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Recently Retired Varsity Female Athletes' Intention to Coach: An Exploration of Continuity Theory and a Transition-Extension Hypothesis

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Graduate Program in Kinesiology
A thesis submitted in partial fulfillment of the requirements for the degree in Master of Arts
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RECENTLY RETIRED VARSITY FEMALE ATHLETES' INTENTION TO COACH:
AN EXPLORATION OF CONTINUITY THEORY AND A TRANSITION-
EXTENSION HYPOTHESIS

(Spine title: Intention to Coach: An Exploration of Continuity Theory)

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by

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Graduate Program in Kinesiology

A thesis submitted in partial fulfillment
of the requirements for the degree of
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THE UNIVERSITY OF WESTERN ONTARIO
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Exploration of Continuity Theory and a Transition-Extension
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requirements for the degree of
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Abstract

The purpose of this study was to examine continuity as an explanation for the intentions of female former athletes to engage in coaching or other roles in sport. In doing so, the study tested the transition-extension hypothesis (Cuskelly, 2004) in the context of former varsity athletes. Eighty-five women (mean age of 23 years; $SD = 1.61$), who had recently retired from playing their sport within the Canadian Interuniversity Sport (CIS) system, completed an online survey measuring their athletic identity, athletic lifestyle, and intention to engage in coaching and other sport roles. Athletic identity and a sport-related productive lifestyle were most consistently associated with future intentions. However, modest findings indicate that there are other factors shaping women's intentions to engage in coaching. Directions for future research and implications for recruiting women for coaching, as well as other sport roles, are presented.

Keywords: women in coaching, continuity theory, athletic identity, athletic lifestyle

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Chapter One: Introduction

There is no question that women's involvement in sport has grown substantially in recent years. Social barriers have been broken, participation has increased, and more opportunities have presented themselves for women within the sport workforce (Robertson, 2010). While women have made their presence more profound in sport, the literature suggests that female coaches remain largely underrepresented (Acosta & Carpenter, 2010; Reade, Rodgers, & Norman, 2009). For example, approximately 80% of coaches within Canadian Interuniversity Sport are male, even though participation is nearly equal for male and female athletes (Donnelly, Kidd, & Norman, 2011; Reade et al., 2009). Based on a profile of sport volunteers generated from the 2000 National Survey of Giving, Volunteering, and Participating, Doherty (2005) reported that almost three-quarters of volunteer coaches in Canada were male. Further, Acosta and Carpenter (2010) noted that in US intercollegiate sport only 20.9% of all teams are coached by a female head coach. The disproportionately fewer women in coaching positions continues to be well noted (Carver-Dias, 2011; Cunningham, Doherty, & Gregg, 2007; Cunningham & Sagas, 2002, 2003; Doherty & Casey, 1996; Doherty & Johnson, 2001; Doherty & Varpalotai, 2000; Greenhill, Auld, Cuskelly, & Hooper, 2009; Hart, Hasbrook, & Mathes, 1986; Knoppers, 1992; Sagas, Cunningham, & Ashley, 2000; Sartore & Cunningham, 2007; Stangl & Kane, 1991; Theberge, 1988; Weiss & Stevens, 1993).

Several studies have investigated the reasoning for the marked gender differences in involvement in coaching roles. For example, some findings suggest fewer women than men become coaches, and more women than men stop coaching (Acosta & Carpenter,

1992; Hart et al., 1986; Hasbrook, 1988). Factors such as unequal assumptions of competence in female compared to male coaches (Jordan, 1999; Marback, Short, Short, & Sullivan, 2005; Parkhouse & Lapin, 1980, Women's Sports Foundation, 2000), hiring from a principle of similarity of male coaches (Acosta & Carpenter, 1985; Stahura & Greenwood, 2001), homophobia and prejudicial attitudes toward female coaches (Krane & Barber, 2005; Nelson, 1984), a lack of female role models and mentors (Everhart & Chelladurai, 1998), and current socio-cultural status regarding opportunity and power (Kilty, 2006; Knoppers, 1994) have all been identified as explanations for the lack of and possible barriers to females entering coaching. Women still present themselves as an untapped leadership resource in general (Jenner & Ferguson, 2009).

Research and theory support one or more of three general explanations that attempt to account for the gender differentiation in any sport role, including coaching: an individual perspective, a system perspective, and a culture perspective (Doherty & Varpalotai, 2000). The individual perspective takes into account personal preference, ability, interest and choice with regards to sport participation. In contrast, a system perspective focuses on structural constraints to participation, such as opportunities and resources. Finally, a wider culture perspective acknowledges that sport in society heavily favours boys and men (Doherty & Varpalotai, 2000).

While all three perspectives are important to consider, the individual aspect is central to this study. The basis of this perspective is personal agency: ability, interest, and choice about sport participation. Hence, the individual perspective argues that it is something about the women themselves that directs them to or restrains them from coaching (Doherty & Varpalotai, 2000). To address the underrepresentation of female

coaches, an interesting group to investigate is recently retired varsity female athletes. Given their presumed sport knowledge, expertise, and lifestyle, it is interesting to understand their intention to choose coaching, and the personal factors that impact their interest. It may be important for women themselves to become involved in coaching (or other sport roles) for their own individual fulfillment, to give back to sport, and to be a role model for other girls and women.

Coaching as a career choice has attracted notable attention among sport researchers (Cunningham & Sagas, 2002; Cunningham, Sagas, & Ashley, 2003; Cunningham et al., 2007; Doherty & Casey, 1996; Doherty & Johnson, 2001; Everhart & Chelladurai, 1998; Pastore, 1991; Pease & Drabelle, 1988; Sagas, Cunningham, & Pastore, 2006; Sage, 1989; Weiss & Sisley, 1984). Some studies have been descriptive of coaching interests and intentions, and others have relied on theoretical models including Social Cognitive Career Theory (SCCT; Lent, Brown & Hackett, 1994), and Career Contingencies Model (Prus, 1982), to explain determinants of coaching choice.

Cuskelly's (2004) transition-extension hypothesis, based on Atchley's (1989, 1999) continuity theory, raises an interesting perspective to be explored. Continuity theory implies that "adults are drawn by the weight of past experience to use continuity as a primary adaptive strategy for dealing with changes associated with normal aging" (Atchley, 1989, p. 183). The transition-extension hypothesis suggests individuals are both predisposed and motivated toward inner psychological continuity as well as continuity of outward social behaviour (Atchley, 1989). That is, people are influenced by and motivated toward maintaining their identity and lifestyle. While continuity theory has been used predominantly with retired adult populations, it may prove useful for younger

populations as well. Cuskelly (2004) adapted continuity theory to the context of community sport participation and further volunteerism. He proposed that sport participants are likely to transition into sport volunteer roles in order to extend their participation. The same principle may be applied to explain the possible transition of recently retired varsity female athletes into coaching and other sport roles; that is, one's athletic identity and athletic lifestyle may be predictive of intention to coach or take on other sport roles.

There is a growing body of research on athlete retirement and sport career transition. The focus of this research has been on coping strategies and experiences during transition (Chow, 2001; Lally, 2007; Lavalley & Robinson, 2007; Pummell, Harwood, & Lavalley, 2008; Sinclair & Orlick, 1993), and the link between athlete identity, transition, and retirement adjustment (Baillie & Danish, 1992; Brewer, Van Raalte, & Petitpas, 2000; Lally & Kerr, 2005; Shachar, Brewer, Cornelius, & Petitpas, 2004; Webb, Nasco, Riley, & Headrick, 1998). However, there is little insight into the particular roles that recently retired athletes adopt, and especially whether they are continuing with other sport roles.

Purpose of the Study

The purpose of this study was to examine factors associated with the intentions of recently retired varsity female athletes to become involved in coaching or other roles in sport. A secondary purpose was to test the transition-extension hypothesis (Cuskelly, 2004) in the context of varsity athletes. The study addresses the research question: Are athletic identity and lifestyle associated with intention to become involved in coaching or

other sport roles? Three different levels of engagement in coaching and other sport roles were investigated: as a career, on a part-time basis, and as a volunteer.

This study makes three contributions to theory and research. First, it adds to the literature pertaining to the involvement of women in coaching and other sport roles. Second, previous studies utilizing continuity theory have mainly included retired populations and are predominantly retroactive in nature. The current study takes a prospective approach to post-retirement activities. Third, this study appears to be the first that utilizes and extends Cuskelly's (2004) transition-extension theory of sport involvement.

Women in Coaching

The individual perspective within the gender differentiation framework, "attributes the gender imbalance in sport roles to differential abilities, interests, and choices of women and men; as a function of differential socialization, but ultimately personal agency" (Doherty & Varpalotai, 2000, p. 35). Several studies have examined individual factors influencing women's interest and intentions towards coaching (Cunningham et al., 2003; Hart et al., 1986; Pastore, 1991; Doherty & Casey, 1996; Everhart & Chelladurai, 1998). While the individual perspective is criticized for blaming women themselves for their low levels of involvement (Myers & Doherty, 2007), Doherty and Varpalotai argue the individual needs, skills, and experiences of women and girls cannot be overlooked.

In an early study, based on Prus' (1982) career contingencies theory, Hart et al. (1986) examined factors associated with high school coaches' initial involvement and disinvolvement. From a list of possible reasons, current coaches reported becoming

involved because they like competitive situations and the challenge of producing a winning team (Hart et al., 1986). In subsequent studies, Pastore (1991) examined college coaches' and Doherty and Casey (1996) examined high school coaches' most important reasons for becoming involved in their respective roles. Pastore found that coaches' top reasons for coaching were to stay involved in competitive athletics and to work with advanced and motivated athletes. Female coaches particularly wanted to help female athletes reach their potential (Pastore, 1991). Doherty and Casey (1996) similarly found that working with children and continued sport involvement were the top reasons both men and women current coaches became involved, although working with advanced athletes was less important; likely reflecting the high school rather than college level of coaching for this group.

Using a prospective view, and social cognitive career theory (Lent et al., 1994), Everhart and Chelladurai (1998) examined the influence of male and female college student-athletes' perceptions of coaching self-efficacy and valence on their preferences for coaching as a career in the future. The student-athletes had high coaching self-efficacy and perceived coaching valence, and the women perceived significantly greater coaching valence than men. They were moderately interested in coaching at the high school and top Division I NCAA college level, but only slightly interested in coaching at the two-year college and Division I and II levels. Everhart and Chelladurai found that coaching self-efficacy was significantly and directly associated with interest in coaching at progressively higher levels (i.e., the higher the efficacy, the higher the desire to coach at a higher level). Coaching valence was not associated with the desire to coach at any level (Everhart & Chelladurai, 1998). Following Everhart and Chelladurai, Cunningham

et al. (2003) also found that coaching self-efficacy was a significant predictor of both male and female assistant college coaches' interest in becoming a head coach.

These few studies provide some insight into factors associated with women's interest and involvement in coaching; however, three of the five studies are retrospective, which limits their contribution to the understanding of coaching intentions. Further, only the two prospective studies (Cunningham et al., 2003; Everhart & Chelladurai, 1998) based their investigations on a theoretical model that considered the relationship between individual factors (coaching efficacy, coaching valence) and interest in coaching.

Cunningham et al.'s investigation focused on current coaches' interest in pursuing coaching at a higher level. Thus, there is a need for further examination of the interests and intentions of prospective women coaches.

Sport Volunteering

To better understand the context of women's involvement in coaching and other sport roles, it is necessary to visit the sport volunteering literature. Coaching may be a future role for retired female athletes, and volunteering is one way to stay involved as a coach. Sport volunteering is a broad topic in research, thus the focus here is on factors influencing involvement in coaching and other roles, and for women in particular.

Doherty (2005) developed a profile of sport volunteers based on data from the National Survey of Giving, Volunteering, and Participating (2000). She identified that women and men became involved in sport volunteering primarily through their children, although younger volunteers (15-24 years) were most likely to become involved because someone asked them. Women and men were motivated to volunteer in the sport setting to support a cause they believe in, such as sport participation itself, and to use their skills to

help (Doherty, 2005). Exploring one's strengths was more important to younger (15-24 years) than older (35 years plus) sport volunteers. Sport volunteers were much more likely to have participated in organized sport themselves than were volunteers in other settings (Doherty, 2005).

In a field study, Kim, Zhang, and Connaughton (2010) compared motivation among volunteers at four different youth sport organizations/events in order to better understand the factors causing and sustaining sport volunteer participation. Six factors were examined (values, understanding, social, career-related, protective, and enhancement) to measure participants' motivations using a version of the Volunteer Functions Inventory (VFI; Clary, Snyder, Ridge, Copelande, Stukas, Haugen, & Miene, 1998) that was modified for sport volunteerism. The values factor (humanitarianism or concern for the beneficiary) and understanding factor (developing knowledge and skills) were significantly stronger motives for female than male volunteers, and greater than the remaining factors for both groups. Busser and Carruthers (2010) also used the VFI (Clary et al., 1998) to examine motivation among a sample of active youth sport coaches who were volunteering for a municipal parks and recreation agency's soccer program. Values were the leading motivation for youth sport coaches, and rated significantly higher than other functions; 94% of the volunteers indicated a desire to instill positive values in youth through coaching. Male and females only differed in that compared to male coaches, female coaches were significantly less likely to believe they were more knowledgeable about the sport.

Cuskelly (2004) examined trends in sport club participation and sport volunteering. He noted that transitioning from player to a volunteer role could result in a

heightened sense of engagement, increasing knowledge, and commitment to a sport activity or particular organization. Thus, he proposed a transition-extension hypothesis to “explain the recruitment and retention of ex-players as volunteers in the community sport system” (Cuskelly, 2004, p. 59). He further suggested that normative pressure, a sense of obligation to put something back into sport, might be instrumental in the decision of a player to take the initial transition into sport volunteering. Cuskelly noted that the transition-extension hypothesis should be examined with field research. The current study adds to the sport volunteer literature by enhancing the discussion of volunteer motives in coaching.

Chapter Two: Theoretical Framework

Continuity Theory

In order to better understand the role that continuity theory plays in the context of this study, it is necessary to visit the foundations of the theory. Continuity theory was originally developed to explain a common research finding in leisure and gerontology; that a large proportion of adults show significant consistency in their patterns of activity, social relationships, thinking, and living arrangements upon retirement (Atchley, 1999). While Robert Atchley was not the first to convey this concept, his work on continuity theory has been widely accepted and cited in the leisure, activity, and gerontology literature (e.g. Burnett-Wolle & Godbey, 2007; Cuskelly, 2004; Kim & Feldman, 2000; Nimrod, 2007).

Firstly, continuity is a subjective perception that changes are linked to and fit with individual personal history (Atchley, 1989; Cohler, 1982). It is important to note that continuity theory is typically used to investigate the behaviour of older adults who experience “normal aging”, and is not applicable to those experiencing “pathological aging” (Atchley, 1989). Researchers using continuity theory are usually interested in measuring inner psychological states, outward behaviour, and adaptation strategies, and establishing positive correlations between continuity in these variables and wellbeing (Burnett-Wolle & Godbey, 2007).

Continuity theory, being a systems feedback theory, is one of continuous evolution (Atchley, 1999; Buckley, 1967). Generally, continuity theory implies that there are initial mental and lifestyle patterns that influence behavioural choices, which in turn influence the nature of one’s life experience. Through their personal conceptions, perceived self-identity, strengths and weaknesses, personal preferences, and lifestyle

patterns, individuals make choices and thus gain a sense of personal agency (Atchley, 1999). Unlike activity theory (Rosow, 1967), which assumes the primary goal of adult development is homeostatic equilibrium, continuity theory assumes the primary goal is continuous adaptive change (Atchley, 1999).

Continuity exists in two different forms: internal and external. According to Atchley (1989, p. 183),

As a result of both their own perceptions and pressures from the social environment, individuals who are adapting to normal aging are both predisposed and motivated towards inner psychological continuity as well as outward continuity of social behaviour and circumstances. Continuity theory views both internal and external continuity as robust adaptive strategies that are supported by both individual preference and social sanctions.

Both forms of continuity are now considered.

Internal continuity. Internal continuity relies on memory, as it is characterized by a remembered inner structure such as preferences and disposition (Atchley, 1989).

Internal continuity is a healthy capacity to see inner change as connected to the individual's past and to see the individual's past as sustaining, supporting and justifying the new self (Atchley, 1989; Lieberman & Tobin, 1983).

Internal continuity acts as a basis for day-to-day decision making and is an important component of individual competence; therefore, individuals have strong motives to maintain internal continuity (Atchley, 1989). Erikson, Erikson, and Kivnick (1986) highlighted the importance of internal continuity to an individual's sense of ego integrity. One's sense of personal history and acceptance of their history, and a

perception of long-standing continuity, as opposed to discontinuity, increases the probability that the individual will perceive their life as having integrity (Atchley, 1989).

The need for self-esteem is also facilitated by internal continuity. While self-esteem is a function of one's perceived level of accomplishment in relation to one's ideal expectations of self, it would be impossible for one to have durable self-esteem without reference to some concept of internal continuity (Atchley, 1989; James, 1890). People are also drawn toward internal continuity as a technique for attaining valuable needs such as food, housing, income, and maintenance of social interaction and support (Atchley, 1989). According to Atchley (1989, p. 185), "the predictability of an individual's identity, self, and temperament is seen as an important part of that individual's personal attractiveness as it makes him or her comfortable and predictable to be around."

Self and *identity* are two interrelated terms relating to inner psychological structures and, thus, internal continuity. While the self deals with what one thinks and feels when focusing attention on themselves (such as appearance, abilities, preferences, attitudes, roles, and emotionality), identity refers to aspects of personality that one sees as remaining with him or her regardless of the social situation and is the basis for incorporating new information about the self (Atchley, 1989; Whitbourne, 1986). Identity also acts as the foundation for the perception of both continuity and integrity, and so identity may have a closer link to an individual's notion of internal continuity than self (Atchley, 1989). Thus, identity is the foundation of internal continuity and is a key component to understanding and predicting continuity and post-retirement behaviour.

External continuity. Remembered structures of physical and social environments, role relationships, and activities characterize external continuity (Atchley,

1989). As Atchley (1989, p. 185) explained “perceptions of external continuity result from being and doing in familiar environments, practicing familiar skills, and interacting with familiar people.” Most people make an effort to set priorities and make selective investments that will generate the most personal satisfaction given their constraints, and as a result their evolving living arrangements and lifestyle are viewed as a source of social security (Atchley, 1999). Thus, external continuity is the persistence of a structure of relationships and overt behaviours typical to each individual (Atchley, 1989).

While these external patterns can be observed by others, continuity is only validated by referring to the individual’s own internal set of beliefs about what is typical for him or her (Atchley, 1989). Similar to internal continuity, there are strong motives that move people toward external continuity.

The important friends and family who are present throughout an individual’s lifetime are a source of affirmation of individual identity, provide security against potential instrumental dependency, and create a sense of belonging (Atchley, 1987; Kahn & Antonucci, 1981). Thus, external continuity of relationships is driven by the desire for predictable social support (Atchley, 1989). External continuity may be a useful coping mechanism for both physical and mental changes, and may also reduce the ambiguity of personal goals that may accompany change (Atchley, 1989).

Many studies have found that continuity of skills, environments, activities, roles, and relationships exist in the everyday lives of adults in their 50s, 60s, and 70s (Atchley, 1971, 1976, 1982a; Atchley & Miller, 1982-83, 1983; Bengtson & Black, 1973; Carp, 1978-79; Gordon, Gaitz, & Scott, 1976; Lawton, 1983; Morgan, 1984; Oliver, 1971; Parnes & Less, 1983; Salthouse, 1984, Shanas, 1977; Streib & Schneider, 1971; Troll &

Smith, 1976). Older individuals tend to utilize known skills to do things they are accustomed to, with people and in places they are familiar with (Atchley, 1989). Through experience, the majority of adults will gravitate towards the things they do well, and separate from the things they cannot. Continuity of activities, skills, environments and relationships is a reasonable outcome leading to an individual's strengths to gain optimal life satisfaction (Atchley, 1989). The activities that comprise one's lifestyle are the foundation of external continuity and a key component to understanding and predicting continuity and post-retirement behaviour.

Continuity, then, is an adaptive strategy. Atchley (1989) identified continuity as a preferred strategy for dealing with aging, as both the internal and external forms aid individuals to focus on and maintain their strengths and minimize the effects of insufficiencies as normal aging occurs. The degree of continuity one experiences can be generally categorized into three groups: too little, optimum, and too much continuity (Atchley, 1989). Too little continuity can be characterized as life being too unpredictable, and in severe cases may even be termed discontinuity. Optimum continuity is depicted by an individual viewing their pace and degree of change to be parallel with personal preferences, social demands, and their coping capacity. Too little continuity occurs when an individual feels in a rut and without enough change to enrich their life. However, given the subjective nature of continuity, individuals must classify themselves based on their own personal interpretations and standards. Continuity is contingent on a personal and present evaluation based on one's remembered past (Atchley, 1989).

Transition-Extension Hypothesis

Cuskelly (2004) proposed the transition-extension hypothesis from Atchley's continuity theory (1989) to explain the possible retention of community sport club participants as volunteers within clubs. Cuskelly reported secondary data indicating that many athletes eventually extend their participation from playing to volunteering. This highlights the possibility of current participants becoming a good source of future volunteers to supplying the community sport labour force.

The notion that an individual can be continuously involved in the community sport sector with changing roles is the core of Cuskelly's (2004) transition-extension hypothesis. In line with continuity theory, the activities and relationships that can be cultivated over a long period of time while participating most likely contribute to well-being and a sense of integrity for individuals (Mannell & Kleiber, 1997). Cuskelly raised the possibility that some players find continuity in their sport participation by transitioning from player to volunteer, and as a result allowing an extension of activities and relationships.

Continuity theory suggests that "individuals are both predisposed and motivated toward inner psychological continuity as well as outward continuity and social behaviour and circumstances" (Atchley, 1989, p. 183). In other words, people are influenced by and motivated toward maintaining their identity and lifestyle. Cuskelly (2004) cited the example of a musician who is no longer able to play yet who might preserve his or her sense of identity as a musician and relationships that have been developed within the social world of music by transitioning from playing to scheduling bookings. In the

current study, athletic identity and lifestyle may be predictive of a retired athlete's intention to take on coaching or other sport roles.

Athletic Identity

Research has treated the self and identity as a multidimensional view of oneself, with varying self-perceptions depending on the domain under consideration (Fox & Corbin, 1989; Gergen, 1971; Harter, 1990; Lally, 2007; Markus & Wurf, 1987; Marsh & Shavelson, 1985). Identity is defined as both enduring and dynamic, with numerous dimensions that are affected by both social and environmental factors (Lally, 2007; Markus, 1977; Stryker, 1978; Stryker & Serpe, 1994). Within the multidimensional self-concept, it is possible for one particular dimension to become dominant and also a lens for which the others are viewed (Lally, 2007).

Athletic identity is conceptualized as encompassing the athletic portion of the multidimensional self-concept. A person may think or feel differently about, for example, their "social", "academic", and "athletic" self-concepts (Brewer et al., 2000). Athletic identity is defined as the degree to which an individual identifies with the athlete role (Brewer, Van Raalte, & Linder, 1993). Individuals with a stronger athletic identity hold a strong self-perception within the sport domain and attribute greater importance to involvement in sport and exercise (Brewer et al., 1993). The personal value given to a certain self-concept domain is considered to influence the relationship between performance within that domain and self-esteem, affect, motivation, and ultimately behaviour (Harter, 1990; James, 1892; Rosenberg, 1979).

In its narrowest sense, Brewer et al. (1993) regarded athletic identity as a cognitive structure. Thus, an individual possessing a stronger athletic identity will

interpret a given situation or event in terms of its consequences for their athletic functioning. In its broadest sense, Brewer et al. identified athletic identity as a social role. In this sense, one with a prominent athletic identity may be strongly influenced by family members, coaches, friends, teachers, and the media (Brewer et al., 1993). The social nature of athletic identity is exposed further, with the concept that athletes may be making a particular social statement about themselves simply by choosing to participate in a particular sport (Sadalla, Linder, & Jenkins, 1988).

Athletic identity has been considered in the sport psychology literature, and particularly sport career transition research (for a review, see Brewer et al., 2000). It has been investigated through interviews and measured using the Athletic Identity Measurement Scale (AIMS; Brewer et al., 1993). The AIMS has been used to examine the relationship between athletic identity and career decision-making and career transition adjustment (Grove, Lavallee & Gordon, 1997; Murphy, Petitpas, & Brewer, 1996; Shachar et al., 2004). In a study of current coaches and non-coaches who were all retired athletes, Shachar et al. (2004) used the AIMS to assess the degree to which athletic identity and perceived adjustment difficulties were associated with the retired athletes' career decisions. They were interested in determining whether the decision to coach was specifically appealing to athletes possessing stronger and more exclusive athletic identities (Shachar et al., 2004). Shachar et al. found that coaches and non-coaches did not differ in the retrospective report of their athletic identity at the time of their retirement, and concluded that it was not a good predictor of the decision to stay involved in sport as a coach. However, a limitation of this study was the retrospective assessment

of identity, without taking into account the period of time that had elapsed since retirement from sport participation (Shachar et al., 2004).

Lavallee, Gordon, and Grove (1997), used the AIMS to investigate 48 former elite athletes' athletic identity and adjustment to financial, occupational, emotional, and social sport retirement. Results indicated that individuals who maintain a strong and exclusive athletic identity up to the point of retirement may be vulnerable to career transition difficulties, and athletes scoring high on the retrospective AIMS measure reported more seeking of social support. Further, the AIMS scores exhibited a considerable negative relationship with pre-retirement career planning (Lavallee et al., 1997). Current literature only suggests that adjustment difficulties could be lesser for retired athletes who choose to stay involved in sport as coaches, since they would maintain a familiar environment as when they participated in sport (Lavallee et al., 1997; Shachar et al., 2004).

Based on the transition-extension hypothesis and related literature to date, the following hypotheses are presented:

Hypothesis 1a: Athletic identity will be positively associated with intention to coach as a career, on a part time basis, and as a volunteer.

Hypothesis 1b: Athletic identity will be positively associated with intention to become involved in other sport roles as a career, on a part time basis, and as a volunteer.

Lifestyle

Continuity theory assumes that individuals are drawn by the weight of past experience to use continuity as an adaptive strategy to manage change. Mannell and Kleiber (1997) suggested that the activities and relationships that have been developed

and maintained over a long period of time are likely to contribute greatly to one's wellbeing and sense of integrity. These activities and ensuing relationships are unique to each individual and represent the basis of lifestyle.

In Atchley's (1999) longitudinal investigation of the external continuity of aging adults, he explored lifestyle activities since they are "an important resource that people use in their attempts to adapt and to create an experience of life satisfaction" (p. 54). The lifestyle activities identified occur in a context shaped by groups and social roles, and include productive activities (such as employment, household work or volunteer work), social activities (such as spending time with friends and family), physical activities (such as gardening or sports), organizational activities (such as participating in professional organizations or churches), and individual activities (such as hobbies or reading) (Atchley, 1999). People structure these activities to correspond with their lifestyle vision. One's lifestyle vision may reflect a particular lens or perspective that spans many or all of these activities. For example, one may have a "religious" lifestyle or a "green" lifestyle. Elite or varsity athletes may possess an "athletic" lifestyle that reflects their involvement in any number of sport-related activities. Continuity theory posits that one will endeavor to maintain a given lifestyle in the face of major life transformation.

Looking at an aging population, Atchley (1999) performed a lagged regression analysis of overall activity level, controlling for age, gender, education, and three internal measures (confidence, health, and functioning), over eighteen years. Overall activity level was represented by multiple components that collectively encompassed each type of lifestyle activity (productive, social, physical, organizational, and individual) in each

wave of surveys. Activity level was observed to be quite predictable, with considerable continuity in all types of lifestyle activities over time (Atchley, 1999).

Based on Atchley's (1999) lifestyle activities and findings, the following hypotheses are presented:

Hypothesis 2a: Athletic lifestyle, represented by sport-related productive, social, organizational, and individual activities, will be positively associated with intention to coach as a career, on a part time basis, and as a volunteer.

Hypothesis 2b: Athletic lifestyle, represented by sport-related productive, social, organizational, and individual activities, will be positively associated with intention to become involved in other sport roles as a career, on a part time basis, and as a volunteer.

Chapter Three: Method

Participants and Procedure

Participants were 85 women who had recently retired from playing their respective sport (at the varsity and further elite level of competition) within the Canadian Interuniversity Sport (CIS) system. Participant contact information was collected from the available information in the worldwideweb public domain, in a three-step process undertaken in May 2011, which is the conclusion of the Canadian university athletic year. First, a list of participating universities was collected from the CIS website (www.cis-sic.ca). Second, the names of athletes in their 4th year or above were collected (where this information was available) from team rosters on the universities' websites. These individuals were considered most likely to be in their graduating year and retiring from their sport at the conclusion of the 2010-11 season. Third, student email addresses were attained through each university's online directory, where available.

Eight of fifty-two CIS universities made student email information public and thus the sample was drawn from these institutions. A total of 174 students were contacted directly via email in September 2011 (following institutional ethics approval, see Appendix A) with a letter of information (see Appendix A) that invited them to complete an online survey, through SurveyMonkey. The letter of information and introductory survey items were used to screen participants to include only those who had recently retired from their sport. In order to optimize the size of the sample, a snowball sampling approach was also used where students in the original sample were asked to forward the email to any women they knew that fit the criteria for inclusion in the study. The email letter of information invited the women to participate in the study by linking to a secure

online survey. As per Dillman (2000), a follow-up notice was sent to the original sample one, two and three weeks following the initial message.

Participants' mean age was 23 years ($SD = 1.61$), and they were attending or previously attended one of eight different universities across Canada. Participants had been involved in one of 15 different sports, and twelve participants participated in more than one sport. A total of 46 (54%) graduated in 2011, 12 (14%) graduated in the previous five years, and 27 (32%) were continuing on with school. The women graduated from or were continuing in one of 23 different academic programs.

Measures

Athletic identity. Brewer et al.'s (1993) Athletic Identity Measurement Scale (AIMS) was used to measure athletic identity. The original 10-item scale is a valid measure designed to indicate the strength and exclusivity of the athletic role. High internal consistency (alpha coefficients ranging from .81 to .93 across three different samples) and a test re-test reliability coefficient of .89 (over a two-week period) were reported (Brewer et al., 1993). The 7-point Likert-type scale has anchors of 1 (*strongly disagree*) and 7 (*strongly agree*); higher scores on the AIMS suggest stronger identification with the athletic role. Strong correlations with related constructs (e.g., level of sport involvement and perceived importance of sport) and weak correlations with theoretically unrelated constructs (e.g., self-esteem and sport skill level) support the construct validity of the scale (Brewer et al., 1993). Sample items of the AIMS include: "I consider myself an athlete" and "Sport is the most important part of my life." The full list of items is presented in Appendix B. In the current study, the athletic identity scale demonstrated a Cronbach alpha value of .85 and was deemed reliable based on Lance,

Butts, and Michel's (2006) argument that values in the range of .80 or higher are good indicators of reliability. In order to obtain this strong internal consistency, it was decided to eliminate two items from the original scale ("most of my friends are athletes" and "sport is the only important thing in my life"). These two items were deemed to be less conceptually relevant to the context of the current study.

Lifestyle. Lifestyle was evaluated using self-constructed measures based on Atchley's (1999) lifestyle categories: productive (employment, volunteering), social (friends, family), organizational (e.g., clubs, churches), and individual activities (non-physical activities, hobbies). Items were generated to represent each aspect. The intent was to determine the nature of participants' lifestyle, and specifically the extent to which it is sport-related. Accordingly, the physical activity component was excluded, as it is not reasonable to attempt to distinguish between physical activity that is sport-related and not sport-related. Sample items included: "The paid job I worked at during the school year is related to sport" and "The volunteer work I did during the summer months is related to sport" (productive activities); "I tend to socialize with people who are on my varsity team or involved in elite sport" (social activities); "Organizations in which I actively participate are related to sport" (organizational activities); and, "I tend to do activities and hobbies that are related to sport" (individual activities). Participants were asked to respond on a 7-point Likert-type scale from 1 (*strongly disagree*) to 7 (*strongly agree*). Higher values for sport-related activities and lower values for non-sport activities indicate a stronger "athletic lifestyle" for a given category. These items are shown in Appendix B. Survey items were reviewed by two academics with expertise in sport and leisure studies and survey development, as well as pilot tested with 16 current and former varsity

athletes to establish validity and clarity. Minor adjustments were made based on their feedback.

Lifestyle scores were manually calculated for each participant. The aim was to obtain a score for each lifestyle category to illustrate the extent to which participants' lifestyle in each category was sport-related. This was done by calculating an average of the sport and non-sport activities in each category. To do this, each of the non-sport items was reverse-scored, so that "high" non-sport items were equivalent to a "low" sport lifestyle. Where participants indicated that a particular activity did not apply to them (e.g., they did not work or they did not volunteer), this was considered to be consistent with a "low" sport or non-sport lifestyle (as appropriate) and was given a value of 1.

Intention to coach. Participants' intentions to coach and engage in other sport roles were also assessed by self-constructed single-item measures. The items were rated on a 7-point Likert-type scale from 1 (*strongly disagree*) to 7 (*strongly agree*). Participants were asked their intentions to become involved as a career, on a part time basis, and on a volunteer basis. Sample items included: "I intend to become involved in coaching in the near future, as a career" and "I intend to become involved in another sport role in the near future, on a part-time basis." See Appendix B for the full list of items. Survey items were reviewed by two experts as well as pilot tested to establish validity and clarity.

Demographics and other measures. In order to develop a profile of participants, demographic data regarding their varsity sport and program of study were collected. Questions were asked to determine participants' graduation year, their intention to continue their education, and current age. These items are shown in Appendix B. Further,

the survey included an open-ended question, “What factors might influence your decision to become involved in coaching or other sport roles?” to give participants the opportunity to suggest and expand on factors influencing their intentions.

Chapter Four: Results

Descriptive Statistics

A summary of the descriptive statistics is included in Table 1. All scales were based on a 7-point rating scale of 1 (low) to 7 (high). Participants reported a fairly high level of athletic identity ($M = 4.97$, $SD = .96$) and moderate mean ratings for the lifestyle activity scales, ranging from 3.65 to 4.61 ($SD = 1.12$ to 1.75). Scores indicating intention to coach as a career ($M = 2.48$, $SD = 1.70$) and be involved in other sport roles as a career ($M = 2.59$, $SD = 1.70$) were fairly low. However, participants reported moderate intention to become involved in coaching and other sport roles on part-time and volunteer bases. These mean scores ranged from 3.54 to 4.92 ($SD = 1.67$ to 1.85), the highest being intention to coach on a volunteer basis.

Correlation and Regression Analyses

Correlation analyses (see Table 1) revealed that athletic identity was significantly and positively associated with intention to coach as a career ($r = .26$, $p < .05$), on a part-time basis ($r = .32$, $p < .01$), and as a volunteer ($r = .30$, $p < .01$). Thus, hypothesis 1a was supported. Athletic identity was also positively associated with participants' intention to engage in other sport roles as a career ($r = .30$, $p < .01$), and on a part-time basis ($r = .23$, $p < .05$), providing partial support for hypothesis 1b.

Table 1

Correlation, Cronbach Alpha (α), and Descriptive (M, SD) Statistics

	Variables											
	1	2	3	4	5	6	7	8	9	10	11	
1. Athletic Identity	--											
2. Productive Activities	.31**	--										
3. Social Activities	.27*	.28**	--									
4. Organizational Activities	.30**	.44**	.26*	--								
5. Individual Activities	.32**	.05	.06	.18	--							
6. Intent to Coach (Career)	.26*	.24*	.15	.18	.24*	--						
7. Intent to Coach (Part-time)	.32**	.25*	.09	.14	.12		--					
8. Intent to Coach (Volunteer)	.30**	.25*	.04	.39**	.29**			--				
9. Intent - Other Roles (Career)	.30**	.30**	.02	.13	.06				--			
10. Intent - Other Roles (Part-time)	.23*	.18	-.16	.13	.15					--		
11. Intent - Other Roles (Volunteer)	.19	.10	-.13	.19	.10						--	
α	.85	--	--	--	--	--	--	--	--	--	--	--
M	4.97	4.19	4.55	4.61	3.65	2.48	4.06	4.92	2.59	3.54	4.15	
SD	.96	1.75	1.12	1.72	1.42	1.70	1.85	1.67	1.70	1.84	1.81	

Note. ** $p < .01$, * $p < .05$

Significant positive correlations were observed between sport-related productive activities and intention to coach as a career ($r = .24, p < .05$), on a part-time basis ($r = .25, p < .05$), and as a volunteer ($r = .25, p < .05$). Sport-related organizational activities were also positively associated with participant's intention to coach as a volunteer ($r = .39, p < .01$). Further, significant positive correlations were observed between sport-related individual activities and intention to coach as a career ($r = .24, p < .05$), and as a volunteer ($r = .29, p < .01$). Thus, hypothesis 2a was partially supported. Additionally, a significant positive correlation was observed between sport-related productive activities and intention to engage in other sport roles as a career ($r = .30, p < .01$), providing some support for hypothesis 2b. In general, greater athletic identity and athletic lifestyle were associated with intentions to coach and take on other sport roles.

It was of further interest to determine the ability of athletic identity and each of the athletic lifestyle categories to predict these intentions. Six separate standard multiple regression analyses were conducted for this purpose, one for each behavioural intention. In order to ensure sufficient power in the analyses with the given sample (Todman & Dugard, 2007), the sport-related social activities score was dropped, as it did not significantly correlate with any of the coaching intention or other sport role measures. Before interpreting the regression results, potential multicollinearity between athletic identity and lifestyle factors was assessed by examining the tolerance values and the variance inflation factors (VIF; Hair, Anderson, Tatham, & Black, 1998). Tolerance values less than .10 and VIF scores greater than 10 are commonly used to denote a problem with collinearity (Hair et al., 1998; Kline, 1998). Observed tolerance values

were .75 and above while observed VIF values were 1.33 and below, indicating no problem with collinearity among the variables.

The results of the regression analyses are presented in Table 2. They revealed that, together, athletic identity and athletic lifestyle significantly predicted recently retired varsity female athletes' intentions to coach as a career, $F(4,80) = 2.89, p < .05$; explaining 13% of the variance in that variable. However, none of the factors made a unique contribution to the overall model. Together, athletic identity and athletic lifestyle significantly predicted intent to coach on a part-time basis, $F(4,80) = 2.89, p < .05$, explaining 13% of the variance in that variable. Athletic identity was the only unique predictor of part-time coaching intention (beta = .26, $p < .05$). Intent to coach as a volunteer was also significantly predicted by athletic identity and lifestyle, $F(4,79) = 5.62, p < .001$, explaining 22% of the variance in that variable. Sport-related organizational activities were the only unique predictor of volunteer coaching (beta = .28, $p < .05$).

Together, athletic identity and lifestyle significantly predicted intent to engage in other roles in sport as a career, $F(4, 80) = 3.28, p < .05$. The model explained 14% of the variance in this variable. Both athletic identity (beta = .24, $p < .05$) and sport-related productive activities (beta = .25, $p < .05$) were unique predictors of careers in other sport roles. Athletic identity and lifestyle did not significantly predict intent to engage in other sport roles on a part-time basis, $F(4,80) = 1.54, p > .05$, or as a volunteer, $F(4,79) = 1.18, p > .05$.

Table 2

Results of Regression Analyses Predicting the Effects of Athletic Identity and Athletic Lifestyle Factors on Intentions to Coach and Engage in Other Sport Roles

	<i>B</i>	<i>SE</i> β	β	<i>R</i>	<i>R</i> ²
<u>Intent to Coach (Career)</u>				.36*	.13
Athletic Identity	.26	.21	.15		
Productive Activities	.16	.12	.17		
Organizational Activities	.03	.12	.03		
Individual Activities	.21	.13	.18		
<u>Intent to Coach (Part-time)</u>				.36*	.13
Athletic Identity	.49	.23	.26*		
Productive Activities	.19	.13	.18		
Organizational Activities	-.02	.13	-.02		
Individual Activities	.04	.15	.03		
<u>Intent to Coach (Volunteer)</u>				.47***	.22
Athletic Identity	.23	.19	.14		
Productive Activities	.07	.11	.07		
Organizational Activities	.27	.11	.28*		
Individual Activities	.22	.13	.19		
<u>Intent - Other Roles (Career)</u>				.38*	.14
Athletic Identity	.43	.21	.24*		
Productive Activities	.24	.12	.25*		
Organizational Activities	-.04	.12	-.04		

Individual Activities	-.03	.13	-.03		
<hr/>					
<u>Intent – Other Roles (Part-time)</u>				.27	.07
Athletic Identity	.30	.23	.16		
Productive Activities	.12	.13	.11		
Organizational Activities	.02	.13	.02		
Individual Activities	.12	.15	.09		
<hr/>					
<u>Intent - Other Roles (Volunteer)</u>				.24	.06
Athletic Identity	.25	.23	.14		
Productive Activities	-.01	.13	-.01		
Organizational Activities	.16	.13	.15		
Individual Activities	.04	.15	.03		
<hr/>					
<i>Note. ***$p < .001$, *$p < .05$</i>					

Open Comments

Of the 85 participants, 67 provided open-ended comments regarding what factors might influence their decision to become involved in coaching or other sport roles. These comments were downloaded from the online survey results and content analyzed for meaning (Patton, 2002). They were generally brief statements, ranging from a few words to one or two sentences. The investigator and her supervisor read through the statements independently and each identified preliminary themes. Together, they compared their themes and the placement of each statement within a given theme, in an effort to arrive at a single framework. The investigator and supervisor were 85% in agreement on the themes and placement of statements. In the case of a disagreement, statements and themes were discussed until agreement was reached. In the end, comments from 62 participants were deemed interpretable, with several participants providing comments that contained multiple themes.

A total of six themes emerged regarding factors influencing one's decision to coach or become involved in other sport roles, including: (1) convenience, (2) the right opportunity, (3) continuity, (4) financial, (5) need for coaches and other sport roles, and (6) other career interests. Convenience was mentioned most often (71% of participants) and referred to time commitments, scheduling, location, and family involvement as factors that would influence one's decision to be involved in the future. For example, one participant indicated "time commitment, length of the season, and travel time" as factors that might influence her involvement. The right opportunity was identified next most often (40% of participants) and referred to the context of the role itself, such as the age of the athletes, level of competition, and favourable working conditions. One participant

specified that “the age group of the athletes, the intensity, politics surrounding the sport, and the level of competition” would be factors. Twenty-one percent of participants identified continuing in sport in some way, or giving back to sport, as a factor in their decision to coach or volunteer after retirement from elite sport participation. One participant indicated factors that might influence her decision to coach or take on other roles such as “staying involved in the sport, maintaining connections/friendships, continuing on the tradition, and passing on knowledge/expertise/experiences in the sport.” Just slightly fewer (19%) participants noted that salary or at least remuneration for costs would be a factor in their future involvement and comprise the financial theme. For example, one participant indicated that “many coaching positions are low-paid or volunteer; making a commitment to an unpaid or low-pay position after graduation with the burden of loans is sometimes not an option.” Ten percent of participants indicated that a need for coaches or other sport roles would increase the likelihood that they would be involved. Participant specified factors such as, “if an organization requires more help” or the “need for coaches/people to fill those positions.” Only a few participants (3%) noted that they would be unlikely to be involved in the future if they were pursuing a different career, and some indicated this was the case. For example, one participant indicated, “as a chemistry major, I will probably be working in the science department.”

Chapter Five: Discussion

The purpose of this study was to explore factors associated with the intentions of recently retired varsity female athletes to become involved in coaching or other roles in sport. Broad support was found for the association between athletic identity, athletic lifestyle, and intentions to take on coaching and other sport roles, although there was noteworthy variation by lifestyle factor and intended engagement. In general, recently retired varsity female athletes with stronger athletic identities and athletic lifestyles had greater intentions to become involved in coaching or other roles in sport. In essence, these women were generally more likely to transition from playing into coaching or other sport roles, thereby extending their participation in sport. This provides support for Cuskelly's (2004) transition-extension hypothesis applied to the context of female former athletes continuing on in coaching and other sport roles, which was a secondary purpose of the study.

Overall, this cohort of female former athletes had stronger intentions to coach or take on other sport roles as a volunteer or on a part-time basis, than as a career. It appears that these women are more interested in taking on coaching or other roles in sport in addition to another career, or as an activity "on the side." This could be because participants are university students or recent graduates, and have been pursuing higher education, leading to career paths outside of sport. Further, the women appeared to be more likely to engage in coaching or other sport roles on a volunteer basis, compared to a part-time basis, which has the connotation of a secondary job. Thus, there was essentially a sliding scale of decreasing intent, from volunteering, to part-time involvement, to coaching or other roles as a career.

On the whole, the women in this study had fairly strong athletic identities. That is, they saw themselves as athletes, they perceived other people to view them as athletes, and they had goals related to sport. Further, participants felt they needed to participate in sport to feel good about themselves, and would feel depressed if they could not participate. Sport appeared to be a fairly important part of these women's lives. The findings are comparable to other studies using the AIMS. Similarly strong athletic identities for both male and female former athletes at the time of retirement (Shachar et al., 2004) and intercollegiate student-athletes (Murphy et al., 1996) have been reported. Brewer et al. (1993) noted that male and female competitive athletes at the intercollegiate/national level had strong athletic identities, however males scored significantly higher on the AIMS than females.

The moderate sport-related productive activity scores indicated that, in general, these former athletes were somewhat more likely to have worked or volunteered in sport-related jobs. This included the paid and unpaid work these women did during the school year and the summer months. Sport-related social activity scores were also above average. This revealed that participants tended to socialize with people who were on their varsity team or involved in elite sport. Women in this study also tended to participate in sport-related more than non-sport organizations, as indicated by the moderate sport-related organizational activity scores. Finally, sport-related individual activity scores were slightly below average, implying that the female former athletes tended to do personal activities and hobbies that are not related to sport. Nonetheless, on the whole, participants had reasonably stronger sport-related than non-sport lifestyles.

Although it was rated fairly low, intention to coach as a career was positively

correlated with athletic identity, sport-related productive activities, and sport-related individual activities, suggesting that participants who identified with the athlete role to a greater extent and did more sport-related work and individual hobbies, had greater intentions to coach full-time. It is not surprising that women who see themselves as athletes and have goals related to sport, are more likely to consider transitioning into a career in coaching, even though this was relatively unappealing for them. Further, productive activities in particular have likely given the women some work experience in sport and exposed them to the possibility of future careers in the field. Together, athletic identity and the lifestyle activity components predicted intentions to coach as a career; however none explained any unique variance in this behavior. Tabachnick and Fidell (2007, p. 148) noted that,

[Regression coefficient] significance tests are sensitive only to the unique variance an IV adds to R^2 . A very important IV that shares variance with another IV in the analysis may be non-significant although the two IVs in combination are responsible in large part for the size of R^2 .

This may be a function of the broad lifestyle measures used here. Further refinement of the measurement of sport-related productive and individual activities that were significantly correlated with career coaching intention may provide support for their ability to uniquely predict this behavior. For example, investigating the specific type of productive activities, whether they are paid or unpaid, the nature of involvement, and the type of establishment may provide insight into the relative importance of sport-related work experience to intentions to coach as a career.

Intent to coach on a part-time basis was positively correlated with athletic identity

and a sport-related productive lifestyle. This suggests that, to the extent participants identified with the athlete role and were involved with sport-related paid or unpaid work, they had greater intentions to coach on a part-time basis. Again, the sense that they and others see themselves as athletes appears to set them up for coaching on a part-time basis, while the work in sport these women experienced likely exposed them to future work in the field, such as coaching even on a part-time basis. Further, athletic identity and the lifestyle activity components collectively predicted part-time coaching intentions, with only athletic identity explaining unique variance. These findings suggest that participants' part-time coaching intentions were affected more by their perceived identity with the athlete role than any other factor in this study.

Coaching intention on a volunteer basis was positively associated with athletic identity and all lifestyle activities except for the social aspect. More specifically, participants with a stronger athletic identity and who did more paid or unpaid work, organizational activities, and individual activities that are related to sport, had greater intentions to coach as a volunteer. This is consistent with Doherty's (2005) findings that sport volunteers are much more likely to have participated in sport than volunteers in other settings. Further, athletic identity and athletic lifestyle in general predicted intentions to coach on a volunteer basis; however, only sport-related organizational activities explained unique variance. This finding indicates that participants' partaking in sport-related organizational activities affected volunteer coaching intentions more than any other factor. It seems reasonable that women who are already involved in sport organizations in some way would be more likely to take on volunteer coaching roles, or may already occupy these roles and intend to continue in them. It is possible that the

experiences these women have gained in sport-related organizations have exposed them to the need for coaches in sport, or perhaps they have benefitted from their experiences, which would encourage them to coach on a volunteer basis. This is consistent with Cuskelly's (2004) specific focus on sport club participants transitioning to a volunteer role in the organization, such as coaching. The broad measure of sport-related organization involvement used here does not reveal the nature of that involvement, and so future research should examine the type of club or organization and the nature of these women's participation within them.

In general, athletic identity was positively associated with intention to coach at all three levels of engagement. This appears to be in at least slight contrast to Shachar et al.'s (2004) finding that former athletes who took on coaching roles did not recall any higher athletic identities than those who chose roles outside of sport. Their study was, however, retrospective in nature, asking participants to recall when they were an athlete. It also did not take into account the period of time between the retirement from sport participation and the decision to pursue a coaching or non-sport career. The current study takes a prospective approach to investigating coaching intentions and, contrary to Shachar et al. (2004), modest support was found for the notion that a stronger identification with the athlete role is associated with a former athlete's intention to take on a coaching role. In addition to athletic identity, productive and organizational activities were noted as factors affecting intention to coach. These findings are important for understanding and engaging these particular women in coaching roles, where they are so underrepresented (Acosta & Carpenter, 2010; Reade et al., 2009).

Positive correlations were observed between intention to take on other sport roles

on a career basis and athletic identity, as well as sport-related productive activities. That is, the more participants felt connected to the athlete role and the more their paid and unpaid work activities were related to sport, the greater their intention to pursue a career in some sport role. Further, athletic identity and productive lifestyle activities were unique predictors of this intention. Again, it seems reasonable that women who were working (paid or unpaid) in sport, and possess a stronger athletic identity, would be more likely to consider continuing in or taking on other careers in sport. The work experience these recently retired female athletes have gained likely exposed them to future careers in sport, and thus they have higher intentions to take them on or continue in them. Also, identifying with the athlete role and feeling that sport is an important part of one's life appears to be a fundamental factor in the consideration of a further career in sport.

Intention to take on other roles in sport on a part-time basis was positively correlated with athletic identity, suggesting that participants with a higher perceived attachment to the athlete role had higher intentions to work in other sport roles on a part-time basis. None of the lifestyle factors were associated with this intention, nor were athletic identity or lifestyle factors associated with intent to volunteer in other roles. This was surprising, and particularly since participants indicated stronger intentions to continue in other sport roles on a part-time or volunteer basis, versus as a career. However, it may have been a function of the broad measure of sport roles, and should be considered further.

The primary focus of this study was coaching intentions; however, it was of interest to also consider factors influencing intention to become involved in other sport roles. Continuity of one's athletic identity and lifestyle appears to be less of a factor for

these roles than for coaching. Perhaps as recently retired elite level athletes, they have a greater closeness with the coaching role than with other roles in sport. However, given the observed link between athletic identity and lifestyle, and coaching intentions, it is possible that exposing women athletes to these other sport roles could strengthen the relationship between athletic identity and lifestyle, and intention to engage in other sport roles. Further investigation is required to determine if greater exposure to certain roles in sport would influence this relationship.

Generally, athletic identity and a sport-related productive lifestyle were the individual factors most consistently associated with intention to coach or become involved in other roles. Stronger athletic identity at the time of retirement has also been linked to a greater risk of experiencing adjustment difficulties following sport career termination (Grove et al., 1997; Lavalley et al., 1997; Shachar et al., 2004). Murphy et al. (1996) found that strong and exclusive identification with the athlete role may reduce the exploration of non-sport career possibilities. As noted earlier, the findings of the current study suggest that intention to stay involved in sport through coaching or another role is consistently a function of stronger identification as an athlete. Thus, athletic identity continues to present itself as an important factor in the current study. In the context of women in coaching and other sport roles, this furthers our understanding of internal continuity (Atchley, 1989), which is founded upon identity, as a key component to understanding and predicting continuity and post-retirement behaviour. Further, continuity of activities, skills, environments and relationships are the foundation of external continuity (Atchley, 1989). The current findings extend our knowledge regarding external continuity within a given context by highlighting the paid and unpaid work that

these women did. These sport-related activities appeared to be one of the more meaningful lifestyle factors; it is these productive activities included in women's lifestyles that are a key component to understanding and predicting continuity and post-retirement behaviour. However, given the modest findings, it is evident that there are other factors shaping these women's intentions to take on coaching and other sport roles.

The open comments provide some further insight into continuity and other factors affecting this cohort's intentions to coach and to take other sport roles. A relatively small proportion of women indicated remaining in and giving back to sport, or continuity, as a factor, which is consistent with the modest correlations and variance observed between intentions to engage in coaching and other roles, and athletic identity and athletic lifestyle. Perhaps the desire to remain in sport was less prevalent as these women were also current students or recent graduates, with presumably other roles that they identify very strongly with (cf. Brewer et al., 2000). These additional aspects of their self-concept may direct them to other, non-sport, future roles (Atchley, 1999) and thus reduce their intention to pursue the sport roles examined here. It would be appealing to investigate continuity and the transition-extension hypothesis with recently retired athletes who are not involved in university life (i.e., full-time students), as they may have an even stronger desire to remain in sport after retirement. Nevertheless, other factors must be present which affect the intentions of the recently retired female varsity athletes examined here. As mentioned earlier, Doherty and Varpalotai (2000) noted that individual factors (e.g., skills, ability), structural factors (e.g., opportunity, resources), and culture factors (e.g., societal values) may support or constrain women's involvement in sport. Additional individual as well as structural factors were reported by participants.

These other factors pointed out by participants in the open comments shed some light on the explanation for the modest support found for continuity as a reason to engage in coaching or other sport roles after retirement. Convenience, an individual factor, and the right opportunity, a structural factor, were indicated by a relatively larger proportion of participants. Conceivably, as elite athletes, these women understand very well the time, commitments, and sacrifices required to coach. This is consistent with the idea that the exceptional amount of time and effort required to be effective as a coach could be seen as a barrier to normal social life (Everhart & Chelladurai, 1998; Hart et al., 1986). It appears that coaching (and perhaps other sport roles) intentions may depend on the ability of the role to fit into their lives expediently. Doherty (2005) noted that sport volunteers, including coaches, tended to become involved through their children, and thus it seems likely the women in the current study would consider being involved, perhaps as a volunteer coach, if doing so coincides with family involvement, and the convenience that brings. Further, participants indicated an interest in coaching if the right opportunity were to present itself. In particular, the women appeared to be quite selective regarding whom they would coach and at what level. This is consistent with Pastore's (1991) and Hart et al.'s (1986) findings that current coaches' main reasons for coaching were to work particularly with more advanced and motivated athletes, and for competitive situations and the challenge of producing a winning team, respectively. It is also likely consistent with the fact that these women have been elite athletes themselves, and so they prefer to coach at more advanced levels.

Another structural factor identified by participants was financial, although a relatively smaller proportion of respondents indicated this as something that would affect

their involvement in coaching or other sport roles. This sheds light on the idea that some participants feel there is not sufficient financial remuneration for these roles, and perhaps particularly coaching, or they would at least require compensation for the incurred costs of coaching or other sport roles on a volunteer basis. These financial concerns may explain the apparently lesser intent to be involved in sport as a career, versus on a part-time basis, versus as a volunteer.

Lastly, a small proportion of participants indicated that the need for coaches or other sport roles, another structural factor, would affect their intention to take them on. It appears that although these few women may not go out and actively seek these positions, they would remain open to taking on coaching roles if there is a need for it. This is consistent with Doherty's (2005) finding that younger volunteers (15-24 years) were most likely to become involved because someone asked them. It is also consistent with Cuskelly's (2004) suggestion that normative obligation to be involved, specifically through volunteering, would strengthen former sport participants' transition from athlete to supportive role in the club. Although the need for coaches as a reason to engage in coaching was indicated by only a small portion of participants, some women who have recently finished competing in elite sport may be more likely to take on coaching roles if they are asked.

Conclusion

This study takes an individual perspective and sheds light on recently retired varsity female athletes' future intentions to coach in relation to their current athletic identity and lifestyle. The findings indicate that what both drives and restrains their intent to coach appears to be multifaceted. The current study makes a three-fold contribution to

theory and the literature by using a prospective approach to post-retirement activities, utilizing the transition-extension hypothesis of sport involvement, and further exploring women in coaching and other sport roles. This study illustrates the multidimensionality of athletic identity and lifestyle, and their varying impacts on recently retired female athletes' intention to take on coaching and other sport roles.

While the current study is not the first to identify continuity as a main reason for becoming involved in coaching (Doherty & Casey, 1996; Hart et al., 1986; Pastore, 1991), it takes a further step by investigating the mechanisms of that continuity; namely, athletic identity and athletic lifestyle. The varying support found for the hypotheses contributes further insight into the notion of continuity. The application of Cuskelly's (2004) hypothesis – that identity and lifestyle play some role in the transition of players to volunteers in order to extend their participation in sport – was supported, but not by all factors. Thus, it is reasonable to assume that other factors (also) affect recently retired female athletes' intention to coach and engage in other sport roles.

Limitations

Several limitations to the study warrant discussion. Firstly, this study does not establish causality between an individual's perceived athletic identity and lifestyle, and their intentions to coach or take on other sport roles. Secondly, the findings are not generalizable beyond the female former Canadian varsity athletes from which the sample was drawn. Accordingly, further research is required to investigate the effects of athletic identity and lifestyle on coaching intentions in other settings. The measurement of each lifestyle factor was quite broad, and therefore the findings must be interpreted quite broadly. These measures may have hindered the generation of more detailed insight or

explanation of continuity as a meaningful determinant of women's involvement in coaching and other sport roles. Further, the open-ended question was general to coaching and other sport roles, and was not specific to career, part-time, or volunteer coaching intention; thus, these findings must also be interpreted broadly.

Nonetheless, this study provides a good starting point for understanding the particular roles that recently retired female athletes may adopt, and the influence of continuity on their involvement in coaching and other sport roles. Implications for management and directions for future research can be considered.

Implications

The findings suggest several implications for practice regarding recruiting, encouraging, and targeting women for coaching, as well as other sport roles. It would be to an organization's advantage to seek out female former athletes who have a stronger athletic identity, have previously worked or volunteered in sport, or have been affiliated with sport organizations. Knowing the profile of those women who are more likely to become involved can help organizations prioritize matters of recruitment.

Policy and strategy should be directed towards encouraging these particular women to continue on into coaching and other sport roles. It may not be enough to just create apprenticeship programs and workshops, and provide grants for women in coaching – women need to be drawn into these programs, workshops, and grant-receiving positions. Strategies should be directed towards tapping into and provoking women's athletic identity and lifestyle. For example, it may prove useful to create promotions for recruitment that relate to women's athletic identity and lifestyles. Promotions could be messages and pictures, which advertise opportunities that link directly to women

maintaining sport as a key part of their life, whether it is in coaching or other sport roles. Messages could be conveyed such as, “Stay competitive – Stay connected – Start coaching” or “Sport roles keep women in the game.” These recently retired athletes need to see themselves in coaching or other sport roles. Therefore, the images and information that is displayed needs to depict continuity – the notion that coaches can be young, recently retired athletes, and they can maintain their identity and lifestyle, and give back to sport, by taking on these roles. Policy-makers should also direct their attention towards strategies that aim to keep women in their positions who already occupy coaching or other sport roles.

At the grassroots level, local sport clubs, organizations and current coaches, should ensure that female athletes are being made aware of coaching and other sport role opportunities, within and beyond their own sport organization. An emphasis should be on current coaches to encourage their athletes to become involved in coaching or other sport roles upon retirement; again, emphasizing the continuity of athletic identity and lifestyle through these roles. These current coaches, being in close proximity to and likely having some influence over their retiring athletes, should provide support, resources, and guidance for these women. These considerations should be undertaken in concert with attention to other individual, system, and culture factors that have been shown to influence women’s involvement in coaching (cf. Doherty & Varpalotai, 2000).

Future Research

Several other routes for future research derive from the study. As mentioned earlier, investigating the further nature of the lifestyle factors and their associations with intentions deserves consideration, and in particular, the sport-related productive and organizational activities. Broad measures of work and organizational involvement were used in the current study. Future research should examine the specific nature of this involvement and the different types of organizations that are a part of female former athletes' lifestyles.

Cuskelly (2004) pointed out that players' decision to extend their sport participation through volunteering might be affected by environmental pressure, and specifically a sense of obligation to put something back into sport. This may be just one factor that moderates the relationship between athletic identity and lifestyle, and intentions to coach or take on other sport roles. Building on the current investigation and recommendations for the further understanding of continuity, its facets, and its effect on female former athletes' coaching and other sport role intentions, the relative influence of moderating factors would be a fruitful avenue for future research. Other factors were identified here and may be considered; namely, convenience, opportunity, and financial aspects.

As briefly highlighted, it may be appealing to investigate continuity in the same manner but with athletes who are not involved in university life. Not being a full-time student or pursuing higher education may allow the athletic portion of their identity and lifestyle to be more predominant. These female former athletes may have very different,

and even stronger, athletic identity, athletic lifestyles, and intentions to continue in sport after retirement.

As the disproportionately fewer women in coaching positions continues to be well noted, it is important to continue investigating the reasoning for the underrepresentation of women in coaching roles. The current study took a prospective approach, examining continuity as an individual factor affecting women's coaching intentions. While continuity appears to have some basis for the explanation of women's coaching intentions and actual involvement, it is likely part of a broader more complex explanation.

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Retrieved December 22, 2011 from <http://www.womenssportsfoundation.org>

Appendix A



Use of Human Participants - Ethics Approval Notice

Principal Investigator: Dr. Alison Doherty
 Review Number: 18322S
 Review Level: Full Board
 Approved Local Adult Participants: 0
 Approved Local Minor Participants: 0
 Protocol Title: Factors Influencing Recently Retired Female Athletes' Intention to Coach
 Department & Institution: Kinesiology, University of Western Ontario
 Sponsor:
 Ethics Approval Date: September 01, 2011 Expiry Date: March 31, 2012

Documents Reviewed & Approved & Documents Received for Information:

Document Name	Comments	Version Date
UWO Protocol		
Other	Retired Female Athletes Survey	
Letter of Information	Email Letter of Information for Participants	

This is to notify you that The University of Western Ontario Research Ethics Board for Non-Medical Research Involving Human Subjects (NMREB) which is organized and operates according to the Tri-Council Policy Statement: Ethical Conduct of Research Involving Humans and the applicable laws and regulations of Ontario has granted approval to the above named research study on the approval date noted above.

This approval shall remain valid until the expiry date noted above assuming timely and acceptable responses to the NMREB's periodic requests for surveillance and monitoring information. If you require an updated approval notice prior to that time you must request it using the UWO Updated Approval Request Form.

Members of the NMREB who are named as investigators in research studies, or declare a conflict of interest, do not participate in discussions related to, nor vote on, such studies when they are presented to the NMREB.

The Chair of the NMREB is Dr. Riley Hinson. The UWO NMREB is registered with the U.S. Department of Health & Human Services under the IRB registration number IRB 00000941.

Signature

Ethics Officer to Contact for Further Information

Grace Kelly (gkelly@uwo.ca)	Janice Sutherland (jsutherl@uwo.ca)
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This is an official document. Please retain the original in your files.

The University of Western Ontario
 Office of Research Ethics
 Support Services Building Room 5150 • London, Ontario • CANADA - N6G 1G9
 PH: 519-661-3036 • F: 519-850-2466 • ethics@uwo.ca • www.uwo.ca/research/ethics

Letter of Information

RE: Invitation to Participate - Survey Study of Former Varsity Female Athletes



Factors Influencing Former Varsity Female Athletes' Intention to Coach

Former varsity female athletes may be a likely group to get involved in coaching after they are done competitive sport. However, not everyone chooses to coach. As part of my masters research program at The University of Western Ontario, under the supervision of Dr. Alison Doherty, I am interested in investigating factors affecting former varsity female athletes' intention to coach.

Female athletes from universities across Canada who have recently finished competing at the varsity and elite level are being invited to participate in the study. If you are no longer involved as a varsity or elite level athlete, we invite you to fill out an online survey that should take less than 10 minutes to complete. It will give you a chance to reflect on certain aspects of your life in relation to your sport involvement. Please forward this letter to any other former varsity female athletes who have recently finished competing.

There are no known risks associated with participation in this study. Participation is voluntary. You may refuse to participate, refuse to answer any questions, or withdraw from the study at any time. The information reported in your survey will be held in strictest confidence and is only for the use of Dr. Doherty and myself. No individuals will be identified in the data or any published results.

If you agree to participate you may access the survey at a secure website by clicking the cursor on this link: <https://www.surveymonkey.com/s/formerfemaleathletesurvey>. If you complete the survey, you may choose to be entered into a draw for one of two \$50 gift certificates for SportChek. In order to ensure the anonymity of your responses to the survey, once it is completed you will be directed to a separate secure area from which you may make your request for the draw. Your contact information will only be used for the draw, and will be destroyed once the draw has been made.

We request that you complete the survey **as soon as possible, or by September 30**.

We are also asking any participants who are willing to take part in a possible follow up interview to indicate at the end of the survey whether we have permission to contact you in the future. Indicating permission does not commit you to taking part.

Completion of the questionnaire indicates your consent to participate in the study. If you have any questions about the survey or the final results, please contact me as indicated below. If you have any questions about the conduct of this study or your rights as a research subject you may contact the Office of Research Ethics, The University of Western Ontario, 519-661-3036 or ethics@uwo.ca.

Thank You!

Appendix B

Part One - Demographics

1. What varsity sport did you play most recently?
Additional/Other (please specify)
2. What was or is your most recent program of study?
3. In what year did you graduate or will you graduate? (e.g. 2011)
4. Do you plan on continuing your university education next year? (Yes/No)
5. What is your current age (in years)?

Part Two - AIMS

Scale of 1 (strongly disagree) to 7 (strongly agree)

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

Part Three - Lifestyle

1. Think about the type of work you did or do at a paid job and volunteering, if at all, during the periods of time indicated below. Indicate the number that best reflects the extent to which you agree or disagree with each statement:

Scale of 1 (strongly disagree) to 7 (strongly agree); N/A

1. The paid job I worked at during the *school year* is related to sport.
2. The paid job I worked at during the *school year* is **not** related to sport.
3. The paid job I worked at during the *summer months* is related to sport.
4. The paid job I worked at during the *summer months* is **not** related to sport.
5. The volunteer work that I did during the *school year* is related to sport.
6. The volunteer work that I did during the *school year* is **not** related to sport.
7. The volunteer work that I did during the *summer months* is related to sport.
8. The volunteer work that I did during the *summer months* is **not** related to sport.

2. Think about the time you spend socializing with others (in person, on the phone, social networking sites). Indicate the extent to which you agree or disagree with each statement:

Scale of 1 (strongly disagree) to 7 (strongly agree)

1. I tend to socialize with people who are on my varsity team or involved in elite sport.
 2. I tend to socialize with people who are **not** involved in elite sport.
3. Think of organizations in which you actively participate, if at all (e.g. church, cultural club, political organization, social service or community outreach program, local sport club). Indicate the extent to which you agree or disagree with each statement:

Scale of 1 (strongly disagree) to 7 (strongly agree); N/A

1. Organizations in which I actively participate are related to sport.
 2. Organizations in which I actively participate are **not** related to sport.
4. Think about non-physical activities or hobbies that you do on your own, if at all. Indicate the extent to which you agree or disagree with each statement:

Scale of 1 (strongly disagree) to 7 (strongly agree); N/A

1. I tend to do activities and hobbies that are related to sport (e.g. following sports on TV/internet/news, reading sport magazines/books, fantasy leagues, sport video games).
2. I tend to do activities and hobbies are **not** related to sport (e.g. reading non-sport material, watching TV, shopping, baking, crafts, non-sport video games, surfing the internet).

Part Four - Intentions

Please indicate the number that best reflects the extent to which you agree or disagree with each of the following statements:

Scale: Strongly Disagree [1] → Strongly Agree [7]

1. I intend to become involved in coaching in the near future, **as a career**.
2. I intend to become involved in coaching in the near future, **on a part-time basis**.
3. I intend to become involved in coaching in the near future, **as a volunteer**.
4. I intend to become involved in another sport role (e.g. sport administrative role, referee, official, trainer) in the near future, **as a career**.
5. I intend to become involved in another sport role in the near future, **on a part-time basis**.
6. I intend to become involved in another sport role in the near future, **as a volunteer**.

Part Five – Open Ended

1. What factors might influence your decision to become involved in coaching or other sport roles?

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