

INVESTIGATION INTO GENDER SPECIFIC TRANSITIONS AND CHALLENGES FACED BY FEMALE ELITE ATHLETES

Doctoral dissertation submitted in fulfilment of the requirements for the degree of Doctor in
Psychological Sciences

Janja Tekavc

Promotors: Prof. dr. Paul Wylleman
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On the cover of this book, you see Tina Maze (1983), the most successful Slovenian ski racer in history, performing in slalom at the World Cup ski race in Maribor (Slovenia). Maze won a total of 26 World Cup races during her career, together with two gold medals at the 2014 Winter Olympics.

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SUMMARY

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Athletes' career development has become a growing field of research in the past decades where the focus of the studies has been shifted from specific career transitions into a holistic, multi-level approach to the competitive as well as post-competitive careers of athletes (Stambulova, Alfermann, Statler, & Cote, 2009). While existing models of career development are effective in determining normative transitions that occur at different levels of athletes' functioning throughout their athletic career, they contain however, less data about diversities which may exist in view of gender-specific characteristics (Wylleman, Alfermann, & Lavallee, 2004). Since research is particularly scarce on female athletes, the purpose of this doctoral study was to develop a better understanding of female athletes' career development. The current doctoral study investigated female athletes' specific transitions, demands and challenges that possibly exist in their athletic career development.

The first three studies of doctoral dissertation qualitatively examined female athletes' specific demands and challenges which they perceive in their competitive and post-competitive athletic career. Separately in three different studies, 22 talented adolescent (Study 1), 32 elite level (Study 2), and 16 retired elite level (Study 3) Slovene male and female athletes participated in semi-structured interviews to discuss their currently perceived athletic career demands and challenges. Findings of these three studies revealed that while male and female athletes perceive several athletic career demands and challenges similarly, gender differences in these perceptions however occur. Female adolescent athletes reported experiencing negative influence of physical maturation on their athletic performance. In development and mastery stage, female athletes more often complained over the characteristics of athletic work they received, and frequently experienced exhaustion and tiredness. Interpersonal relationships appeared as very important for female athletes' development; however these relationships were often described as dynamic and tensed (e.g., conflicts with teammates). In all three studies, female athletes often expressed being dissatisfied with their physical appearance and body weight. Also, some psychological difficulties (e.g., pre-competition anxiety, decreased self-confidence, decreased personal satisfaction after retirement) appeared as more prevalent among female athletes.

Since findings of first three studies implied also that male and female athletes approach somewhat differently to their dual career development, especially their academic career, Study 4 and 5 examined this into a greater detail. Study 4 investigated perceptions of dual career development among elite level individual and team sport athletes to detect possible gender as well as type of sport differences. 12 retired Slovene elite level swimmers and basketball players participated in semi-structured interviews to discuss transitions, demands and challenges that occurred throughout their dual career development. Findings of this study supported Holistic athletic career model (Wylleman, Reints, & de Knop, 2013), in that both male and female athletes perceived different stages in their dual career development, which were connected to several transitions and subsequent challenges

SUMMARY

occurring not only in their athletic and academic/vocational career, but also at other levels of their development. Next, results revealed that Slovene male and female athletes perceive and approach to their dual career somewhat differently. In comparison with male athletes, female athletes achieved better grades in school, higher levels of education, and reported a strong determination to pursue their academic career together with athletic career. Although perceived as difficult as well as detrimental at times, dual career was connected to female athletes' greater personal satisfaction and higher self-confidence.

Following the results of previous four studies, Study 5 quantitatively examined which competences talented and elite male and female athletes perceive as important set to possess in order to successfully deal with dual career challenges. Competences, which help the athletes to manage their thoughts and emotions, were perceived as most important for athletes' dual career success, followed by life management competences (e.g., self-discipline, effective use of time). In comparison with male athletes, female athletes perceived the majority of dual career as more important for their dual career success. In possession of these competences, female athletes perceived possessing lower abilities to regulate emotions, effectively cope with stress, lower levels of self-belief and assertiveness.

Study 6 explored a female specific athletic career transition - transition into motherhood. Eight female elite athletes who were also mothers at the time of their competitive career participated in semi-structured interviews to discuss about their transitional process of becoming a mother athlete. Findings of this study revealed that becoming a mother represents an important transformative process for female athletes in which motherhood and elite sport have a reciprocal effect. Although this process was connected with several experienced difficulties, becoming a mother athlete represented a major multi-level positive change in athletic career development of female athletes.

The current doctoral dissertation broadened the knowledge base currently available on the career development of talented and elite level athletes with specific characteristics of female athletes. Research findings stressed the importance of taking a developmental and holistic approach when addressing female athletes, as well as considering their specific developmental characteristics. Finally, the current research has several applied recommendations for supporting female athletes' development throughout their athletic competitive career as well as after it.

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GENERAL INTRODUCTION

1. WOMEN IN SPORT

On 7 January 2017 Olympic ski champion Tina Maze officially concluded her athletic career at the age of 33 by pushing out of the starting gate for one final time in her home country of Slovenia. The most successful Slovenian skier in the history, a four-time Olympian who won 26 World Cup races, took a year off before retirement during which she finished her university degree while working for Eurosport as a television commentator and writing a children's book at the same time. She announced her decision to retire a few months earlier at a press conference saying:

My story has been full of ups and downs...I wouldn't say the story ends here. It's the start of a new beginning. (Hall, 2016, para. 6)

Although Maze is a well-known female athlete in the media, women's sport has historically received less media attention than men's sport (Billings, 2008). To some extent, this is logically connected with the fact that participation of women in competitive sport was low in the past (Chalabaev, Sarrazin, Fontayne, Boiché, & Clément-Guillotin, 2013). With increased funding to girls' and women's sports and policy strategies to motivate more girls for sport, the number of females involved in sport has, however, risen considerably over the past decades (Chalabaev et al., 2013; Daniels, 2012). As a consequence, female athletes are becoming more and more visible in today's media; although media coverage of female athletes is still scarce in comparison with male athletes (Daniels, 2012; McGannon, Gonsalves, Schinke & Busanich, 2015).

In sport science, there is a clear lack of research on female athletes. Generally, women are significantly underrepresented both in science in general as well as in sport psychology more specifically (Conroy, Kaye, & Schantz, 2008; Gledhill, Harwood, & Forsdyke, 2017; Tekavc, Wylleman, & Cecić Erpič, 2013). According to Ronkainen, Watkins, and Ryba (2016), women's athletic career research is still scarce and therefore needs to be enriched with research in this field.

1.1 WHAT NARRATIVE STUDIES SAY ABOUT FEMALE ATHLETES?

Narrative studies explain the complex social, cultural, and gendered underpinnings of athletic career (Ronkainen, Kavoura, & Ryba, 2016). Sport research in general remains very single-focused by having a narrow focus on achieving athletic success and leaving almost no space for anything else (Dacyshyn, 1999). Douglas and Carless (2006; 2009) identify such single-focused narratives about athletes' careers as performance narratives. These narratives are characterized by the elements of competition, winning, and gaining social esteem. As such, elite sport culture offers limited narrative resources for athletes, and can endanger athletes' well-being if they are unable to conform to the dominant ideals of being an athlete (Ronkainen et al., 2016).

Lieblich, Tuval-Mashiach, and Zilber (1998) noted that although male and female athletes develop very similarly during childhood, greater differences emerge in adulthood. While male athletes typically follow the performance narrative, focusing merely on their athletic career, female athletes focus on several equally important areas in addition to their athletic career, such as relationships, family, etc. When investigating female competitive golfers, Douglas and Carless (2006) discovered two other types of narratives besides the performance narrative: the discovery narrative, which focuses on discovering, experiencing, and exploring life in a full and multidimensional sense; and the relational narrative, which emphasizes interpersonal relationships. They found that women whose narratives emphasized not only athletic performance but also other aspects in life experience less psychological problems when retiring from sport (Douglas & Careless, 2006; 2009). The authors believe that focusing only on performance and neglecting other aspects of life can be damaging to the individual and could limit his/her identity development.

Female gymnasts seem to represent a group of female athletes which is especially at risk for focusing predominantly on athletic performance while neglecting other aspects in life (e.g., Fišer, 2007; Kerr and Dachyshyn, 2000; Lavalley & Robinson, 2007; Lally & Kerr, 2008). Female gymnasts begin and end their competitive careers at young ages and become single-mindedly focused on sport far earlier in life than other athletes. Fišer (2007) found that young Slovene female gymnasts adapt their daily rhythm completely to sport, leaving them with little or no time for other interests and activities. Consequently, they often feel socially isolated from their non-athletic peers, as well as facing significant exhaustion due to high training loads. According to Lavalley and Robinson (2007), young female gymnasts are driven by the need to progress and develop strong perfectionist tendencies. They often become overly-critical of themselves. The intensity and singular focus on sport, which are expected from female gymnasts, prevent them from exploring other roles. According to Lally and Kerr (2008), female gymnasts' parents usually support their daughters' singular focus on sport. The authors reported that parents of female gymnasts questioned the effects of prolonged training and competition on their daughters' physical and psychological health, and even sensed that some coaching behaviours were unhealthy. However, they decided not to intervene, believing that these behaviours and attitude were required to produce elite athletes.

For many athletes telling an alternative narrative can be hard or even impossible for several reasons, e.g. an absence of alternative narrative templates, or considering the tellers of alternative narratives to be "failures". According to Carless and Douglas (2009), female athletes in particular are often not heard in a male-dominated structure of professional sport, and their needs and values are not being understood or acknowledged.

The existing narratives and beliefs about women and women athletes in particular affect their experiences and life choices (Ryba, Stambulova, Ronkainen, Bundgaard, & Selänne; 2015b). Despite

the greater participation of women in all types of sports, sporting and leisure activities are still gendered and men and women select different activities because of the expectations of masculinity and femininity created by society (Mills, 1998). The potential role conflict between being an athlete and being a woman has been a subject of research by both sport sociologists and sport psychologists (Allison, 1991). Researchers discussed the types of social and psychological pressures female athletes face as social images, definitions, and expectations of being an athlete collide with those of being a woman. According to Ryba, Ronkainen, and Selänne (2015a), gendered narratives and beliefs deeply influence male and female athletes' experiences and life choices. Despite the recognized gender equality in most European countries, the residual elements connected to gender roles are still present in everyday life, especially in the context of elite sport. Kavoura, Ryba and Kokkonen (2012) argue that even sport psychology studies sometimes reinforce gender stereotypes that female athletes are in general "weaker" than male athletes, or that they have fewer chances for success in sport than men. Particularly in martial arts, the stereotypes which suggest that female martial art athletes are different from other women, possess e.g. more masculine traits or may be more prone to accept violent conflict resolutions, are being reinforced (Kavoura et al., 2012).

Ryba et al. (2015a) found that female athletes often feel the pressure to adhere to the cultural script of a 'normal life', which means not having a professional athletic career. Ronkainen et al. (2016) support this notion. They explored pre-retirement experiences of Finnish elite distance runners and found that female runners had strongly internalized performance narratives in order to be validated as "serious athletes". However, most women in the study understood competitive athletic career as a project undertaken in one's youth and felt the pressure to conform to the exemplary life script in which graduation should lead to full-time work and then family. Even female athletes' parents withdrew their support for sport during mastery years and expected their daughters to follow the cultural script of devoting themselves to their professional career and starting a family. Since the performance narrative conveys the idea that athletes should fully devote themselves to their sport in order to live the athletic life, taking the "all-in" approach (Douglas & Carless, 2006), female athletes felt they needed to choose between their athletic career and the gendered life script. On the other hand, male athletes decided more often to compromise their academic and professional careers due to their athletic career. Ronkainen et al. (2016) found that female athletes tended to see pregnancy and becoming a mother as the normative end of their athletic career. In contrast, the majority of males believed that it was normal for them to continue their athletic career beyond the peak years and after having children. They saw the motives for continuing their athletic career in their love for sport and enjoyment of challenges.

2. ATHLETIC CAREER DEVELOPMENT

Athletic career development and transition research is a domain within sport psychology which has attracted considerable interest and undergone some major changes over the past decades. The first studies on athletes' career development and transitions were conducted in the 1960s and have significantly increased in number since the end of the 1980s (Stambulova, Alfermann, Statler, & Côté, 2009). Since then, four major shifts in athletic career research have occurred: (1) seeing the transition as a coping process; (2) taking a whole-career approach by describing the stages in athletes' career development; (3) taking a whole-person approach by focusing not only on the athletic sphere but also on other domains in athletes' lives; (4) inclusion of contextual factors into research (i.e. macro-social factors such as sport system or culture) (see Stambulova et al., 2009).

The term of transition is therefore an evolving concept (Wylleman, Alfermann, & Lavallee, 2004). It originates from Schlossberg's (1981) general psychology definition of transition as "an event or non-event [which] results in a change in assumptions about oneself and the world, and thus requires a corresponding change in one's behaviour and relationships" (p. 5). A transition usually "results from one or a combination of events that are perceived by the athlete to bring about personal and social disequilibria" (Wylleman & Lavallee, 2004, p. 509). Today's term of transition represents a coping process with potentially positive or negative outcomes (Stambulova et al., 2009). The experience of athletic transition involves characteristics of the athlete (i.e., age, gender, type of sport, competitive level), and environmental characteristics (i.e., culture, sport environment) (Stambulova & Alfermann, 2009; Wylleman et al., 2004). Researchers suggested that personal characteristics, including gender, may influence athletes' perceptions of change-events and their subsequent decisions (Samuel & Tenenbaum, 2011).

2.1 THEORETICAL MODELS OF ATHLETIC CAREER DEVELOPMENT

Career development is defined as proceeding through career stages and transitions (Stambulova & Wylleman, 2014, p.605). In general, theoretical models of athletic career development in sport psychology can be classified as (a) descriptive career models (Salmela, 1994; Stambulova, 1994; Wylleman & Lavallee, 2004), which present athletic career development as a succession of stages, describe characteristics of each stage, its specific challenges, and predict normative transitions between the stages; or (b) explanatory models (Schlossberg, 1981; Stambulova, 2003; Stambulova et al., 2009; Taylor & Ogilvie, 1994, 2001), which explain the transition process, its outcomes, and factors involved in this process (Stambulova & Wylleman, 2014).

Since the aim of this study was to investigate female athletes' career development, more specifically to identify and describe female athletes' specific transitions and challenges they face in

their athletic career development, the descriptive model of athletic career development was selected as a theoretical framework for this doctoral dissertation. Our goal was to explore female athletes' specific transitions and challenges which occur not only in their athletic career, but also in other spheres of their life (e.g. relationships with important others, education). We decided to employ the Holistic Athletic Career (HAC) model (Wylleman, Reints, & De Knop, 2013), because the model can be seen as the embodiment of a holistic lifespan perspective (Stambulova & Wylleman, 2014).

2.2 HOLISTIC ATHLETIC CAREER MODEL

Bringing together the concepts of whole-career and whole-person approach, Wylleman and Lavallee (2004) proposed a developmental model of transitions faced by athletes, which delineates a series of normative transitions occurring in several spheres of athletes' lives, including the athletic, psychological, psychosocial, and the academic/vocational level. The model was later supplemented with a financial level and presented as the Holistic Athletic Career (HAC) model (Fig. 1) (Wylleman, Reints, & De Knop, 2013).

Figure 1 – The Holistic Athletic Career Model (Wylleman, Reints, & De Knop, 2013).

AGE	10	15	20	25	30	35
Athletic level	Initiation	Development		Mastery		Discontinuation
Psychological level	Childhood	Puberty Adolescence		Young adulthood		Adulthood
Psychosocial level	Parents Siblings Peers	Peers Coach Parents		Partner Coach Support staff Teammates Students		Family (Coach) Peers
Academic/ Vocational level	Primary education	Secondary education		(Semi-) professional athlete		Post-athletic career
			Higher education	(Semi-) professional athlete		
Financial level	Family	Family Sport governing body	Sport governing body Government/NOC Sponsor		Family	Employer

The top layer of the model represents the stages and transitions athletes face in their athletic development. These include: (a) transition to organized competitive sports at about six to seven years

of age (Initiation), (b) transition to an intensive level of training and competitions at age 12 to 13 (Development), (c) transition to the highest or elite level at about 18 or 19 years of age (Mastery), and (d) transition out of competitive sports between 28 and 30 years of age (Discontinuation) (Wylleman & Lavallee, 2004; Wylleman et al., 2013). The authors of the model warrant that these age ranges are averaged over many athletes and several different sports, and therefore should not be sport-specific. The second layer of the HAC model identifies the normative stages and transitions occurring at a psychological level: childhood (up until 12 years of age), adolescence (13 to 18 years), and adulthood (from 19 years of age onwards). Each of these developmental stages is related to its specific developmental task(s), which represent the task that “arises at or about a certain time in the life of an individual, successful achievement of which leads to his happiness and to success with later tasks, while failure leads to unhappiness in the individual, disapproval by the society, and difficulty with later tasks” (Havighurst, 1972, p. 2). Critical developmental tasks occur throughout the lifespan of an individual. For example, in childhood (six to 12 years of age), a child must deal with demands to learn new skills (Erikson, 1950; Erikson & Joan, 1997), and become psychologically ready for competitions (Wylleman & Lavallee, 2004). In adolescence (13 to 19 years of age), teenagers are developing their self-identity regarding who they are and where their lives are headed, i.e. by achieving a masculine or feminine social role, accepting one’s physique and using the body effectively, acquiring a set of values and an ethical system as a guide to behaviour (Erikson, 1950; Erikson & Joan, 1997; Havighurst, 1972). In early adulthood (19 to 39 years of age), people become capable of forming intimate, reciprocal relationships (Erikson, 1950; Erikson & Joan, 1997; Havighurst, 1972). While the important theoretical contributions to the understanding of development from the late teens through the twenties, e.g. the theory of human development across the life course developed by Erik Erikson (1950, 1968), the work of Daniel Levinson (1978), and the theory of youth by Kenneth Keniston (1971), recognize a period in which adult commitments and responsibilities are delayed while the role experimentation that began in adolescence continues or even intensifies, they do not identify it as a specific stage. The theory of emerging adulthood (Arnett, 2000) proposes a new conception of development for this period, i.e. emerging adulthood. Emerging adulthood is a distinct period demographically, subjectively, and in terms of identity explorations, existing only in cultures that allow young people a prolonged period of independent role exploration during the late teens and twenties (Arnett, 2000). Because marriage and parenthood are delayed until the mid-twenties or late twenties for most people, it is no longer normative for the age period between 18 and 25 years to be a time of entering and settling into long-term adult roles. Therefore, emerging adulthood is the period of life that offers the most opportunities for identity explorations in the areas of love, work, and worldviews (Arnett, 2000; 2004). The HAC model (Wylleman et al., 2013), identifies this distinct period between adolescence and adulthood as ‘young adulthood’.

The third layer of the HAC model (Wylleman et al., 2013) reflects the transitions and changes that can occur in the athlete's social development relative to her or his athletic involvement. It comprises those individuals who are perceived by athletes as being significant during that particular transition or stage (e.g. parents, coach, peers, siblings, and spouse) (Wylleman & Rosier, 2016).

The fourth layer represents stages and transitions at academic and vocational levels, i.e. the transition into primary education/elementary school at six or seven years of age, the stage of secondary education/high school at age 12–13, and the transition to higher education (college/university) at 18 or 19 years of age. Although the transition to vocational training or a professional occupation may occur at an earlier age, the model positions it after the stage of higher education (Wylleman & Lavallee, 2004). Elite athletes may also start their vocational development after secondary education, which may involve a full-/part-time occupation in the field of professional sports (Wylleman & Rosier, 2016).

The final layer of the model illustrates the financial support of athletes throughout, as well as after, their athletic career. At the beginning of athletes' athletic career, financial support provided by their families is significant, and for some athletes remains important also throughout their athletic career, especially before and during retirement (Wylleman & Rosier, 2016). The financial support from sport-governing bodies, national Olympic Committees, and/or sponsors becomes important at the end of the development stage and continues into mastery stage.

The HAC model (Wylleman et al., 2013) clearly illustrates the strong and reciprocal connection between athletes' athletic development and their development in other domains. However, while the Holistic athletic career model has been widely accepted and applied, it describes common patterns for many athletes from different types of sport (Wylleman & Lavallee, 2004). Therefore, the model remains too general since it does not allow for the recognition of gender and sport specifics in athletes' career development and should be expanded in view of different characteristics, such as type of sport, gender, or culture (Reints, 2011; Wylleman et al., 2004; Wylleman & Rosier, 2016).

3. FEMALE ATHLETES' CAREER DEVELOPMENT

According to Stambulova and Ryba (2013; 2014), models of athletic career development operate on the level of a 'universal' athlete who is most likely a white male athlete, which is surprising since male and female athletes will typically have qualitatively different developmental experiences (Gill, 2001). There is a clear gap in literature on women's athletic career and so far only a few studies have focused on understanding the impact of gender on athletes' career development (Ronkainen et al., 2016). Also outside of athletic career development research, sport psychology research has sampled men disproportionately more than women, making female athletes typically underrepresented (e.g.,

Conroy et al., 2008). Many feminist scholars pointed out this disproportion and argued that unlike men, women are rarely studied in the male-dominated world of sports (Krane, 1994; Ryba & Wright, 2005). Moreover, while sport research on men tends to focus on various psychological issues that are usually related to performance and competition, research on women has focused on “differences” and “similarities” by comparing female athletes with male athletes or with women outside sport (Kavoura et al., 2012). According to Kavoura et al. (2012), male athletes seem to be the norm which sport psychology knowledge is based on, while female athletes are examined later as being “similar to” or “different from” this norm.

One of the few studies which used the holistic lifespan approach to explore the athletic career of a female elite athlete was the research conducted by Debois, Ledon, Argiolas, & Rosnet (2012). The authors presented a case of a female elite athlete: her athletic career experiences, events and transitions, as well as transitions in other domains of her life. Their findings supported the holistic approach as suggested by the Holistic athletic career model (Wylleman & Lavallee, 2004; Wylleman et al., 2013). They revealed that the course of a female athlete’s career can be wave-like, involving several life spheres, i.e. education, vocation, social life, and motherhood. The authors stressed the importance of anticipating and planning normative athletic as well as non-athletic transition experiences as early as possible to promote a successful career path (Debois et al., 2012). However, since individual factors (including gender) and environmental factors (e.g., culture, sport context) influence the experience of these athletic career changes and transitions, it is therefore necessary to examine possible differences in athletic career development between athletes while taking a culturally specific approach (Debois et al., 2012; Park, Lavallee, & Tod, 2013; Ryba, 2017; Samuel & Tenenbaum, 2011). This might help practitioners to provide appropriate support for each athlete (Park et al., 2013). Athletic career development research should investigate more the way in which female elite athletes are able to combine their psychological, psychosocial and academic/vocational development with their athletic development (Debois, Ledon, & Wylleman, 2015). This is especially needed in long-term sport careers, where female athletes go through the decision-making process with regard to their sport career and motherhood or are already trying to reconcile motherhood and elite sport (Debois et al., 2015).

3.1 WOMEN’S PARTICIPATION IN SPORT

Although more females are involved in sport today than ever before, gender differences considering sport participation of males and females were one of the most persistent findings in the literature (e.g., Armstrong, Balding, Gentle, & Kirby, 1990; Sallis, Zakarian, Hovell, & Hofstetter, 1996; Vilhjalmsson & Kristjansdottir, 2003). Despite the significant growth in females’ sport involvement, males still

participate in sports more than females in most European countries and worldwide (see Chalabaev et al., 2013). Also, media coverage and portrayal of male and female athletes is still significantly different: less media attention is given to female athletes and, in comparison with male athletes, there is still an obsession with the body of a female athlete rather than focusing on her athletic skills (Trolan, 2013).

There exist several possible explanations or hypotheses why females' participation in sport is lower. Vilhjalmsson & Kristjansdottir (2003) presented two types of hypotheses: (1) the enrolment hypothesis and (2) the withdrawal hypothesis. The enrolment hypothesis says that girls are less likely to enroll in organized sport clubs and programs. This might be a consequence of gender biases in sport organizations, better and more accessible training facilities for boys, more competition opportunities for boys, or better career options for male than female athletes in terms of financial and material rewards (see Vilhjalmsson & Kristjansdottir, 2003). According to Howard et al. (2011) who explored career aspirations of young adolescents, girls are less likely to dream about a future professional athletic career than boys. Their gender analysis was based on career aspirations of over 22,000 young adolescents and revealed that only boys had career aspirations of becoming a professional athlete. The withdrawal hypothesis (Vilhjalmsson & Kristjansdottir, 2003) explains that girls are more likely to withdraw from organized sport programs than boys. This could result from female athletes' negative experiences with their athletic program, coaches' behaviour and demands, or less opportunities to train and compete (Stewart & Taylor, 2000; Baron-Thiene & Alfermann, 2015). A higher rate of prematurely dropping out of sport among female athletes was reported also by other researchers Baron-Thiene and Alfermann (2015), for instance, found that more female adolescent athletes prematurely decide to end their athletic career than male adolescent athletes, particularly in individual types of sports. They explained their decision by reporting experiences of increased exhaustion, physical discomforts and pains, and possession of a less competitive orientation than male athletes. Fišer (2007) conducted a qualitative study on the characteristics of a premature career end among young Slovene female elite athletes who competed in artistic gymnastics, rhythmic gymnastics, swimming, and dancing. The participants decided to retire from competitive sport due to a combination of several factors, i.e. decline of motivation, poor relationships with coaches, injuries, and other health-related problems.

Chalabaev et al. (2013) argue that gender differences observed at a general level where girls and women are less involved in competitive sport than men mask important disparities according to the type of activity. Some sports are practiced mostly by men, e.g. soccer or rugby; others are practiced almost exclusively by women, e.g. gymnastics, dancing, and ice-skating. The authors suggest that considering the perceived gender-appropriateness of sports, activities may be perceived as masculine, feminine, or neutral. Fighting sports are consistently categorized as masculine, expressive sports (e.g. gymnastics, dancing) as feminine, while others (e.g. tennis or swimming) are perceived mostly as

neutral. Individuals learn stereotypes and gender roles during their childhood and adolescence, mostly through the socializing influences of significant others, especially their parents (Fredericks & Eccles, 2005). These social beliefs then affect their self-perceptions of competence and value attributed to sports, predicting in turn their sport participation and performance (see Chalabaev et al., 2013). Research suggests that parents of boys and parents of girls differ in the way they motivate their children to be involved in sport and support them, and therefore play a role in the transmission of stereotypes and gender roles to their children (Chalabaev et al., 2013). Parents of boys were found to hold higher opinions of their child's sport competence and consider sport to be more important than parents of girls (Fredericks & Eccles, 2005). Also, boys seem to receive more encouragement and sport opportunities from their parents than girls (Fredericks & Eccles, 2005). Individuals' conformity to social norms in terms of perceived competence and subjective value attributed to a certain type of sport was found to be an important factor determining males' and females' sport participation not only in childhood and adolescence, but also in adulthood (see Chalabaev et al., 2013).

When thinking about their post-athletic career, male athletes seem to show more interest and perceived competence in becoming a coach than female athletes. In a study by Ronkainen et al. (2016), women explained that this low motivation to become a coach stemmed from their lack of time, lack of sufficient knowledge, and bad experiences with their own coaches. However, this somewhat lower motivation for a professional career in sport cannot fully explain why women are underrepresented in the sport system, as found by different studies (e.g., Anderson, 2009; Gledhill et al., 2017; Pfister & Radtke, 2009). Even in applied sport psychology, the majority of attention seems to be devoted to male practitioners' experiences (Roper, 2008). Findings by Pfister and Radtke (2009) showed that despite their similar levels of qualifications, women did not have the same positions and the same status as men on the executive boards of sport organizations. Women were faced with gender-specific barriers, such as negative reactions from their male colleagues and the particular circumstances of their lives. They explained that the organizational culture supports the image of an ideal leader exhibiting typically male characteristics (e.g. freedom from family duties, high degree of self-confidence). Sport maintains the image of a gendered institution in which men take up the most powerful positions and women less powerful ones (Roper, 2008). Moran-Miller and Flores (2011) suggested that women encounter specific barriers which prevent them from being employed in sport systems: discrimination in hiring practices, gender inequality in work responsibilities, salary disparities, lack of support, sexual harassment, homophobia, and working hours. The authors believe that positive female role models who succeeded despite these barriers are especially important and that female coaches may represent a buffer for female athletes against perceived barriers.

3.2 DUAL CAREER

Being an elite athlete usually requires single-minded determination, commitment, and focus on sport. Therefore, thinking about a post-athletic career, which includes decisions and preparations for life after sport, can be given a lower priority. Many athletes invest so much time and energy in sport participation that they do not engage in exploratory behaviour. They make firm commitments to sport as their primary source of identity which has been described as being in a state of identity foreclosure (Brewer & Petitpas, 2017; Petitpas & France, 2010). Many athletes who compete at the elite level can experience difficulties with identity foreclosure, career planning, and transition out of sport (Albion & Collins, 2007). Female athletes, however, were found to be more motivated to explore different career options and make career decisions than male athletes, and less often displayed signs of identity foreclosure (Albion & Collins, 2007; Ceci Erpič, 2002; Ceci Erpič, Zupančič, & Wylleman, 2004).

Since scarce number of athletes attain professional status, combining an athletic career with education is necessary in order to facilitate the transition to labour market (Stambulova & Wylleman, 2015). Research reveals that elite athletes who continue with their athletic career together with their vocational training and higher education face challenges in investing their efforts in two areas of achievement (Ryba et al., 2015a; Ryba, Stambulova, Selänne, Aunola, & Nurmi, 2017; Sorkkila, Aunola, & Ryba, 2017). On one hand, dual career athletes see the combination of sport and studies as an opportunity for their vocational future and on the other as a constraint. They especially find the combination of sport and studies difficult when they experience (a) a heavy load due to the combination of sport and studies without support from the university to manage their academic schedule and study load, and/or (b) dissatisfaction with flexibility in terms of study and exams (Debois et al., 2015).

Gender seems to be strongly connected with athletes' identity in terms of sport and education/profession (Murdock, Strear, Jenkins-Guarnieri, & Henderson, 2016). Reimer, Beale, and Schroeder (2000) found that female athletes possess a stronger academic identity than male athletes. The authors believe that female athletes' peers promote this academic inclination and therefore support female athletes' academic investments, unlike in male sport peer culture where academic inclination is weakened. Likewise, Murdock et al. (2016) found that female student athletes, especially those with higher academic grades, possess a weaker athletic identity than male student athletes. Dunn, Gotwals & Dunn (2005) investigated perfectionism among student athletes. When comparing genders they found that male and female student athletes differ little in terms of their perfectionist tendencies at a global level. No gender differences were also observed in school perfectionism; they were, however, found in sport perfectionism where males displayed significantly stronger perfectionist tendencies than females. The authors suggest that these gender differences in sport perfectionism

may be related to the higher value and importance which males tend to place on sport achievements, success and competence in sport in comparison to females.

3.3 TRANSITION OUT OF COMPETITIVE SPORT

With regards to athletic career termination, female athletes seem to retire earlier than male athletes (North & Lavalley, 2004; Stambulova, Stephan, & Jäphag, 2007). In their study on athletic career retirement, Stambulova et al. (2007) found that female athletes retired at app. 34 years of age, while male athletes retired at app. 37 years of age. When retiring from sport, female athletes most often identified the following reasons for retirement: injury, physical deterioration, a good job opportunity, wanting to start a family, and not being selected for the Olympic Games (Albion & Collins, 2007; Reints, 2011). Female athletes' desire to start a family was the only difference found between both genders in the study of Moesch, Mayer, and Elbe (2012) which explored the influence of gender on Danish athletes' decision-making process about retirement. Ryba et al. (2015b) found that female athletes were less determined to pursue their professional athletic career than male athletes. The reasons for that were lower status of females' sport, lack of female role models, weak partner support for their athletic career, and the perception that starting a family means the end of an athletic career (Ryba et al., 2015b).

4. FEMALE ATHLETES' SPECIFICS AND ADVERSITIES

So far, researchers have compared male and female athletes in several aspects, such as motivation, personality traits, coping with stress, psychological disturbances (e.g. disturbed eating patterns, substance abuse), relationships with important others, academic success, etc. Research findings suggest that while male and female athletes share many similarities in their personality traits and career development characteristics, they also differ in the prevalence and types of adversities they report and their psychological responses following such adversities (see: Tamminen, Holt, & Neely, 2013). The succeeding section will present an overview of themes where female athletes were found to possess some specifics in comparison with male athletes which may have an impact on their career development; i.e. body image and physical self-esteem, injury, perceptions of stress and coping with it, coach-athlete relationship, retirement process, and coping with career adversities.

4.1 BODY IMAGE

It has been suggested that female athletes may be at greater risk of developing body image dissatisfaction and eating disorders than their non-athletic peers (Brownell, Rodin, & Wilmore, 1992; Davis & Cowles, 1989). Moreover, female athletes who participate at elite level are at higher risk of

developing body image dissatisfaction than female athletes who compete at lower competition levels (Smolak, Murnen, & Ruble, 2000). Reasons for this are the athletic requirements (e.g. performance advantages) as leanness is viewed as enhancing performance, and social pressures to maintain a particular body physique. According to Krane, Choi, Baird, Aimar, and Kauer (2004), female athletes live in two cultures: (1) the sport culture which is predominantly masculine and (2) the social culture where femininity is praised in women. The authors believe that these two cultures clash when it comes to ideal body expectations, i.e. the social culture emphasizes an ideal feminine body (i.e. small, thin and model-like) while the sport culture emphasizes an athletic body. As a consequence, female athletes often struggle to balance their desire to be feminine and physically attractive with the size and strength demands of their sport (Thomsen, Bower, & Barnes, 2004). The impacts of this conflict between femininity and athleticism can manifest themselves in body dissatisfaction, constant surveillance and monitoring of body size and weight, avoidance of gaining muscle weight, and eating disorders (Krane et al., 2004). Not only do these behaviours undermine athletes' ability to reach their athletic potential but they also present a higher chance of injury. Images of female athletes seen in the media often highlight beauty and sexuality of the women rather than athleticism, and therefore exacerbate this conflict between an ideal feminine body and an athletic body among female athletes (Krane et al., 2010). Despite recent images in the media conveying the message that "strong is the new beautiful" (Heywood, 2015), female athletes still receive mixed signals. This, as a consequence, confuses them about what should constitute an appropriate and attainable physical ideal (Thomsen et al., 2004). Female athletes tend to recognize the positive aspects of their sporty bodies due to their athletic functionality, but are concerned about their physical appearance when placed in social environments outside sport. Research shows that many female athletes are proud of their athletic bodies and feel physically and mentally stronger. The strength and confidence they gained through sport positively influence them both in the athletic environment as well as outside of sport (Krane et al., 2004; Kauer and Krane, 2006). However, when evaluating their physical appearance, they tend to complain about their overall size, height, and thighs, especially in adolescence (Thomson et al., 2004). Female athletes who wear "revealing" uniforms (e.g. track and field, gymnastics, swimming, and volleyball) were more concerned with how they looked in these uniforms, i.e. looking too big, or being sexualized (Krane et al., 2004). Female athletes described these uniforms as tight and exposing the shape of women's bodies. Women athletes who participate in aesthetic sports (i.e., gymnastics, dance, and figure ice skating), where they are constantly being judged for their appearance, are more likely to struggle with body dissatisfaction and eating disorders than athletes who participate in non-aesthetic sports or non-weight-dependent sports (Smolak et al., 2000; Berry & Howe, 2000; Kerr, Berman, & Souza, 2006). In a study conducted by Stirling, Cruz, and Kerr (2012), female gymnasts reported engaging in unhealthy weight control behaviours (e.g., use of laxatives or diet pills, excessive

exercise, restrictive diets). The athletes were initially taught these behaviours by coaches, judges and teammates, which suggests that sport environment has a strong influence on athletes, putting them at risk of eating pathologies. Research shows that preoccupation with appearance and weight in gymnastics leaves female athletes feeling dissatisfied with their bodies and struggling with these issues even after retirement (Kerr & Dacyshyn, 2000). Retired gymnasts reported more eating disorders and negative views on their experiences than active gymnasts (Kerr et al., 2006). However, being involved in an aesthetic sport is not the only factor which determines whether an individual will develop an eating pathology or not; others, such as sport pressures, body dissatisfaction, restrained eating, perfectionism, social support, and self-concept are also included in this process (Papathomas & Lavalley, 2010).

A constant focus on achieving or maintaining a prescribed weight goal can cause female athletes to develop an eating disorder (Yeager, Agostini, Nattiv, & Drinkwater, 1993). This in turn may put the athlete at risk of a syndrome called the 'female athlete triad', a medical condition unique to females that is a combination of three associated disorders: disordered eating, amenorrhea, and osteoporosis (Yeager et al., 1993; Otis, Drinkwater, Johnson, Loucks, & Wilmore, 1997). Amenorrhea is defined as a type of menstrual dysfunction in a woman of reproductive age where the menstrual period is absent. Low caloric intake, training intensity (including overtraining), low body weight and/or low body fat are the primary factors leading to menstrual dysfunction (Hobart & Smucker, 2000). Disordered eating and amenorrhea are common risk factors for osteopenia (condition) and osteoporosis (disease), whereby bone mineral density is lower than normal, leading to increased risk of fracture. Alone or in combination, all three female athlete triad disorders can impair physical performance and cause morbidity and mortality (Otis et al., 1997).

4.2 INJURY

Sport injuries are not an unknown phenomenon in women's sport, and research suggests that the frequency of some specific injuries like anterior cruciate ligament injuries is higher among female athletes than male athletes (see Thing, 2006). Female athletes may be more prone to injuries than male athletes due to physiological and psychological factors (Clement et al., 2012; Granito, 2002). According to Kristiansen et al. (2012) and Ronkainen et al. (2016), the coach-athlete relationship is very influential in this process. Ronkainen et al. (2016) reported that female athletes are very conscientious in following their coaches' instructions and are expected to listen to their coaches rather than their bodies. They believe that the existing gender order in sport where males are positioned as more competent puts female athletes in a position where they cannot challenge their coaches' authority despite facing an injury. Moreover, as reported by Kristiansen et al. (2012), female athletes

are often considered to “whine” more than male athletes because they express themselves less strongly (e.g., use more trivial expressions, express uncertainty concerning what they are discussing, turn statements into questions). In endurance sport in particular, female athletes argued that they were training too hard since their coaches tended to adopt training regimes according to the strength and endurance of male athletes which resulted in injuries and overtraining (Kristiansen et al., 2012). Kristiansen et al. (2012) stated that coaches who do not consider gender-specific characteristics may risk athletes’ health, long-term success and commitment.

4.3 STRESS

Athletes experience different levels of stress coming from competitive sports they engage in as well as from other important domains in their lives (e.g. school, social relationships). Gender may play a role in athletes’ appraisal of stressors and use of coping strategies because of a different socialization process or different role expectations (Ptacek, Smith, & Zanas, 1992). Research suggests that female athletes may perceive more stress than male athletes (Tamres, Janicki, & Helgeson, 2002). Female athletes most often identified the following as the biggest stressors: negative aspects of competition, which resulted in sport-related performance anxiety (Tamminen & Holt, 2010; Patel, Omar & Terry, 2010), negative relationship with coach (Diehl, Thielmann, Thiel, Mayer, Zipfel, & Schneider, 2014; Tamminen & Holt, 2010), negative relationship with teammates (Tamminen & Holt, 2010), social evaluation by significant others, i.e., family and friends (Diehl et al., 2014), the demands of sport (Diehl et al., 2014; Kristiansen, Tomten, Hanstad, & Roberts, 2012; Tamminen & Holt, 2010; Tekavc & Cecić Erpič, 2012a), and personal struggles, i.e. physical/mental difficulties, doubts about talent, life stressors (Diehl et al., 2014). Diehl et al. (2014) emphasized that female athletes obviously face a higher level of organizational stress; therefore, they need firm support from their environment and sport organizations. When coping with stress, female athletes demonstrate less confidence in their problem-solving abilities and tend to use more emotion-focused strategies to reduce stress, while male athletes tend to use more problem-focused strategies (Giurgiu & Damian, 2015; Parietti, Lower, & McCray, 2016). In accordance with that, female athletes seek emotional support to a greater extent than male athletes: they more often say things to let unpleasant feelings escape, and are more willing to talk and share their personal struggles with other people (Stambulova, Stephan, & Jäphag, 2007, Giurgiu & Damian, 2015). In a study of mental toughness and risk-taking behavior (Crust & Keegan, 2010), female athletes reported significantly lower levels of overall mental toughness, and less confidence in their abilities than male athletes.

4.4 RELATIONSHIP WITH COACH

Working so closely together, coaches and athletes form significant relationships and therefore influence each other (Jowett & Cockerill, 2003). It has been suggested that traditional gender roles of males and females may interact with the traditional roles of coach and athlete (Lorimer & Jowett, 2010). The relationship is often perceived as one in which the coach is controlling and directing, which is in accordance with the traditional male role, while the role of the athlete is to be submissive and understanding, which is congruous with the traditional female role (Burke, 2001; Lorimer & Jowett, 2010). These role expectations are even more strongly reinforced in a dyad made up of a female athlete with a male coach. It was suggested that the gender of the coach and the athlete and the roles they occupy in the coach–athlete relationship can influence how well they perceive each other’s thoughts and feelings. Female athletes were found to exhibit greater empathic accuracy working with male coaches than male athletes did (Lorimer & Jowett, 2010). On the other hand, when working with female coaches, they displayed lower empathic accuracy than male athletes. The authors explained these findings with gender incongruence in relation to the expected roles of males and females (Lorimer & Jowett, 2010).

The quality of the athlete–coach relationship plays an important role in the athlete’s development both as a performer and as a person (Jowett & Cockerill, 2003). Research suggests that female athletes more often report negative experiences with their coach (Tekavc & Cecić Erpič, 2012b). Lavallee and Robinson (2007) qualitatively explored experiences of female gymnasts. All of the participants in their study identified at least one occasion when they had felt depersonalized by their coach, feeling like a “dispensable tool” instead of a person. Female athletes also felt that their coach failed to acknowledge their personal needs and was overly concerned with performance and success. The most optimal coach–gymnast relationships in terms of both personal well-being and sporting success were those where the coaches trusted and believed in the athletes.

4.5 MOTHERHOOD

Pregnancy and motherhood have been seen as reasons why female athletes may end their athletic career or fail to reach their potential in sport (McGannon, Curtin, Schinke, & Schweinbenz, 2012). Women have been found to end their athletic career to have children or were encouraged to do so (Palmer & Leberman, 2009; Pedersen, 2001). Sport training during pregnancy has been seen as incompatible or dangerous, and training and competing as requiring too much time to allow any time left for motherhood (McGannon et al., 2012).

However, media focus has recently been turned to mother athletes, shattering the myth that motherhood and sport are incompatible (McGannon & Schinke, 2013). The International Olympic

Committee also placed mother athletes in spotlight by recognizing their role in promoting women's participation in sport (International Olympic Committee, 2008). Nonetheless, so far research on mother athletes has been scarce. The first qualitative studies of mother athletes were conducted outside sport psychology, i.e. in sport sociology and sport management (e.g., Darroch & Hillsburg, 2017; Palmer & Leberman, 2009; Pedersen, 2001; Spowart, Burrows, & Shaw, 2010), and reinforced the compatibility of motherhood and sport. The findings of these studies showed that motherhood gives athletes an additional perspective on sport, a sense of empowerment, and reduces performance pressures (Darroch & Hillsburg, 2017; Palmer & Leberman, 2009; Pedersen, 2001; Spowart et al., 2010). Moreover, mother athletes seem to have high athletic motivation, strive for performance excellence, and view themselves as role models for their children or other female athletes (Leberman & Palmer, 2009; Pederson, 2001; McGannon et al., 2015).

Despite these positive aspects of combining motherhood with elite sport, mother athletes were found to be vulnerable to experiencing additional challenges when combining their role of a mother with the role of an athlete (Palmer & Leberman, 2009). They reported feeling guilty in relation to the ethics of care as they were frequently away from their children, or experiencing psychological distress due to their striving for perfection in both domains (i.e., motherhood and athletics) (Darroch & Hillsburg, 2017; Palmer & Leberman, 2009). In their comparison of mother-athletes and father-athletes, Dionigi, Fraser-Thomas, and Logan (2012) found several differences: female athletes more often talked about feelings of guilt due to their frequent absence from home, the way their children influenced their athletic engagement, and they placed their family before sport. On the other hand, male athletes more often spoke about their spouse having more parental and domestic responsibilities, so that they were able to play and train for their sport. In the conclusions of their study on female athletes, Palmer and Leberman (2009) stressed the importance of developing and implementing policies, strategies and practices to cater for mother athletes.

4.6 RETIREMENT FROM COMPETITIVE SPORT

Research about athletes' reactions to sport career termination says that in general, female athletes report less negative emotions after retirement from sport and tend to be more satisfied with their past athletic career in comparison with male athletes (Alfermann, Stambulova, & Zemaityte, 2004; Stambulova et al., 2007). They recognize several positive influences of athletic career, e.g. they learned how to be a leader and how to work in a team, became equipped with time management skills of, and improved their confidence and willpower (Albions & Collins, 2007). On the other hand, they also identified negative effects of their athletic engagement on their non-athletic career, i.e. being behind their peers (financially and career-wise), and putting their studies or careers on hold. Female athletes

needed more time to adapt to a post-career life than male athletes (Alfermann et al., 2004). In their life after sport they mostly reported missing the company of other athletes, physical activity and fitness, and being recognized and acknowledged for their performances (Albions & Collins, 2007).

One specific group of athletes that seems to be particularly at risk of experiencing psychological distress when retiring are female gymnasts. Women's artistic gymnastics is a typical early development sport where athletes need practise hard from an extremely young age and typically reach their peak in the years before adolescence (Barker-Ruchti & Schubring, 2016). Retirement therefore occurs during adolescence, when the developmental task of identity formation is the most obvious (Warriner & Lavalley, 2008). So far, several studies on retirement experiences of these athletes have been conducted (e.g. Fišer, 2007; Kerr & Dachyshyn, 2000; Lavalley & Robinson, 2007; Warriner & Lavalley, 2008; Stirling et al., 2012). In Lavalley and Robinson's study (2007), women gymnasts were found to have been encouraged to dedicate their lives to gymnastics and prematurely adopted an identity based solely on their role as a gymnast. Consequently, they experienced serious distress when they retired, i.e. feeling lost and helpless and many of them knew little about who they are and what they wanted to do with their lives. Warriner and Lavalley (2008) believe that retired gymnasts may be at particular risk of adjustment difficulties because of the combined effect of retirement from sport and the onset of puberty. Stirling et al. (2012) supported this notion and found that retired gymnasts experienced an increase in body dissatisfaction upon retirement and that they felt guilty about their weight gain, loss of muscle mass and eating habits. According to Warriner and Lavalley (2008), these physical changes and weight gain are not surprising since retirement of female gymnasts often coincides with the onset of (delayed) puberty, and the fact that elite athletes present a below-average physical profile in terms of weight and height, which cannot be maintained in retirement.

4.7 COPING WITH ADVERSITIES

Tamminen and colleagues (2013) examined how athletes experience adversities and found that female athletes perceive adversities as a part of elite sport. They reported how the experience of an adversity caused them to question their identities and abilities as athletes. However, they also realized their strengths in the face of adversity, gained a new perspective and developed a desire to help others, sought social support and experienced changes in perceptions of social support (i.e., some members of athletes' social network were perceived positively following adversity, others were perceived more negatively). In general, females reported greater growth following adversity than males (Joseph, Alex Linley, & Harris, 2004). The authors believe that one possible explanation for this might be that women are more likely to seek support following adversity compared to men. Martin et al. (2001) found that in sport psychology consulting process, female athletes displayed a higher degree of personal

commitment to the consulting process than male athletes, while the latter showed a stronger belief in applied sport psychology practitioners when trying to solve problems quickly. The authors concluded that sport psychology practitioners should take into account also the gender of athletes when delivering their services. .

5. PHD STUDY

5.1 PARADIGMATIC APPROACH AND EPISTEMIOLOGY

A paradigm is defined as a set of basic beliefs and agreements shared between scientists about how problems should be understood and addressed (Guba & Lincoln, 1994). This doctoral study was based on postpositivism. Positivism denotes the “received view” that has dominated the formal discourse in physical and social sciences for some 400 years, whereas postpositivism takes into account the criticisms against and weaknesses of rigid positivism (Campbell & Russo, 1999). While positivists believe that the researcher and the researched person are independent of each other, postpositivists hold the view that theories, background, knowledge and values of the researcher can influence what is observed (Robson, 2002). Postpositivism is based on the presumption that there is a real world with verifiable patterns that can be observed and predicted – that reality exists and truth is worth striving for (Patton, 2002, p.91). Reality can be elusive and truth can be difficult to determine, but describing reality and determining truth are the appropriate goals of scientific inquiry. Such philosophical inquiry into truth and reality involves examining the nature of knowledge itself, how it comes into being and is transmitted through language. The position of postpositivism with respect to epistemology is that objectivity remains a “regulatory ideal” (Guba & Lincoln, 1994, p. 110), and special emphasis is placed on validity, reliability, and objectivity. Since the postpositivism paradigm acknowledges the fact that a completely value-free inquiry is impossible, objectivity is pursued by recognizing the possible effects of biases (Patton, 2002; Robson, 2002). Special attention is therefore given to the values and preconceptions which may affect the research process.

According to Patton (2002), qualitative research is subjective – the researcher’s beliefs, experiences, and values are incorporated into the research design and analysis. Throughout the process of conducting this doctoral study, we were aware of my potential biases which could influence the results. We tried to be upfront about our own beliefs, i.e. that women face more difficulties in their athletic career development, that women are obliged to successfully perform many social roles (e.g. student, daughter, sister, friend, girlfriend, spouse, and mother), and that women have greater perfectionistic tendencies. We were conscious of our experiences which could interfere with the research process, i.e. personal experience from my own athletic engagement in dancing, and scientific

experience, e.g. that Slovene female athletes are more successful in terms of the number of Olympic medals won; however, the national culture is such that male athletes are given more credit and social recognition (Cecić Erpič, 2013). In order to control this research bias, we took several actions. We kept records on the research process (audio recordings, notes) and conducted the research in a systematic way, e.g. using the same procedure for every participant when sampling them, and following an interview guide for qualitative data gathering. We included colleagues (i.e. both supervisors observed the whole process and actively participated in it) and research participants (i.e. the interviewees read the transcripts of the interviews) into research design and data analysis. Throughout the research process, We strived to keep our own beliefs and values in mind.

5.2 RESEARCH AIMS, FORMAT AND RESEARCH QUESTIONS

Using the Holistic athletic career model (Wylleman et al., 2013) as a theoretical framework, this doctoral dissertation has three main aims:

- (I) To identify possible female athletes' specific athletic career demands and challenges;
- (II) To explore female athletes' dual career development;
- (III) To investigate possible female specific athletic career transitions.

These three aims are further developed in 17 research questions which are addressed in six different studies that logically follow each other. Each of these studies has been written as an independent study and therefore consists of an introduction, a description of methods, results, a discussion, and conclusions.

5.1.1 ADOLESCENT ATHLETES' PERCEPTIONS OF CAREER DEVELOPMENT: FEMALES' SPECIFIC DEMANDS AND CHALLENGES (STUDY 1)

The aim of Study 1 was to compare **adolescent** male and female athletes to see whether they differ in their perceptions of demands and difficulties they face in their athletic career. Therefore, in Chapter 1 the following research questions were proposed:

- RQ1 Which demands, challenges and adversities do adolescent male and female athletes face in their athletic career development?
- RQ2 Do adolescent female athletes face some specific demands, challenges and/or adversities in comparison with their male counterparts?
- RQ3 How could these perceived demands, challenges, and adversities be positioned in the Holistic athletic career model (Wylleman et al., 2013)?

5.1.2 ELITE ATHLETES' ADVERSITIES PERCEIVED IN MASTERY STAGE OF ATHLETIC CAREER: FEMALES' SPECIFIC DEMANDS AND CHALLENGES (STUDY 2)

Study 2 compared male and female **elite** athletes in their peak years of performance to identify possible differences in their perceptions of demands and difficulties they face in their athletic career.

Therefore, in Chapter 2 the following research questions were addressed:

RQ4 Which demands, challenges and adversities do elite male and female athletes face in their athletic career development?

RQ5 Do elite female athletes face some specific demands, challenges and/or adversities in comparison with their male counterparts?

RQ6 How could these perceived demands, challenges, and adversities be positioned in the Holistic athletic career model (Wylleman et al., 2013)?

5.1.3 ELITE ATHLETES' ADAPTATION TO LIFE AFTER SPORT: FEMALES' SPECIFIC DEMANDS AND CHALLENGES (STUDY 3)

Similarly, Study 3 compared elite athletes of both genders, this time in the discontinuation stage of their athletic career development. The aim of Study 3 was to explore the adversities retired male and female elite athletes face in the last stage of their athletic career development and to define possible gender differences in these perceptions. Therefore, in Chapter 3 the following research questions were proposed:

RQ7 Which demands, challenges and adversities do elite male and female athletes face after their athletic career retirement?

RQ8 Do retired elite female athletes face some specific demands, challenges and/or adversities in comparison with their male counterparts?

RQ9 How could these perceived demands, challenges, and adversities be positioned in the Holistic athletic career model (Wylleman et al., 2013)?

5.1.4 PERCEPTIONS OF DUAL CAREER DEVELOPMENT AMONG ELITE LEVEL SWIMMERS AND BASKETBALL PLAYERS (STUDY 4)

Since studies 1 to 3 revealed that athletes perceive significant challenges in combining their athletic and academic work, the following two studies focused on dual career (i.e. combination of sport and studies/work) and possible gender differences. The aim of Study 4 was twofold, namely to (a) examine how athletes (i.e., retired swimmers and basketball players) retrospectively perceive their dual career development, and to (b) search for possible differences between both genders and both types of sport. Therefore, in Chapter 4 the following research questions were formulated:

RQ10 How do athletes retrospectively describe their dual career development in five specific domains (i.e., athletic, academic/vocational, psychological, psychosocial, and financial) for each of the four career stages (initiation, development, mastery, and discontinuation) specifically?

RQ11 Do perceptions of dual career development differ as a consequence of gender and/or type of sport?

5.1.5 GENDER DIFFERENCES IN ATHLETES' DUAL CAREER COMPETENCES (STUDY 5)

Study 5 investigated the competences athletes need for an optimal dual career. More specifically, the aims of Study 5 were to (a) identify which dual career competences talented and elite athletes possess and find important; and to (b) explore possible gender differences in athletes' possession of and the importance they attach to these competences. For that reason, in Chapter 5 we focused on answering the following research questions:

RQ12 Which competences do talented and elite athletes find important in terms of their success in combination of studies and elite sport?

RQ13 Does the perceived importance of specific dual career competences differ between male and female athletes?

RQ14 Which dual career competences talented and elite athletes perceive they possess the most? Which dual career competences they perceive to possess the least?

RQ15 Do male and female athletes differ in their perceived possession of specific dual career competences?

5.1.6 FEMALE ATHLETES' TRANSITION TO MOTHERHOOD (STUDY 6)

Study 6 brought into focus of research one of the last transitions that may or may not happen in the athletic career of female athletes; i.e. becoming a mother and having a child. The study aimed to explore perceptions of female elite athletes' transition into motherhood and their experiences of combining motherhood with elite sport. To that end, the following research questions were asked:

RQ16 What are the characteristics of female athletes' transition into motherhood?

RQ17 What influences does motherhood have on female athletes at different levels of their athletic career development?

5.3 SOCIOCULTURAL POSITIONING OF THE THESIS

This doctoral research is set in the Slovene sociocultural environment, where sport psychology is a relatively young discipline with a small number of experts (Cecić Erpič, 2013). In the past two decades,

career transition studies in Slovenia were conducted by the research group of S. Cecić Erpič. The majority of these studies focused on athletic career termination and adaptation to post-sport life (e.g., Cecić Erpič, 2002; Cecić Erpič et al., 2004; Fišer, 2007; Ravnikar, 2003; Tekavc & Cecić Erpič, 2012a).

Slovenia is a relatively small country (20,273 km²) with a population of 2.052 million, located in southern central Europe. Having once been a socialist state in Yugoslavia, Slovenia gained its independence in 1991 and joined the European Union in 2004. In the last 25 years, Slovenia made a transition into an autonomous democracy that participates in global political and corporate economic relationships. All these changes influenced Slovene society, including sport (Cecić Erpič, 2013).

In Slovenia, sport represents an important and effective means of fostering and displaying national identity (Doupona Topič & Coakley, 2010). Sports that attract the most spectators include alpine skiing, ski jumping, handball, basketball, and football. There are two main sport governing bodies in Slovenia, i.e. the Ministry of Education, Science, Culture, and Sport and the Slovenian Olympic Committee (SOC). The Slovenian government supports elite sport through several financial means. For student athletes, there are scholarships available for talented and elite athletes. The SOC occupies an active role in employing athletes and coaches within the public sector administration. However, the number of these employment positions is limited to a number of elite athletes and coaches from priority sport disciplines (e.g., biathlon, alpine skiing, cross-country skiing, track and field), which means that a large number of elite athletes and their coaches are not eligible for such employment (Cecić Erpič, 2013).

The Slovene sport system is decentralized and athletes pursue their careers in clubs rather than in sport associations. As a consequence, many of them need to migrate daily from their home club to the place of education and back. Despite the relatively low amount of absolute resources intended for developing elite sports (Doupona Topič & Coakley, 2010), Slovenia is among the top-rated countries in terms of the number of Olympic medals per capita (Cecić Erpič, 2013). The analysis of Slovene athletic achievements in 2013 (Cecić Erpič, 2013) showed that among 5248 categorized athletes only 34% were women, but at the same time, female athletes won 45% of Slovenian Olympic medals.

In higher education system, there are three universities in Slovenia, all evenly distributed across the country. Several system solutions and programs aim to help young athletes to coordinate their sport and studies, such as legally defined modifications of academic obligations from primary education onwards, organization of sport classes in secondary schools, sport boarding schools of national importance for individual disciplines (Cecić Erpič, 2013). These programs, however, mainly focus on young athletes at secondary education level, while at higher education level, there exists the so-called *laissez-faire* style of implementing dual career policies into practice, where universities and

even faculties individually decide whether they will make any special arrangements for student athletes (e.g., greater flexibility concerning exams, tutors).

5.4 METHODS

5.4.1 PARTICIPANTS

All studies in this doctoral dissertation involved Slovene elite athletes. Participants are described more thoroughly in each of the following chapters. There was no overlap between the samples in different studies.

Study 1 covered 22 Slovene adolescent male and female athletes (eleven males, eleven females; 15 to 17 years of age) who were recognised as elite by their respective elite sport governing bodies, the sport administration of the government, or their education institution. They were involved in various types of individual sports (twelve athletes) and team sports (ten athletes).

In study 2, 32 elite senior level athletes (16 males, 16 females) participated, all of them active in international (World level) competitive sport and ranging in age from 18 to 27 years.

Study 3 concerned 16 former elite athletes (eight male, eight female) aged between 25 and 37. The time elapsed since their retirement ranged between 6 months to 3 years.

Study 4 included twelve former elite level athletes (six males and six females) participating in swimming (n=6) and basketball (n=6). At the time of the interviews, the participants were between the ages of 23 and 37 and had retired from international (European level at minimum) competitive sport within the last three years before the time of the interviews.

For study 5, 198 athletes (97 males and 101 female) were chosen. Their ages ranged from 15 to 25, and they were all involved both in competitive sport as well as in education.

For study 6, eight mother athletes participated in the interviews. The participants were professional athletes who returned to elite level sport (European level at minimum) after having a baby. At the time of the interviews, their ages ranged between 30 and 36.

5.4.2 INSTRUMENTS

To address the research questions of studies 1, 2, 3, 4 and 6, qualitative methodologies were chosen. More specifically, semi-structured interviews were used to provide qualitative information about (female) athletes' specific transitions and challenges in their career development. Qualitative research aims for a holistic picture: its purpose is to develop a complex view over the problem (Creswell, 2013). Usually, it tries to describe a phenomenon in details, often by comparing individual cases and looking for similarities and differences (Flick, 2013). Over the past decades, the number of qualitative studies

has increased and spread to more disciplines (e.g. anthropology, sociology, psychology, political science). With this, methods for data gathering and data analysis have increased in variety (Flick, 2013).

Qualitative research is a flexible process in all phases (Côté, Salmela, Baria, & Russell, 1993). In it, researchers gather information by talking directly to the people and observing them behave and act within different contexts. Their focus is on determining the meaning that participants assign to a problem or issue. This meaning is captured in the words that participants use to express themselves; these words are later treated as data (Hanin, 2003). In qualitative research the researcher has the central role in exploring and finding meaning patterns in data gathered from the participants. This is in accordance with the heuristic paradigm which emphasizes a holistic research approach by capturing the individual's subjective experiences, perceptions, and interpretations of their world (Côté et al., 1993).

Studies 1, 2, and 3 employed semi-structured face-to-face interviews to gather information about the challenges athletes face in their current stage of athletic career; i.e. development (Study 1), mastery (Study 2), and discontinuation stage (Study 3). The interview guide followed the holistic perspective (Wylleman et al., 2013) enabling the athletes to discuss about the challenges they face at multiple levels of their career; i.e. athletic, psychological, psychosocial, academic/vocational, and financial levels.

Study 4 also employed in-depth semi-structured interviews. The interview guide was based on the Holistic Athletic Career model (Wylleman et al., 2013), and encouraged participants to retrospectively describe their experiences of dual career development in different domains of their lives.

Study 5 was the only quantitative study in this doctoral dissertation. The GEES-S38 questionnaire (De Brandt et al., in prep.) was employed as an instrument to measure the participants' perceived importance and possession of 38 potentially important dual career competences.

Study 6 used semi-structured interviews to explore female athletes' transition to motherhood. The interview guide was developed on the basis of existing scientific literature about mother athletes and mothers working in sport. It enabled the participants to discuss their transition to motherhood and their experiences of combining motherhood with elite sport.

5.4.3 PROCEDURE

In all of the following studies of this doctoral dissertation, the prospective participants were contacted via their national sport organization over email to take part in a study. For those who responded positively, an interview schedule with the author of the present doctoral thesis was set (studies 1, 2, 3, 4, and 6), or they were sent a second email with an access link to an online survey (Study 5).

In all five qualitative studies (i.e., studies 1, 2, 3, 4, and 6), the interviews were transcribed verbatim and later qualitatively analyzed. Qualitative data analysis is a process which starts already with collecting data and a very careful reading of the data. Transcripts are very important in qualitative studies, since they represent a connection between verbal and written communication. A high risk of mistakes between both exists in this process, usually as a consequence of simplification (Flick, 2013). We tried to lower this risk by having the same researcher who performed the interviews and later transcribed them verbatim. In qualitative data analysis, the inductive and deductive approaches can be used and are usually combined. The inductive approach consists of building patterns, categories, and themes from the bottom up by organizing the data into more and more abstract units of information until a comprehensive set of themes is established. After that, the deductive approach usually follows, looking back at the data derived from the themes to check whether more evidence can support each theme or whether additional information is needed (Creswell, 2013). After transcribing, we followed two major strategies of qualitative analysis: (1) reduction of large data sets and complexity of the information, and (2) enlargement of the material by producing more and more interpretation of the original text (Flick, 2013). First, parts of data (i.e. words, sentences, paragraphs) were labeled as meaningful units (codes) and later combined into overarching themes that accurately depict the data. These themes were then explored and compared, both between as well as within categories. Coding enables the use of a formal system for data organization and comparison, so that descriptive data can be treated as independent units (Bradley, Curry, & Devers, 2007; Flick, 2013).

For Study 5 the participants completed the questionnaire via their personal computer. Descriptive statistics (i.e., median, percentage) were used to summarize and analyze the data. To examine the influence of gender on the importance and possession of potential dual career competences, non-parametric tests (i.e., Mann-Whitney U test) were used.

6. TERMINOLOGY

With regards to terminology in this doctoral dissertation, the words 'female' and 'athlete' were disproportionately used in comparison with the words 'woman' / 'women'. However, this imbalance in word use does not reflect an imbalance of different roles, e.g. where the role of an athlete would be more dominant than the role of being a woman. Rather, our impression was that the phrase 'female athlete(s)' suggests that both social roles (i.e., athlete and woman) are equally represented. With the use of the phrase 'female athlete(s)' we wanted to ensure that the reader would know precisely when something referred to the social group of female athletes and not to the whole population of women.

6.1 LIST OF TERMINOLOGY

Adversity = unpleasant, difficult situation.

Athletic career = the full course of athletic engagement in sport, from early initiation in sport until retirement from sport.

Athletic career retirement = career termination in competitive sport.

Career transition = turning phases or shifts in athletes' development associated with a set of specific demands that athletes have to cope with in order to continue successfully in sport and/or other spheres of their life (Stambulova & Wylleman, 2014, p.607).

Challenge = situation of being faced with something that needs great mental or physical effort in order to be done successfully.

Demand = an insistent request, difficult thing that someone has to do.

Drop out = premature athletic career termination before the athlete has achieved his/her full potential.

Elite athlete = athletes who are involved in international (World level) competitive sport.

Non-normative transitions = turning points/phases which are situation-related, peculiar, and therefore less predictable.

Normative transitions = turning points/phases which usually happen to all athletes, and are therefore more predictable.

Talented athletes = young athletes who were recognized as being talented by their sports federation,

7. REFERENCES

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