993). Due to intensive involvement in sport, athletes tend to experience identity foreclosure crisis upon retirement (Brewer et al., 1993). Identity foreclosure can be extremely detrimental to personal development (International Olympic Committee, 2014), and makes the transition out of sport tremendously challenging. Athletes with strong, exclusive athletic identities are at major risk for emotional disturbance, mental health issues, and decreased self-confidence upon the termination of their athletic careers (Werthner & Orlick, 1986), as they lack other sources of self-worth and self-identification (Brewer et al., 1993). Werthner and Orlick (1986) observed almost



60% of their participants rating self-confidence significantly lower during retirement than when competing. They also found that these athletes were extremely uncertain about their abilities in new situations outside the world of sport (Werthner & Orlick, 1986). It is important to note that the stronger and more exclusive the athletic identity, the harder the transition out of sport, and the more time needed for psychological adjustment (Brewer et al., 1993; Pearson & Petitpas, 1990).

In addition to shedding their athletic identities, retiring athletes are also faced with the loss of the traditional social support system that exists within sport (Baillie, 1993). This social support system consists of teammates, coaches, and sport administrators, and upon retirement, ultimately ceases to exist (Baillie, 1993). Eighty-two percent of participants in Baillie's (1992) study classified the friends on their teams as "very important" or "somewhat important," deeming them salient losses in retirement. It is not uncommon for athletes to report feelings of isolation and loneliness upon career termination (Blinde & Stratta, 1992; Horton & Mack, 2000).

Another psychological obstacle retiring athletes must face is the loss of routine and structure. Student-athletes' lives are extremely regimented with school, training, and competition, and between the demands of coaches, parents, and teachers, little to no time is left for the individual (Kerr & Dacyshyn, 2000). Since their lives are formally managed, few decisions need to be made by student-athletes, sometimes developing a false sense of control (Werthner & Orlick, 1986). This restricted autonomy is nurtured and protected by the constraints of their lifestyles (Gearing, 1999), making them feel lost or unsure of what to do once external controls are removed (Kerr & Dacyshyn, 2000). Interestingly enough, 64% of former Olympian athletes in Werthner and Orlick's (1986) study reported feeling little personal control over their lives during their sport careers. Once their careers ended, however, many athletes rated their

sense of personal control even lower than when competing, as they had virtually no idea what they should be doing (Kerr & Dacyshyn, 2000; Werthner & Orlick, 1986). With no identity, social support system, or routine upon retirement, it is no wonder that athletes often experience a huge emptiness or void with the loss of sport (Stambulova, 1997; Werthner & Orlick, 1986).

***Practical Challenges.*** Many athletes have a tendency to ignore or postpone the consideration of a future beyond sport, making way for poor career planning and the underdevelopment of life skills (Haerle, 1975; Svoboda & Vanek, 1982; Werthner & Orlick, 1986). Athletes often forgo basic life skills, dedicating most of their time and energy to sport, and thus tend to lag behind the general population in the formation of career plans and goals (Funk, 2010). Werthner and Orlick (1986) observed a lack of job experience in their sample of elite Canadian athletes, noting that these athletes often sacrificed their summers (and other large periods of time) in dedication to their respective sports. These athletes often had little to no vocational experience when it came to looking for jobs post-retirement, putting them at a severe disadvantage to the rest of society. One subject stated, “I designed all the other things in my life to fit my sport schedule” (Werthner & Orlick, 1986). This false prioritization and neglect to other areas of life might be attributed to the expectations of professional sport careers for many amateur athletes (Baillie, 1993). Student-athletes often resign themselves to inferior academic performance, as dominant athletic identity often causes the exploration of other roles to diminish over time (Adler & Adler, 1985; Adler & Adler, 1991). Neglecting social, educational, and vocational arenas, athletes often feel unprepared for life as “ordinary citizens” (Werthner & Orlick, 1986). After retirement, many athletes struggle to figure out exactly what they want from life, as most of their experiences thus far have been restricted to sport (Funk, 2010). Poor pre-retirement career planning and immature life skills often leave these individuals feeling vague

and uncertain of their futures after sport, as they are left with a skill set obscure to the rest of society (Webb et al., 1998). “The skills the athlete has perfected for so long are now useless in a world that no longer sees him or her as special. Much of our personal identity and self-esteem rests on what we are able to do – cognitively, affectively, and physically. To be able to do nothing very skillfully in the real world (in some cases not even read or write) is to be cast into nothingness, loneliness, and isolation” (Thomas and Ermler, 1988, p. 142). Taking both the psychological and practical challenges associated with sport retirement into account, it is understandable that many athletes experience negative transitions out of sport.

**Positive Transitions from Sport.** Many athletes experience retirement from sport as a relief and opportunity to pursue new roles and experiences (Kerr & Dacyshyn, 2000). In Allison and Meyer’s (1988) study, half of the participants expressed relief upon the end of their competitive careers, while nearly three quarters of athletes in Sinclair and Orlick’s (1993) study indicated that retirement had significantly changed their lives for the better. Coakley (1983) described career termination as a type of rebirth, stating that many athletes use retirement as an opportunity to grow and develop personally. As with many of the aforementioned studies, it is not uncommon for some athletes to experience positive transitions out of sport (Coakley, 1983; Greendorfer & Blinde, 1985). These athletes tend to significantly differ from poorly adjusted athletes in that they have developed a high-complexity self (Brewer et al., 1993). Individuals with multi-dimensional identities are more likely to experience easy transitions (Brewer et al., 1993; Horton & Mack, 2000; Orlick, 1980; Stephan et al., 2003; Werthner & Orlick, 1986). Sport can be a central pursuit in the life of an athlete, but other pursuits must not be relegated to zero (Orlick, 1980). Brewer et al. (1993) have concluded that having a strong but unrestricted athletic identity can be psychologically beneficial. It is only upon the exclusion of other roles

that athletic identity becomes detrimental to an individual's self-concept and life functioning (Brewer et al., 1993; Horton & Mack, 2000).

Blinde and Stratta (1992) found that participants who experienced milder transitions had anticipated their exit from sport and had thus started to take on new roles accordingly. Having a new focus and staying involved with sport (i.e. coaching or competing at a much lower level) can significantly ease an athlete's retirement (Baillie, 1992; Blinde & Stratta, 1992; Lally, 2007; Stephan et al., 2003; Werthner & Orlick, 1986). Several factors appear to play an important role in determining the nature of an athlete's transition out of sport (Werthner & Orlick, 1986). These factors included having a new focus, a sense of accomplishment, good coaching, minimal injuries and good health, minimal politics/sport association problems, financial stability, and adequate support of family and friends. The complex interaction of these factors, along with the coping strategies employed by an athlete, is said to determine how he/she responds to life after sport.

Grove, Lavellee, and Gordon (1997) investigated the relationship between sport-role identification and the quality of adjustment to retirement, as well as how athletic identity is related to coping strategies used during the career termination process. Using the AIMS and COPE Inventory (Carver, Scheier, & Weintraub, 1989), Grove and colleagues were able to analyze the coping strategies of forty-eight national and state Australian athletes. Athletes who experienced positive transitions implemented strategies like acceptance, positive reinterpretation and growth, planning, active coping, and the seeking of social support for emotional reasons (Grove et al., 1997). The researchers also concluded that individuals with strong exclusive athletic identities may fail to develop these coping strategies upon retirement, thus requiring more time to achieve psychological adjustment (Brewer et al., 1993; Grove et al., 1997).

**Life Satisfaction After Sport Career Termination.** With many elite athletes experiencing stressful transitions out of sport, researchers have questioned the adverse effects retirement has on life satisfaction and subjective well-being. In studies where athletes adjust easily, there have been correlations linked between academic involvement while in college and post-collegiate life satisfaction and self-esteem (Kleiber & Malik, 1989). This is consistent with the aforementioned findings regarding the high-complexity self (Brewer et al., 1993; Horton & Mack, 2000). Other studies, on the other hand, have indicated that intercollegiate athletes whose sports careers were involuntarily ended due to injury often experience lower post-collegiate life satisfaction than intercollegiate athletes whose careers were not terminated by injury (Kleiber, Greendorfer, Blinde & Samdahl, 1987). The general consensus, however, is that although the period surrounding retirement is psychologically difficult, overall life satisfaction is not affected (Brewer et al., 1993; Greendorfer & Blinde, 1985; Martin, Gerard, & Albion, 2014; Stephan et al., 2003; Webb et al., 1998; Werthner & Orlick, 1986).

Stephan et al. (2003) examined the dynamics of subjective well-being during transition out of elite sport. After analyzing sixteen French athletes who retired following the Sydney Olympic Games, the researchers quantitatively identified four phases in the evolution of subjective well-being (Stephan et al., 2003). Well-being (life satisfaction) decreased significantly upon immediate retirement, followed by an increase, stabilization, and final increase. Initially, all participants experienced feelings of loss or void, and expressed perceptions of being in a liminal position between their former athlete status and a current “ordinary individual” status. Many experienced difficulty accepting the new lifestyle and thus rejected new beginnings in the socio-professional arena. As Bradley (1976) stated, these athletes were faced with the realization that they would “live all [their] days never able to recapture the feeling of those few years of

intensified youth” (p. 190). Adjustments were finally achieved once these athletes were able to consider job accomplishments a source of proficiency and pride. Transitional athlete’s feelings and attitudes during retirement ranged from initial difficulties facing drastic life changes to eventual reconstruction of and adjustment to their new lifestyles. Martin, Gerard, and Albion’s (2014) findings also support this notion, as the majority of their athletes who retired voluntarily experienced increases in life satisfaction post-retirement.

Taking the aforementioned information into account, it is obvious that athletic retirement often proves problematic for elite athletes. It is also evident that some individuals may be more prone to experiencing adaptation difficulties than others. Elite transfer intercollegiate student-athletes were postulated to fall under this umbrella and were thus examined in depth. Chapter 3 of this paper describes the methodology implemented during this study.

### **Chapter 3: Methods**

The following chapter will discuss the methodology of this study; specifically the eligibility of participants, the instrumentation used, the procedure of data collection, and how data were analyzed and interpreted. Appendix D illustrates the timeline for this particular study.

#### **Participants**

I used my own personal contacts within the NCAA Division I women's soccer network to identify eligible participants for this study unfamiliar to me by at least one degree of separation. Recruiting unfamiliar participants prevented coercion from taking place, and allowed subjects to feel more comfortable sharing their experiences of athletic retirement. Initially, I identified and contacted sixteen potential participants. Ten participants responded via e-mail and enrolled in the study by mailing back signed consent forms and completed AIMS. Only one of these original ten participants withdrew from the study, as she failed to complete the qualitative measure within the requested time frame.

Of the nine participants who completed the study, all happened to be white/Caucasian females between the ages of 22 and 24. It is important to note, however, that no specific ethnic population was targeted, but that white/Caucasian females make up approximately 74.1% of the NCAA Division I women's soccer population (NCAA Demographics Database, 2014). Race was not the focus of this particular study. As previously stated, all subjects participated in NCAA Division I women's soccer, transferred institutions at least once during their collegiate careers, and retired from elite sport upon the expiration of eligibility within the past five years. Income levels varied, but due to the nature of this study, each participant completed at least undergraduate studies. English was the primary language of all participants. Reference Table 1 in Appendix F for information regarding participant demographics.

## **Instrumentation**

In order to carry out this study, I utilized a mixed methods approach. In the interest of measuring athletic identity quantitatively, I employed the Athletic Identity Measurement Scale (AIMS) developed by Brewer and colleagues in 1993 (reference Appendix B). The AIMS contains ten statements that athletes must score on a Likert scale ranging from (1) strongly disagree to (7) strongly agree. This instrument measures the strength and exclusivity of athletic identity on the basis of three subscales: social identity, exclusivity, and negative affectivity. Items #1, 2, 3, and 7 assess social identity (which can be further broken down into self identity and social identity), items #4, 5, and 9 assess exclusivity, and items #6, 8, and 10 assess negative affectivity (Michalis, Miltiadis, Fotios, & Theofanis, 2012). The original AIMS has exhibited terrific psychometric integrity, as it demonstrates internally consistency (Cronbach's  $\alpha = .93$ ) and test-retest reliability ( $r = .89$ ) (Brewer et al., 1993). While many suggestions regarding modification of the AIMS have been made (Brewer, Boin, Petitpas, Van Raalte, & Mahar, 1993; Brewer & Cornelius, 2001; Hale, James, & Stambulova, 1999; Martin, Mushett, & Eklund, 1994), the instrument is seen as both a valid and reliable measure of athletic identity (Brewer et al., 1993; Grove, Lavellee, & Gordon, 1997; Horton & Mack, 2000).

In order to qualitatively assess athletic identity and athletic retirement, the Individual In-Depth Interview Protocol was used (reference Appendix C). I developed this particular guide, and split the interviews into two separate parts. Part I examines the participant's athletic identity and transfer experience, while Part II focuses on the participant's specific transition out of sport.

## **Procedure**

In May 2014, I submitted the appropriate paperwork to the University of Connecticut's Institutional Review Board (IRB), a committee that ensures the ethical conduct of research at the



institution. Following IRB approval, participant recruitment ensued and sixteen eligible subjects were identified and contacted via e-mail. After receiving favorable responses, interested participants were then mailed validated consent forms, AIMS, and pre-addressed/stamped envelopes. Subjects were asked to sign and date the validated consent form and fill out the AIMS as if still participating in intercollegiate sport. They were asked to complete these forms and return them back to me as soon as possible.

After assessing the strength and exclusivity of participants' athletic identities at the time of participating in intercollegiate athletics, qualitative methods were employed. Participants were contacted upon the receipt of consent forms and were asked to schedule individual in-depth interviews. Each participant completed one 30-60 minute interview with me over the telephone. During this time, I followed the Individual In-Depth Interview Protocol and collected information relative to each individual's experience with athletic retirement.

Each individual interview was recorded on my personal laptop via GarageBand Version 6.0.5, and began by the obtainment of verbal consent. Upon consent, I confirmed that the participant was eligible for the study based on inclusion and exclusion criteria. I then conducted the interview and asked each participant to be as specific as possible by providing any relevant examples, stories, and/or anecdotes. Follow-up questions were not predetermined, but did not breach ethical boundaries. Follow-up was individualized and guided by the content of each unique interview. Additional questions were only asked if I needed clarification or elaboration on what was already said during the interview. Since these interviews took place after AIMS data were analyzed, I knew which participants were potentially 'at-risk' of experiencing negative transitions, and thus paid special attention to these responses. The interview protocol was not changed, however, as all participants were asked the same exact series of questions.

I then digitally transcribed each individual interview on the same laptop computer. In order to protect confidentiality, the recordings were typed up using pseudonyms and aliases for all names, cities, and institutions. All voice files were immediately destroyed upon transcription. Data analysis then ensued, and participants were contacted one more time to verify interpretations/coding of their responses. A peer debriefer was also used to ensure consistency of interpretation across participants. No changes were made to the initial data.

### **Data Analysis**

Data collected from the AIMS were analyzed to identify which participants may have potentially experienced difficult transitions from sport. Using Microsoft Excel, the means and standard deviations of social identity, exclusivity, negative affectivity, and overall athletic identity were calculated for each participant. I then established classification cut-offs, and participants were categorized as either “very low,” “low,” “moderate,” “high,” or “very high” in each of the aforementioned constructs (reference Appendix E).

After descriptive statistics were used to analyze quantitative data, I utilized inductive methods similar to those used by Kerr and Dacyshyn (2000) to analyze qualitative data. Patterns, themes, and categories for the data were not pre-determined prior to data collection, however a list of a priori and emergent themes was used upon analysis. Using NVivo Version 10.0.4 for Mac, I then coded each individual interview using this list of themes. I established four nodes, or areas of interest (transferring, athletic identity, athletic retirement, and confounding variables) and then identified similarities and differences between the themes in each node. In order to establish credibility in the qualitative analysis, the principle investigator (Dr. Bruening) and I collaborated and compared coding opinions. This form of triangulation facilitated the validation of data via cross-verification from two sources. Furthermore, a peer debriefer offered minimum

insight regarding interpretation, and participants were offered a chance to elaborate on or clarify statements they thought were misconstrued during analysis. This ensured the data to be both credible and trustworthy. The results are discussed in the next chapter of this paper.

## Chapter 4: Results and Discussion

The following chapter summarizes and discusses the results of both quantitative and qualitative measures separately. These results are then synthesized together and discussed in the final subsection.

### Quantitative (AIMS) Results

In effort to protect confidentiality, all AIMS data were aggregated and combined in Tables 2 and 3 located in Appendix F. Since participants were asked to score statements from (1) strongly disagree to (7) strongly agree, higher scores generally correspond with stronger and more exclusive identification with the athlete role (Brewer et al., 2010). After totaling up the items corresponding to each subscale, mean values and standard deviations were calculated – something every professional working in intercollegiate athletics should be able to do. Again, higher scores correspond with stronger social identity, higher exclusivity, and higher negative affectivity. After looking at this data, only one of nine participants fell into the “very high” category for overall athletic identity. This participant (alias “Heather”) scored a mean value of 6.50 with a standard deviation of 1.58, meaning that she possessed a strong and uni-dimensional identity at the time of transferring institutions, potentially predisposing her to retirement difficulties. Five other participants fell into the “high” athletic identity category, however none of these participants fell into the “high” or “very high” category for exclusivity. These individuals exhibited strong social identity and high negative affectivity, but were multidimensional in their self-schemas. Heather was the only participant to exhibit high exclusivity on Brewer et al.’s (1993) AIMS. Having a strong athletic and social identity has numerous benefits, as mentioned in Chapter 2 of this paper. Athletic identity becomes dangerous, however, when an athlete neglects other areas of life and exclusively defines him/herself as only

an athlete. Heather was the only participant to exhibit this “over-identification” with the athlete role, making her a focal point of this study. Findings from Brewer et al. (1993), Horton and Mack (2000), Kerr and Dacyshyn (2000), and Ogilvie and Howe (1986) all suggest that role-restricted individuals struggle with adaptation difficulties during stressful events (i.e. athletic retirement). This wealth of research also suggests that individuals with multidimensional identities and high self-complexity are protected from stress-related depression during adverse experiences.

### **Qualitative (Interview) Results**

After reviewing interview transcripts, various themes consistent with the literature review were ascertained. Themes included reasons for transferring, divestment of athletic identity, psychological challenges upon career termination, emotional variance during the retirement process, transitioning without difficulty, and potential confounding variables (injury).

**Reasons for Transferring.** As hypothesized, elite transfer intercollegiate student-athletes often elect to transfer institutions for reasons of athletic dissatisfaction. Eight of nine participants cited athletic dissatisfaction as playing a role in their decision to transfer schools. Athletic dissatisfaction included unsatisfactory playing time, low quality team performance, poor relationships with coaches, coaching staff changes, and broken promises/athletic scholarship misunderstandings. One participant expressed her dismay with playing time when stating:

My coaches told me that I probably wasn't going to be ready in time and that I wasn't going to play because I was injured and wasn't good enough. I wanted to play my senior year, so I transferred somewhere that I was told I would be able to play (Heather).

Another participant stated that her decision to transfer was triggered by low quality play and coaching staff changes:

I decided to transfer because the soccer wasn't that good and the whole coaching staff was getting let go and they were redoing the whole program. And I didn't want my sophomore year to be... like it was very unknown and I wanted a more stable foundation and program to play with for four years (Kelly).

One participant cited the poor relationship with her coach and broken promises regarding an athletic scholarship as her primary reason for transferring schools. She stated:

I decided to transfer after my third semester of school because playing sports – me and my coach really didn't see eye-to-eye. There were a lot of things that I was promised, like [scholarship] for instance, that I never received, playing time that never happened, and you know – I started questioning why I was there and I had gone to the coach and tried talking to her. I kind of just felt like she was very untruthful from when I was being recruited to even when I was in the school (Molly).

While minimal literature currently exists on this topic, it is not surprising that athletic dissatisfaction is often instrumental in a student-athlete's decision to transfer institutions. Three participants also included personal reasons in their motives for transferring (i.e. homesickness, school size, type of school), however, two participants each cited academic and financial reasons. The data also revealed that these elite student-athletes did not necessarily desire better team performance or athletic reputation. Four of nine participants expressed transferring to an "athletic upgrade," while five of nine participants cited transferring to an "athletic downgrade." Of the five who pursued "athletic downgrades," three expressed regret or frustration in their

decisions. Feelings of regret and frustration can in some ways aid in the process of athletic retirement, as these athletes expressed a certain readiness to move on. This fact was evident by the following quotation:

The thing about [institution two] is that we weren't as good as [institution one]. So it was really tough to play Division I [conference], and I mean we were decent, but we weren't anything to talk about. So it was hard not winning all the time. And my whole life, I've always won at everything. And now it's like – it was almost like I was kind of ready to move on. Because it was driving me insane (Whitney).

This finding supports the work of Brewer et al. (1999), which states that athletes who are experiencing poor team or individual performance often subliminally distance themselves or divest from athletic identity.

**Divestment of Athletic Identity.** Before transferring to other institutions, seven of nine participants exclusively self-identified as athletes. Nine of nine participants classified their friends as mostly teammates and/or other athletes. After transferring institutions, however, seven of nine participants self-identified as both students and athletes. One participant expressed her development of other roles by stating:

It was nice to identify with the athletes, but I was also an engineering major, so I could identify with all my class friends because we were all working really hard to study where that wasn't always the same on the athlete side (Brittany).

Another participant actually cited her “athletic downgrade” as the reason for her divestment from athletic identity when stating, “I guess [at institution two], I was a little more both [student and athlete] because athletics aren't as serious there” (Sarah). Seven of nine

participants classified their friends as mostly teammates and/or other athletes, while two subjects classified their friends as both athletes and non-athlete students. It is important to note that both of these student-athletes pursued “athletic downgrades,” perhaps further contributing to their divestment from social athletic identity like Sarah. The data reflects that most of the participants divested from their self athletic identities upon transferring, meaning that these individuals changed the way they perceived themselves. Social athletic identity remained relatively constant, however, as most of the participants chose to fraternize primarily with teammates and/or other athletes. Due to the socio-professional status and distinct social rank of athletes in today’s culture (Stephan et al., 2003; Webb et al., 1998), these findings were not surprising. Participants often laughed when I inquired about their friends, making statements like: “I don’t think I had any friends outside of athletics [laughter]” (Kelly) and “I can honestly say I don’t think I knew more than five regular students [laughter]” (Rachel).

Divestment from athletic identity can be seen as a protective mechanism, as athletes are able to experiment in and develop other roles in life. Having a non-exclusive athletic identity yields many benefits including possessing a salient sense of self, increased self-confidence, improved health and fitness, and enhanced athletic performance (Horton & Mack, 2000). Multidimensional self-concepts also decrease the potential risks associated with athletic identity, including emotional difficulty dealing with injury and difficulty adjusting to life after sport (Kerr & Dacyshyn, 2000). Though most of these participants did not exclusively self-identify as athletes, five of them experienced at least slight loss of identity upon retirement. Participants made statements like:

It was like I couldn’t identify as a person anymore. Like I didn’t have what I thought my entire identity was...It was like “What do I do with my life now?”



You know, I just felt like my whole identity was playing soccer and I was this athlete. Even after I retired and came home to my friends, they were like, “Oh you don’t have to run to soccer practice? Oh you don’t have to like go workout?” It’s like I really didn’t even know what to do with myself (Molly).

Identity crisis is defined as a period of uncertainty and confusion in which a person's sense of identity becomes insecure, typically due to a change in their expected aims or role in society (Marcia, 1991). Divesting from identification in the athlete role is an proactive and anticipatory coping mechanism that protects against identity crisis, making identity moratorium – the stage preceding identity achievement where individuals actively explore alternative roles (Marcia, 1991) – somewhat pleasant and short-lived in nature. Four of nine participants experienced no loss of identity upon career termination. One such participant stated, “I would say soccer helped make me who I am, rather than me losing [my identity]. It kind of sculpted me into who I am today I guess” (Whitney). While divestment of athletic identity can help ease a student-athlete’s transition, it does not preclude all other psychological challenges. It is important to note that all five individuals who experienced at least slight identity crisis also experienced psychological challenges discussed in the following subsection.

**Psychological Challenges Trump Practical Challenges.** After analyzing the data, I found that participants virtually did not struggle with any of the practical challenges cited in the review of literature. Nine of nine participants felt practically prepared for life beyond collegiate athletics, while only four of nine participants partook in CHAMPS or similar life skills programs. Only one participant cited having to participate in a mandatory life skills program sponsored by her university athletic department. Two participants stated that their respective athletic departments offered optional life skills programs but opted out, while three participants did not

know of any life skills programs, classes, or seminars offered by their respective institutions. Three of nine participants expressed that they did somewhat put off educational or vocational goals, however it is important to note that none of them exclusively self-identified as athletes. These participants cited athletic reasons, as well as personal reasons, for neglecting schoolwork. Personal reasons included social endeavors, as demonstrated by the following quotation:

I mean I think I could have done better in school if I paid more attention. I mean, girls on the team did do both. They did pay a lot of attention to both [athletics and academics] and didn't have a social aspect of their college career, and I'm a social person [laughter], so I did. And so balancing those three lives was difficult. But I mean, I got a 3.3 GPA. Like I'm not upset about it. But I guess I could have paid more attention to my education (Kelly).

While zero of nine participants faced practical challenges upon athletic retirement, five subjects did experience psychological challenges. Of these five, all mentioned the loss of structure and routine to be the most troublesome, followed by the loss of teammates, and then the loss of coaches and athletic staff. Participants made statements like:

The thing that most got to me I think is that you get so used to just doing so much in one day. You know you have classes, you have homework, you have other things, so like by the end of the day you're exhausted, but you have a ton to show for it. And so then transitioning to normal life, I never felt like I was accomplishing quite as much. And so I've tried to start filling up my days. I'm about to start taking on a second job just for fun. I just want to do more with my day [laughter]... I like crave the craziness almost (Brittany).

Statements like this were not uncommon during the individual in-depth interviews. Due to the constraints of their lifestyles, restricted autonomy was nurtured (Gearing, 1999), leaving participants unsure of what to do with their free time post-retirement. Research by Kerr and Dacyshyn (2000) also supported this finding, as participants cited the demands of coaches, parents, and teachers as leaving little to no personal time for themselves.

**Emotional Variance in Athletic Retirement.** With athletic retirement came a myriad of emotions for participants. While zero participants cited depression upon athletic retirement, sadness and nostalgia were the two most frequently cited emotions. Six of nine participants reported feeling sad upon career termination, while six of nine participants also reported “missing” collegiate soccer. One participant explained the sadness as follows:

I was definitely really sad after soccer ended for like a few months. I mean you lose something that has been a part of your life for a really long time. So, it was definitely hard, but I mean I didn't go into a depression or anything (Heather).

Another expressed sadness, but explained that it was offset by excitement by stating, “Overall, I was sad, but excited about what opportunities [Division I sport] would provide me in the future” (Kelly). Excitement about the future and relief were the next most frequently cited emotions after sadness and nostalgia, with each being reported by four of nine participants. These participants supported the research by Allison and Meyer (1988) and Coakley (1983), as athletic retirement can be seen as opportunistic and liberating. One participant expressed her excitement by stating:

I was excited about the future and what I had ahead of me and the opportunities I'd be given because of the four years I committed to playing Division I sport. And the experiences and the people that I met that helped me become a better person (Kelly).

Another participant expressed relief when stating:

When I got injured my freshman year, things never came quite back around for me. Like I never got back to the same place I was. So there was a certain frustration in that, and it was kind of a relief to stop having to feel like that (Brittany).

Three of nine participants reported feeling “ready” for athletic retirement, while two stated that they did not feel prepared to leave elite sport. One participant described burnout-like symptoms, expressing that she just needed a break:

I wouldn't say relieved. It was more of – like I needed a break...playing at such a high competitive level, you have to compete at such a high and competitive level your entire life...Like it starts so early. It doesn't stop. And then once you enter college, they own you...I don't know if relief is the right word. I mean I miss it, but it was good to have a break for once (Whitney).

Another stated that, “I mean it was a good four years. I'm happy I did it. But I'm glad I'm done. To be quite blunt [laughter]” (Kelly). Intensified training regimes and increased competitive pressure in elite collegiate sport often makes it easier for athletes to end their own athletic careers (Gustafsson, 2007). Burnout has been the subject of much research over the past decade, and has been deemed the reason why many elite collegiate athletes end their careers prematurely. While all participants in this study competed in four competitive seasons, burnout may have eased the transition for the three participants who felt “ready” to leave sport.

Two of nine participants also cited strong feelings of anticipation, while two more stated that they “don't miss” collegiate sport. Unlike involuntary exits from sport (i.e. injury,

deselection, program termination), the expiration of finite eligibility is anticipated. One participant summarized her anticipation by saying:

Leading up to it, I don't know. You know it's coming and senior day really hits you pretty hard. And you kind of look back on everything and it's sad, but then I feel like I was pretty grounded in the sense that like you know it's coming to an end, you take it for what it was, it was an amazing experience but it kind of has its place in your life and you know you like can't overextend that (Brittany).

Another participant expressed that she did not miss sport by saying:

Have I missed it? Surprisingly, I haven't. I haven't touched a ball since my last game at [opposing school]. I don't know why. Because it was such a huge part of my life and now it's like I'm okay with it (Whitney).

Feelings of bitterness, frustration, and regret were each cited by one participant only.

Though not felt by more participants, these findings still support the research of Kerr and Dacyshyn (2000), which states that individuals who leave sport harboring unresolved conflict often experience feelings of loss, bitterness, regret, or anger. As previously mentioned, Schlossberg (1981) suggested that fostering negative feelings or perceptions would likely adversely affect the process of change for these individuals. One participant implicitly expressed bitterness when stating, "I don't think I was necessarily ready to leave sport. I had more injuries my last year of eligibility to play sports, so that kind of decided it for me" (Catie). Another participant indirectly expressed frustration and regret upon retirement by stating the following:

To be honest, I still feel bitter about ending my collegiate career [laughter]. I didn't really end on like a high note...So for my psychologically, it was just me

like getting over the fact of what was in the past and what had happened and that was going to be over and there was no going back. It was like – you know it's too late to change it (Molly).

Due to the unique nature of athletic retirement, it is no wonder that participants experienced such a wide array of emotions. While sadness and nostalgia were most frequently cited, participants described these feelings as “manageable” and not “mind-blowing” (Sarah). Excitement of the future, relief, readiness, and anticipation can be classified as positive emotions and were the next most commonly cited. Unreadiness, bitterness, frustration, and regret can be classified as negative emotions and were the least most commonly cited emotions.

**Transitioning without Difficulty.** Perhaps the most interesting finding of this study was that only one of nine participants classified her transition from sport as “negative.” Catie was the only participant to characterize her athletic retirement as completely “negative.” It is important to note that she did not exclusively self-identify as an athlete subsequent to transferring institutions. Four of nine participants actually characterized their transitions as relatively “easy” and “positive,” while the remaining four characterized their transitions as neutral and/or containing both “positive” and “negative” aspects. One of the participants to experience a “positive” transition stated:

My transition was very smooth. Soccer was always a part of my life, but I was ready my senior year to be done with it and start – move on with something else. And so I was happy with what I did and how I committed to it and actually stayed with soccer. So, overall, my transition went well. I am now moving on to different things and hopefully soccer will come back into my life. But like right now, I'm completely happy with everything (Kelly).

Participants to experience “neutral” transitions cited both negative and positive elements of career termination. One such participant stated:

It’s kind of both a positive and a negative [experience]. It kind of really makes you look at yourself and figure out who you are. Like you know, one thing doesn’t define you. So it was positive in the sense that it kind of made me try to figure out who I was beyond soccer, but it was negative because it frickin' sucked. I would say that it was definitely a very hard transition and I felt like all of my teammates that were going through it – like I felt like none of us really wanted to talk about it (Molly).

While many participants experienced neutral or not “difficult” transitions, it is important to note that these transitions were not painless. Though Molly cited both positive and negative aspects of retirement, she stated that career termination was “horrible” and that “It was the worst thing of my life” (Molly). As supported by the literature, however, all nine participants expressed high life satisfaction post-retirement. Nine of nine participants retired from elite sport within the past two years and all are currently employed on at least a part-time basis. Stephan et al. (2003) found that it took approximately one year for athletes to discover that their jobs could be just as satisfying and self-enhancing as athletic achievement. The results of this study corroborate this finding. Furthermore, all but one has stayed involved in sport (specifically soccer), whether it be playing recreationally, coaching, or spectating. As mentioned in Chapter 2, having a new focus and staying involved with sport can significantly ease an athlete’s retirement, but does not guarantee a painless transition (Baillie, 1992; Blinde & Stratta, 1992; Stephan et al., 2003; Werthner & Orlick, 1986). Catie is currently employed and has stayed involved in sport, yet still classified her transition from sport as “negative.” This can be attributed to the idiosyncratic

nature of athletic retirement, and can perhaps be explained further when exploring potential confounding variables (injury).

**Confounding Variables (Injury).** Much research has been done on injury and athletic retirement, as extensive injury has a profound effect on the way an individual transitions out of sport. According to Lally (2007), injury is rarely immediately recognized as career ending, often leaving an athlete to endure a period of rehabilitation while believing he/she will one day compete again. This false sense of hope prolongs the process of psychological healing and may actually impede the reformation of healthy identity (Lally, 2007). Four of nine participants cited extensive injury (or injury that sidelines an athlete for a prolonged period of time) during their collegiate athletic careers, often giving way to medical hardship waivers. A medical hardship waiver (often incorrectly termed a “medical redshirt”) can be granted to a student-athlete who (1) experiences a season-ending injury/illness, (2) experiences this injury/illness prior to the completion of the first half of said season, and (3) has only competed in 30% or less of his/her team’s scheduled contests during the traditional season (not including post-season). Due to medical hardship waivers, three of the four participants to cite extensive injury were granted five years of eligibility – two of whom went on to compete in graduate school.

Three of the four participants to cite injury were able to compete during their final “senior” seasons, while one had to participate from the sidelines. These participants were able to divest from athletic identity and explore other roles, as demonstrated by the following statement:

I got really in shape and then the week before preseason, I actually tore my quad and so, yeah it was really tough. So I got kind of depressed to be honest. I worked really hard and it was all kind of slipping away from me. So I’d try and get back and I’d like overcompensate for the other quad with my ankle, and I just couldn’t



seem to get it right and couldn't get back to where I was and I worked so hard for it. So I lived with these people. I played with these people. I ate with these people... So, like I started studying really hard because it was something I could do by myself and it got me really into engineering (Brittany).

When asked if one participant lost a sense of who she was upon retirement, she stated:

Not dramatically, because I got injured my senior year, and I was probably most emotionally into it at that point. So that's probably somewhere where you realize it's not life and you have to kind of move on from it...So I probably dealt with some of that [identity foreclosure] earlier and like maybe more appreciated playing my fifth year and just being able to be out there and play. So I don't know if that's why it wasn't as terrible, because I know when I first got injured, I definitely felt like I was dealing with a lot of that stuff then (Heather).

Unlike these participants, Catie's injury was not immediately recognized as career ending, and she thus endured countless hours of rehabilitation in attempt to get back on the field. Unfortunately, she was unable to compete during her final season and left sport without petitioning the NCAA for a sixth year of eligibility. When asked how she felt upon the expiration of her eligibility, she stated that she did not necessarily feel "ready" to leave sport. She also stated that her injuries kind of forced her into athletic retirement, supporting research regarding involuntary retirements. Catie was the only one of nine participants to classify her transition from sport as "negative," consistent with the findings of Baillie (1993), Blinde and Stratta (1992), Brewer et al. (1993), Pearson and Petitpas (1990), Stephan et al. (2003), Webb et al. (1998), and Werthner and Orlick (1986). Due to the already stringent restrictions of the inclusion criteria, I did not feel it necessary to rule out participants who experienced extensive injury.

Injury is extremely common in high-level intercollegiate athletics, and perhaps even more so prevalent in elite women's contact sports like soccer.

### **Synthesized Data**

After amalgamating the data, two participants became persons of interest. Heather was the only participant to score on the high end of the exclusivity spectrum, a component of athletic identity known to predispose athletes to difficult retirements. She had a neutral transition out of sport. Catie, on the other hand, had a “negative” transition out of sport, but only scored moderately on the exclusivity sub-scale. As mentioned above, confounding variables like injury probably played into her “negative” transition. After referencing *Table 4* in Appendix F, it can only be concluded that individuals who score on the low end of the exclusivity spectrum are likely to experience “positive” transitions out of sport.

### **Summary**

After taking all of the results into account, multiple conclusions can be drawn. For starters, athletic dissatisfaction usually does play a role in an elite intercollegiate student-athlete's decision to transfer. Though athletic identity is typically high in these individuals (as demonstrated by the AIMS), they tend to divest from this identity upon transferring. Exploring and developing alternative roles facilitates easier transitions out of sport, as only one participant explicitly cited having a “negative” experience. The process of transferring institutions may have even facilitated divestment from athletic identity, as these student-athletes had to essentially start over at their new institutions, a form of role exploration and development in and of itself. This transition from schools may have actually helped ease the eventual transition out of sport. While participants felt practically prepared for the “real world,” they struggled psychologically with the losses of structure/routine and, more importantly, identity. This finding can likely extend to elite

intercollegiate athletes in other sports (sp. non-revenue producing sports). Emotional experiences are also very different across the board, as some elite transfer intercollegiate student-athletes view retirement as liberating and opportunistic, while others look back on their athletic careers with bitterness, frustration, and regret. This emotional variance can be attributed to the idiosyncratic and multifactorial nature of athletic retirement.

Due to a small sample size, lack of exclusively identified participants, and the idiosyncratic nature of athletic retirement in general, this study produced inconclusive evidence as to whether or not the AIMS can be used to identify ‘at-risk’ student-athletes. The instrument, though a valid and reliable measure of athletic identity, social identity, exclusivity, and negative affectivity, cannot take into account injury and other variables that can play against smooth transition from sport. This being said, I cannot conclude whether the AIMS can be used to identify athletes who might experience difficult career terminations.

Since athletic retirement is unique to every individual, it is difficult to definitively say whether elite transfer intercollegiate student-athletes comprise an ‘at-risk’ population of experiencing difficult transitions out of sport. Instead of looking at this specific population *per se*, professionals within the intercollegiate athletics network are encouraged to learn the risk factors and signs predicative of negative athletic retirements. These risk factors include extensive injury and overall neglect to other aspects of life (i.e. academics, family, etc.)

## **Chapter 5: Conclusion**

After analyzing and discussing the data, the aforementioned research question can be answered. The construct of athletic identity is strong in elite transfer intercollegiate student-athletes, but not exclusive. The multi-dimensionality of personal identity actually makes athletic retirement tolerable in many cases, though not necessarily pain-free. The hypothesis was rejected, as the participants demonstrated low exclusivity. Only one participant reported experiencing a “negative” transition out of sport (credited to injury).

### **Implications for Future Research**

It is unclear whether Brewer et al.’s (1993) AIMS can definitively be used to identify student-athletes at risk of experiencing negative athletic retirements, as the sample size for this particular study was small and the number of exclusively identified participants even smaller. In order to test the instrument’s predictive ability, future researchers should apply both the AIMS and Individual In-Depth Interview Protocol to a much larger sample, and perhaps even consider comparing non-transfer student-athletes with transfer student-athletes. In order to account for factors other than athletic identity that can affect athletic retirement (i.e. extensive injury), future researchers should also consider adding items to and/or modifying the current AIMS. A new instrument should be developed to assess athletic identity specifically in the context of athletic retirement. This new instrument should be modeled after Brewer et al.’s (1993) AIMS, as the scale is extremely user friendly and can easily be employed by professionals working in intercollegiate athletics. All participants involved in this particular study transferred on their own volition (meaning none were forced to leave their initial teams). Future researchers should also examine the construct of autonomy in the decision to transfer and analyze how control, or lack there of, impacts an elite transfer intercollegiate student-athlete’s transition out of sport.

### **Implications for Professionals in Intercollegiate Athletics**

As mentioned above, it is the responsibility of professionals in higher education and intercollegiate athletics to prepare student-athletes for the psychological and practical challenges associated with life after sport. In order to help prepare student-athletes for the psychological challenges associated with retirement, coaches, academic advisors, and other sport administrators should know the signs of athletes who will potentially experience difficult athletic retirements. Knowing that injured or exclusively identified student-athletes generally experience tougher transitions out of sport, advisors can encourage engagement in academic activities like getting to know classmates or talking to instructors, as well as understanding personal strengths/weaknesses and establishing values relative to personal identity (Menke, 2013). Advisors should encourage the exploration of other roles and foster the formation of a multidimensional self-concept in student-athletes. Lally (2007) found that athletes who did not experience crisis upon retirement “consciously elected to shift the athlete role from its central to a subordinate status in their identity hierarchies and explore other available roles.” Decreasing the strength of athletic identity is a successful protective mechanism (Lally & Kerr, 2005), as some athletes decrease self-identification with the athlete role in response to or anticipation of stressful events (i.e. career termination) (Brewer et al., 1999). It is important to inform all student-athletes of the dangers associated with strong, exclusive athletic identity, and to encourage the development of new focuses prior to retirement (Brewer et al., 1999; Brewer & Cornelius, 2010; Lally, 2007). Coaches, advisors, and other sport administrators must help student-athletes establish new focuses prior to retirement and generate excitement about new opportunities in the future. Coaches may initially feel conflicted about having their star athletes

pursue other avenues outside the world of sport, but it is important to inform these coaches of the potential issues their players might face down the road.

Along with the psychological task of shedding their athletic identities, student-athletes are also often faced with the loss of their entire social support systems. Advisors should encourage athletes to establish support teams that are not exclusive to only coaches, teammates, and athletic counselors. Involving others outside the realm of athletics can be extremely beneficial and aids in the creation of a student identity (Lally & Kerr, 2005). Using campus resources like the counseling center, career center, and various alumni associations can help ease an athlete's psychological adjustment to the real world (Menke, 2013).

Though not necessarily supported by this particular study, professionals in intercollegiate athletics and higher education must also be prepared to help student-athletes overcome the practical obstacles associated with retirement from sport (Funk, 2010). Since many athletes do forego basic life skills (sp. revenue generating sports like football and basketball), it is the duty of coaches, administrators, advisors, and counselors to prevent this underdevelopment. These individuals must hold workshops, seminars, and classes to prepare student-athletes for life after sport, placing high priority on teaching self-responsibility for career development. CHAMPS (Challenging Athletes Minds for Personal Success) and other life skills programs are extremely effective at making the transition out of sport easier for student-athletes. These programs help athletes develop overall life plans and equip them with the skills needed for the post-collegiate world (Funk, 2010). These practical skills include credit management, resume writing, interview skills, budgeting, paying bills, understanding salaries, and preparing for graduate school. The proactive development of new career options and gradual withdrawal from sport can be very beneficial for intercollegiate athletes approaching retirement (Baillie, 1993; Lavellee &

Robinson, 2007). The data from this specific study cannot support or refute the establishment of CHAMPS/life skills programs, as nine of nine participants felt practically prepared for life in the real world. It is postulated that participants in this particular study did not struggle with practical challenges, as women's soccer is not typically a revenue generating sport. Professional opportunities beyond intercollegiate women's soccer are slim at best. Accordingly, members of this specific population usually prepare themselves for the workforce, as they are assumed to understand the likelihood of and financial struggles associated with professional soccer. Male intercollegiate student-athletes and the select few female intercollegiate student-athletes involved in revenue generating sports (i.e. women's basketball) might be more 'at-risk' of experiencing aforementioned practical challenges. The professional opportunities for these individuals beyond intercollegiate athletics may play a role in this under-preparedness. While the NCAA currently mandates that all member institutions implement some form of CHAMPS/life skills, not all schools embrace these programs to the same degree. To prevent transfer intercollegiate student-athletes from slipping through the cracks, so-to-speak, the NCAA should consider creating a policy that enforces a more uniform application of these programs.

### Appendix A: Definition of Terms

1. Athletic Dissatisfaction – When reasons of athletic dissatisfaction are noted, participants expressed choosing to transfer institutions due to (a) poor competition, (b) poor team performance, (c) unsatisfactory playing time, (d) desire of athletic scholarship/prowess, or (e) subpar coaching.
2. Athletic Identity – The degree to which an individual identifies with the athlete role and looks to others for acknowledgement of that role (Brewer et al., 1993). It is a type of self-schema or how an individual perceives him/herself (Pottratz, 2013).
3. Athletic Identity Measurement Scale (AIMS) – A ten-item instrument developed by Brewer et al. (1993) to measure the social, cognitive, and affective aspects of athletic identity. Higher AIMS scores generally correspond with stronger and more exclusive identification with the athlete role (Brewer, Cornelius, Stephan, & Van Raalte, 2010). This multidimensional scale contains three subscales (social identity, exclusivity, and negative affectivity), each being evaluated on a Likert scale of one through seven (Brewer et al., 1993; Michalis, Miltiadis, Fotios, & Theofanis, 2012). It has proved to be both a valid and reliable measure of athletic identity.
  - a. Social Identity – The strength with which an athlete identifies with the athlete role (Martin, Eklund, & Adams-Mushett, 1997; Michalis et al., 2012). This construct is made up of the way others view an athlete, as well as the way he/she views him/herself (i.e. self identity).
  - b. Exclusivity – The degree to which an athlete relies heavily on his/her athletic identity and identifies weakly with other roles such as student or friend (Martin et al., 1997).



- c. Negative Affectivity – The negative emotional responses resulting from poor performance or the inability to participate in sport (i.e. injured, retired) (Martin et al., 1997).
4. Athletic Retirement – In the context of this particular study, the action or fact of leaving one's athletic career or ceasing to compete in elite/intercollegiate sport.
5. CHAMPS/Life Skills Programs – The NCAA CHAMPS (Challenging Athletes Minds for Personal Success)/Life Skills Program is an initiative aimed at enhancing the quality of the student-athlete experience within the context of higher education (National Collegiate Athletic Association, 2008). The program supports student-athlete development and excellence in the following five areas: academics, athletics, personal development, career development, and community service. Student-athletes are often taught practical skills like time-management, credit management, resume writing, interview skills, budgeting, paying bills, understanding salaries, and preparing for graduate school.
6. National Collegiate Athletic Association (NCAA) – The national governing body for more than 1,300 colleges, universities, conferences, organizations and people (National Collegiate Athletic Association, 2013).
7. Student-Athlete – A student whose enrollment was solicited by a member of a school's athletics staff for the purpose of the student participating in an athletics program, or a student who reports for practice (National Collegiate Athletic Association, 2013).

## **Appendix B: Athletic Identity Measurement Scale (AIMS)**



While completing this short assessment, please answer each statement as if you were still competing in intercollegiate sport. Ideally, we would like you to answer these questions just as you would have when you decided to transfer institutions. Please give each of the following statements a score from 1 (strongly disagree) to 7 (strongly agree).

- |   |   |   |   |   |   |   |   |
|---|---|---|---|---|---|---|---|
| 1. I consider myself an athlete.  | 1 | 2 | 3 | 4 | 5 | 6 | 7 |
| 2. I have many goals related to sport.  | 1 | 2 | 3 | 4 | 5 | 6 | 7 |
| 3. Most of my friends are athletes.   | 1 | 2 | 3 | 4 | 5 | 6 | 7 |
| 4. Sport is the most important part of my life.                                 | 1 | 2 | 3 | 4 | 5 | 6 | 7 |
| 5. I spend more time thinking about sport than anything else.                   | 1 | 2 | 3 | 4 | 5 | 6 | 7 |
| 6. I need to participate in sport to feel good about myself.                    | 1 | 2 | 3 | 4 | 5 | 6 | 7 |
| 7. Other people see me mainly as an athlete.                                    | 1 | 2 | 3 | 4 | 5 | 6 | 7 |
| 8. I feel bad about myself when I do poorly in sport.                           | 1 | 2 | 3 | 4 | 5 | 6 | 7 |
| 9. Sport is the only important thing in my life.                                | 1 | 2 | 3 | 4 | 5 | 6 | 7 |
| 10. I would be very depressed if I were injured and could not compete in sport. |   |   |   |   |   |   |   |
|   | 1 | 2 | 3 | 4 | 5 | 6 | 7 |

Brewer, B. W., Van Raalte, J. L., & Linder, D. E. (1993). Athletic identity: Hercules muscles or Achilles' heel? *International Journal of Sport Psychology*, 24, 237-254.

### Appendix C: Individual In-Depth Interview Protocol

Part I

First, I am going to ask you a few questions specific to transferring institutions.

When and why exactly did you elect to transfer schools?

If you chose to transfer for athletic reasons, would you consider your second institution an upgrade or downgrade?

Was transferring to a new school difficult to you and why/why not?

Before transferring schools, did you personally identify as more of a student, athlete, or neither?

Were the majority of your friends at your first institution teammates and/or other athletes?

After transferring schools, did you personally identify as more of a student, athlete, or neither?

Were the majority of your friends at your second institution teammates and/or other athletes?

Part II

Now, I am going to ask you a few questions relative to athletic retirement and your specific transition out of sport.

When exactly did you retire for intercollegiate athletics?

How did you feel upon the expiration of your eligibility? Did you feel like you were ready to leave sport?

Did you ever try to pursue playing professionally?

Practically speaking, did you feel prepared for life beyond collegiate athletics?

Do you wish you had paid more attention to educational/vocational goals?

Did you at any time participate in CHAMPS or other Life Skills programs throughout your collegiate career? If so, did it help prepare you for the “real world?”

Psychologically speaking, was the loss of teammates, structure/routine, and support of athletic staff difficult for you? Please explain.

What emotions did you feel leading up to athletic retirement and how did you feel during the two years following career termination?

Did you feel like you lost a sense of who you were upon retirement?

What are you doing with your life now?

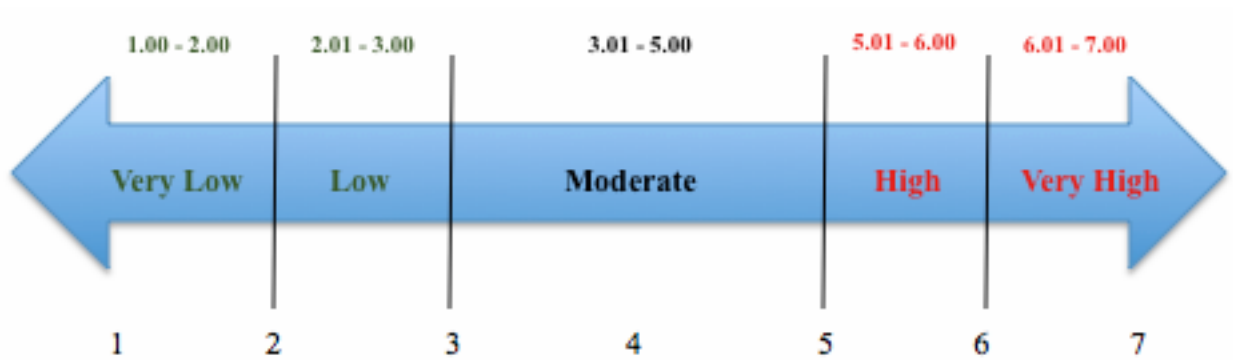
Have you stayed involved in sport? If so, how?

Overall, how would you classify your transition out of sport?

**Appendix D: Researcher's Time Table**

<b>Researcher's Time Table</b>	
<b>2014 Month</b>	<b>Action</b>
May	IRB-1 Protocol Application submitted to UConn IRB; review of literature
June	IRB approval 6/27/14; participant recruitment
July - September	Validated consent forms and AIMS collected; AIMS data analyzed; individual in-depth interviews scheduled and completed
October	Qualitative data analysis via NVivo Version 10.0.4; formal report created
November	Thesis defense
December	Distribution of materials to all participants

**Appendix E: Construct Classifications**



**Appendix F: Tables**

	Age	Race/Ethnicity	Date of Athletic Retirement
1	23	White/Caucasian	Fall 2012
2	23	White/Caucasian	Fall 2013
3	24	White/Caucasian	Fall 2012
4	22	White/Caucasian	Fall 2013
5	24	White/Caucasian	Fall 2012
6	23	White/Caucasian	Fall 2012
7	23	White/Caucasian	Fall 2013
8	22	White/Caucasian	Fall 2012
9	23	White/Caucasian	Fall 2012

*Table 1. Participant Information*

Athletic Identity		Social Identity		Exclusivity		Negative Affectivity		
	M	S.D.	M	S.D.	M	S.D.	M	S.D.
1	5.10	1.79	6.00	1.15	3.00	1.73	6.00	0.00
2	6.50	1.58	7.00	0.00	5.33	2.89	7.00	0.00
3	5.10	1.73	6.00	1.15	4.00	2.65	5.00	1.00
4	3.70	2.45	6.00	1.41	1.00	0.00	3.33	1.53
5	5.90	1.10	6.75	0.50	4.67	0.58	6.00	1.00
6	4.80	2.04	6.75	0.50	3.33	2.08	3.67	1.15
7	5.90	1.45	6.50	1.00	4.67	2.08	6.33	0.58
8	5.50	1.35	6.50	0.58	4.00	1.00	5.67	1.15
9	4.70	1.64	5.00	2.16	3.67	1.53	5.33	0.58

Table 2. AIMS Calculations

AIMS Frequency Table					
Construct	Very High	High	Moderate	Low	Very Low
Athletic Identity	1	5	3	0	0
Social Identity	5	3	1	0	0
Exclusivity	0	1	6	1	1
Negative Affectivity	2	4	3	0	0

Table 3. AIMS Frequency Table

Synthesized Results

	AIMS Athletic Identity	AIMS Exclusivity	Transition
1	High	Low	Positive
2	Very High	High	Neutral
3	High	Moderate	Positive
4	Moderate	Very Low	Positive
5	High	Moderate	Negative
6	Moderate	Moderate	Positive
7	High	Moderate	Neutral
8	High	Moderate	Neutral
9	Moderate	Moderate	Neutral

*Table 4. Synthesized Results*

### Endnotes

As a former elite transfer intercollegiate student-athlete, I can vouch for the findings of this study. If I were to have taken Brewer et al.'s (1993) AIMS at the time of transferring institutions, I would have scored "very high" in both the domains of athletic identity and exclusivity. My career was anything but smooth, as I was plagued by extensive injury. I petitioned the NCAA for a medical hardship waiver and was eventually awarded a sixth year of eligibility, which took place this past fall. I often wonder how I would have dealt with athletic retirement if my career (1) ended in four healthy years or (2) ended in injury after just two. Upon receiving additional eligibility, I was lucky enough to realize that sport could end at any moment, and thus started to divest from my own athletic identity. I started to explore and develop roles outside the realm of athletics and found it to make all the difference when transitioning from sport. I began to identify as a student, athlete, Christian, daughter, sister, role model, and friend, and consequently experienced a "positive" athletic retirement.

Like these participants, I did not experience an entirely painless transition. Due to the idiosyncrasy of my situation and the fact that athletic retirement is often seen as a dynamic process as opposed to an isolated event, I worked through many of the aforementioned psychological challenges before my career actually came to an end. I honestly wish that someone had pulled me aside and informed me of the challenges associated with career termination before I was forced to deal with them on my own. This research is not only personally important to me, but also benefits the athletic community, as it sheds light on some of the issues elite transfer intercollegiate student-athletes may face; a population previously unexamined. It is my hope that this research provides powerful insight to professionals working in intercollegiate athletics/ higher education, and in turn allows them to better assist student-athletes retiring from elite sport.

## References



- Adler, P., & Adler, P. A. (1991). *Backboards and blackboards: College athletes and role engulfment*. New York: Columbia University Press.
- Adler, P., & Adler, P. A. (1985). From idealism to pragmatic detachment: The academic performance of college athletes. *Sociology of Education*, 58(4), 241-250.
- Adler, P. A., & Adler P. (1989). The gloried self: The aggrandizement and the constriction of self. *Social Psychology Quarterly*, 52, 299-310.
- Alexander, E. (4 March 2011). *College athletes turn to transfers in search of playing time*. Retrieved from [http://www.cleveland.com/sports/college/index.ssf/2011/03/college\\_athletes\\_turn\\_to\\_trans.html](http://www.cleveland.com/sports/college/index.ssf/2011/03/college_athletes_turn_to_trans.html)
- Allison, M., & Meyer, C. (1988). Career problems and retirement among elite athletes: The female tennis professional. *Sociology of Sport Journal*, 5, 212-222.
- Anderson, D. F. & Cychosz, C. M. (1994). Development of an exercise identity scale. *Perceptual & Motor Skills*, 78, 747-751.
- Astle, S. J. (1986). The experience of loss in athletes. *Journal of Sports Medicine and Physical Fitness*, 26, 279-284.
- Baillie, P. H. F. (1992, October/November). *Career transition in elite and professional athletes: A study of individuals in their preparation for and adjustment to retirement from competitive sports*. Colloquium present at the seventh annual conference of the Association for the Advancement of Applied Sport Psychology, Colorado Springs, CO.
- Baillie, P. H. F. (1993). Understanding retirement from sports: Therapeutic ideas for helping athletes in transition. *The Counseling Psychologist*, 21, 399-410.
- Baillie, P. H. F., & Danish, S. J. (1992). Retirement from sport: Studies show wide range of experiences and expectations. *Olympinfo*. 8, 4.
- Blinde, E. M. & Stratta, T. M. (1992). The "sport career death" of college athletes: Involuntary and unanticipated sport exits. *The Journal of Sport Behavior*, 15, 3-20.
- Bradley, B. *Life on the run*. Quadrangle/The New York Times Book Co., New York, 1976.
- Brewer, B. W., Boin, P. D., Petitpas, A. J., Van Raalte, J. L., & Mahar, M. T. (August 1993). *Dimensions of athletic identity*. Paper presented at the annual meeting of the American Psychological Association, Toronto, Canada.
- Brewer, B. W., Cornelius, A. E. (2001). Norms and factorial invariance of the Athletic Identity Measurement Scale. *Academic Athletic Journal*, 16 (1), 103-113.
- Brewer, B. W., Cornelius, A. E., Stephan, Y., & Van Raalte, J. (January 2010). Self-protective changes in athletic identity following anterior cruciate ligament reconstruction.

*Psychology of Sport and Exercise*, 11(1), 1-5. doi: 10.1016/j.psychsport.2009.09.005

Brewer, B. W., Selby, C. L., Linder, D. E., & Petitpas, A. J. (1999). Distancing oneself from a poor season: Divestment of athletic identity. *Journal of Personal and Interpersonal Loss*, 4, 149-162.

Brewer, B. W., Van Raalte, J. L., & Linder, D. E. (1993). Athletic identity: Hercules muscles or Achilles' heel? *International Journal of Sport Psychology*, 24, 237-254.

Capelo, H. (July 2010). Symbols from the sky: Heavenly messages from the depth of prehistory may be encoded on the walls of caves throughout Europe. Retrieved from [http://seedmagazine.com/content/article/symbols\\_from\\_the\\_sky](http://seedmagazine.com/content/article/symbols_from_the_sky)

Carver, C. S., Scheier, M. E., & Weintraub, J. K. (1989). Assessing coping strategies: A theoretically based approach. *Journal of Personality and Social Psychology*, 56, 267- 283.

Christianson, E., & Geren, H. (13 March 2007). NCAA launches latest public service announcements, introduces new student-focused website. Retrieved from <http://fs.ncaa.org/Docs/PressArchive/2007/Announcements/NCAA%2BLaunches%2BLatest%2BPublic%2BService%2BAnnouncements%2BIntroduces%2BNew%2BStudent-Focused%2BWebsite.html>

Coakley, J. (1983). Leaving competitive sport: Retirement or rebirth? *Quest*, 35, 1-11.

Cozby, P. C. (2009). *Methods of behavioral research (10<sup>th</sup> ed.)*. New York, NY: McGraw-Hill.

Danish, S. J. (1983). Musing about personal competence: The contributions of sport, health, and fitness. *American Journal of Community Psychology*, 11, 221-240.

Fox, K. H., & Corbin, C. B. (1986). An extension to a model of physical activity involvement: A preliminary investigation into the role of perceived importance of physical abilities. In J. Watkins, T. Reilly, & L. Burwitz (Eds.), *Sport Science* (p. 223-228). London: Spon.

Funk, A. (22 June 2010). *Next step*. Retrieved from [http://www.athleticmanagement.com/2010/06/06/next\\_step/index.php](http://www.athleticmanagement.com/2010/06/06/next_step/index.php)

Gearing, B. (1999). Narratives of identity among former professional footballers in the United Kingdom. *Journal of Aging Studies*, 13(1), 43-58.

Gould, D., & Horne, T. S. (1984). Participation motivation in young athletes. In J. M. Silva & R. S. Weinberg (Eds.), *Psychological foundations of sports* (pp. 359-370). Champaign, IL: Human Kinetics.

Greendorfer, S. L. & Blinde, E. M. (1985). 'Retirement' from intercollegiate sport: Theoretical

- and empirical considerations. *Sociology of Sport Journal*, 2, 101-110.
- Grove, J. R., Lavellee, D. & Gordon, S. (1997). Coping with retirement from sport: The influence of athletic identity. *Journal of Applied Sport Psychology* 9, 191-203.
- Gustafsson, H. (2007). *Burnout in competitive and elite athletes*. Retrieved from <http://www.diva-portal.org/smash/get/diva2:135387/FULLTEXT01.pdf>
- Haerle, R. K. (1975). Career patterns and career contingencies of professional baseball players: An occupational analysis. In D. Ball & J. Loy (Eds.), *Sport and social order* (pp. 461-509). Reading, MA: Addison-Wesley.
- Hale, B., James, B., Stambulova, N., & Collins, D. (1999). A cross-cultural analysis of the dimensions of the Athletic Identity Measurement Scale: A Herculean undertaking. *International Journal of Sport Psychology*, 30, 83-100
- Holahan, C. J., & Moos, R. H. (1987). Risk, resistance, and psychological distress: A longitudinal analysis with adults and children. *Journal of Abnormal Psychology*, 96, 3-13.
- Horton, R. S., & Mack, D. E. (2000). Athletic identity in marathon runners: Functional focus or dysfunctional commitment? *Journal of Sport Behavior*, 23, 101-119.
- International Olympic Committee. (2014). *Athletic identity and sport transition*. Retrieved from [http://www.olympic.org/Documents/elite\\_athletes/ATHLETIC\\_IDENTITY.pdf](http://www.olympic.org/Documents/elite_athletes/ATHLETIC_IDENTITY.pdf)
- Kendzierski, D. (1988). Self-schemata and exercise. *Basic and Applied Social Psychology*, 9, 45-59.
- Kerr, G., & Dacyshyn, A. (2000). The Retirement experiences of elite, female gymnasts. *Journal of Applied Sport Psychology*, 12, 115-133.
- Kim, J. E., & Moen, P. (2001). Is retirement good or bad for subjective well-being? *Current Directions in Psychological Science*, 10, 83-86
- Kleiber, D., Greendorfer, S., Blinde, E., & Samdahl, D. (1987). Quality of exit from university sports and life satisfaction in early adulthood. *Sociology of Sport Journal*, 4, 28-36.
- Kleiber, D. A., & Malik, P. B. (1989). Educational involvement of college athletes and sub-sequent well-being in early adulthood. *Journal of Sport Behavior*, 12, 203-211.
- Kübler-Ross, E. (1969). *On death and dying*. New York: Macmillan.
- Lally, P. S. (2007). Identity and athletic retirement: a prospective study. *Journal of Psychology of Sport and Exercise*, 8, 85-99.

- Lally, P. S., & Kerr, G. A., (2005). The career planning, athletic identity and student role identity of intercollegiate student athletes. *Research Quarterly for Exercise and Sport*, 76(3), 275-285.
- Last, J. M. (2001). *A dictionary of epidemiology* (4<sup>th</sup> ed.). New York: Oxford University Press, Inc.
- Lavallee, D., & Robinson, H. K. (2007). In pursuit of an identity: a qualitative exploration of retirement from women's artistic gymnastics. *Journal of Psychology of Sport and Exercise*, 8, 119-141.
- Marcia, J. (1991). Identity and self-development. In R. Lerner, A. Peterson, and J. Brooks-Gunn (Eds.), *Encyclopedia of Adolescence* (1). New York: Garland.
- Martin, J. J., Eklund, R. C., & Adams-Mushett, C. (1997). Factor structure of the Athletic Identity Measurement Scale with athletes with disabilities. *Adapted Physical Activity Quarterly*, 14(1), 74-82. • Available at: [http://digitalcommons.wayne.edu/coe\\_khs/6](http://digitalcommons.wayne.edu/coe_khs/6)
- Martin, J. J., Mushett, C., & Eklund, R. (1994). Factor structure of the Athletic Identity Measurement Scale with adolescent swimmers with disabilities. *Brazilian Journal of Adapted Physical Education Research*, 1(1), 87-100.
- Martin, L. A., Gerard, F. J., & Albion, M. J. (2014) Changes in athletic identity and life satisfaction of elite athletes as a function of retirement status. *Journal of Applied Sport Psychology*, 26(1), 96-110, DOI: 10.1080/10413200.2013.798371
- McAllister, D. R., Motamedi, A. R., Hame, S. L., Shapiro, M. S., & Dorey, F. J. (2001). Quality of life assessment in elite collegiate athletes. *American Journal of Medicine*, 29, 806–810.
- McLaughlin, P. (1981). Retirement: Athlete's transition ignored by system. *Champion*, 5(2), 14-15.
- McPherson, B. D. (1980). Retirement from professional sport: The process and problems of occupational and psychological adjustment. *Sociological Symposium*, 30, 126-143.
- Menke, D. (2013, September). Student-athletes in transition: Applying the Schlossberg model. *Academic Advising Today*, 36(3). Retrieved from <http://www.nacada.ksu.edu/Resources/Academic-Advising-Today/View-Articles/Student-Athletes-in-Transition-Applying-the-SchlossbergModel.aspx#sthash.yzWUN2Ub.dpuf>
- Michalis, P., Miltiadis, P., Fotios, M., & Theofanis, S. (2012). An exploratory study of athletic identity in university physical education students. *Graduate Journal of Sport: Exercise & Physical Education Research*, 1(1), 98-107.
- Murphy, G. M., Petitpas, A. J., & Brewer, B. W. (1996). Identity foreclosure, athletic identity, and career maturity in intercollegiate athletes. *Sports Psychologist*, 10, 239-246.

- National Collegiate Athletic Association. (2008). *Division II model life skills resource*. Retrieved from [http://www.ncaa.org/sites/default/files/10\\_D2\\_LifeSkills%2BDocument.pdf](http://www.ncaa.org/sites/default/files/10_D2_LifeSkills%2BDocument.pdf)
- National Collegiate Athletic Association. (July 2013). *Transfer 101*. Retrieved from <http://www.ncaapublications.com/productdownloads/TGONLINE2013.pdf>
- National Collegiate Athletic Association. (2014). *Why does the NCAA regulate transfer situations?* Retrieved from <http://www.ncaa.org/about/frequently-asked-questions-about-ncaa>
- NCAA Demographics Database. (2014). *Student athletes 2013-2014 division I figures*. Retrieved from <http://web1.ncaa.org/rgdSearch/exec/saSearch>
- NCAA Research. (2013). *Estimated probability of competing in athletics beyond the high school interscholastic level*. Retrieved from [https://www.ncaa.org/sites/default/files/Probability-of-going-pro-methodology\\_Update2013.pdf](https://www.ncaa.org/sites/default/files/Probability-of-going-pro-methodology_Update2013.pdf)
- Ogilvie, B., & Howe, M. (1982). Career crisis in sport. In T. Orlick, J. Partington, & J. Salmela (Eds.), *Mental training for coaches and athletes* (pp. 176-183). Ottawa: Coaching Association of Canada.
- Ogilvie, B., & Howe, M. (1986). The trauma of termination from athletics. In J. M. Williams (Ed.), *Applied sport psychology: Personal growth to peak performance* (pp. 365-382). Palo Alto, CA: Mayfield.
- Ogilvie, B., & Taylor, J. (1993). Career termination issues among elite athletes. In R. Singer, M. Murphy, & L. Tennant (Eds.), *Handbook of research on sport psychology* (pp. 761-775). New York: Macmillan.
- Orlick, T. (1980). *In pursuit of excellence*. Ottawa, CN: Coaching Association of Canada.
- Pearson, R. E., & Petitpas, A. J. (1990). Transitions of athletes: Developmental and preventative perspectives. *Journal of Counseling and Development*, 69, 7-10.
- Petitpas, A. J. (1978). Identity foreclosure: A unique challenge. *Personnel and Guidance Journal*, 56, 558-561.
- Petitpas, A. J. (1987). *Psychological care for injured athletes*. Unpublished manuscript, Springfield College, Springfield, MA, USA.
- Pottratz, S. (15 July 2013). *Athletic identity*. Retrieved from <http://www.thesportinmind.com/articles/athletic-identity/>
- Sadalla, E. K., Linder, D. E., & Jenkins, B. A. (1988). Sport preference: A self-presentational analysis. *Journal of Sport and Exercise Psychology*, 10, 214-222.
- Schlossberg, N.K. (1981). A model for analyzing human adaptation to transition. *The Counseling Psychologist*, 9(2), 2-18.

- Sinclair, D., & Orlick, T. (1993). Positive transitions from high-performance sport. *The Sport Psychologist*, 7, 138-150.
- Stambulova, N. B. (1997). Transitional period of Russian athletes following sports career termination. In R. Lidor & M. Bar-Eli (Eds.), *Proceedings of the 9th World Congress of Sport Psychology* (pp. 658–660). Netanya: International Society of Sport Psychology.
- Staurowsky, E. J., & Sack, A. L. (2005). Reconsidering the use of the term student-athlete in academic research. *Journal of Sport Management*, 19, 103-116.
- Stephan, Y., & Bilard, J. (2003). Repercussions of transition out of elite sport on body image. *Perceptual and Motor Skills*, 96, 95-104.
- Stephan, Y., Bilard, J., Ninot, G., & Delignieres, D. (2003). Repercussions of transition out of elite sport on subjective well-being: A one-year study. *Journal of Applied Sport Psychology*, 15, 354-371.
- Svoboda, B., & Vanek, M. (1982). Retirement from high level competition. In T. Orlick, J. T. Partington, & J. H. Salmela (Eds.), *Proceedings of the Fifth World Congress of Sport Psychology* (pp. 166-175). Ottawa, Canada: Coaching Association of Canada.
- Taylor, S. (July 1998). *Coping strategies*. Retrieved from <http://www.macses.ucsf.edu/research/psychosocial/coping.php>
- Thomas, C. E., & Ermler, K. L. (1988). Institutional obligations in the athletic retirement process. *Quest*, 40, 137-150.
- Webb, W. M., Nasco, S. A., Riley, S., & Headrick, B. (1998). Athlete identity and reactions to retirement from sports. *Journal of Sport Behavior*, 21, 338-362.
- Werthner, P. & Orlick, T. (1982). Transition from sport: Coping with the end. In T. Orlick, J. Partington & J. Salmela (Eds.), *Mental training for coaches and athletes* (pp. 188-192). Ottawa, Ontario: Coaching Association of Canada.
- Werthner, P. & Orlick, T. (1986). Retirement experiences of successful Olympic athletes. *International Journal of Sport Psychology*, 77,337-363.
- Wolff, R., & Lester, D. (1989). A theoretical basis for counseling the retired professional athlete. *Psychological Reports*, 64, 1043-1046.