

## **Investigating Elite End-of-Athletic-Career Transition: A Systematic Review**

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This article presents a systematic review of the literature investigating factors that contribute to a successful end-of-career transition among elite athletes. The systematic review included 10 studies that focused on elite athlete retirement that in part measured positive outcomes, which fall under the flourishing construct. Results indicated that although there has been an abundance of research examining multiple effects of transition out of sport among elite athletes, there appears to be no current literature explicitly examining flourishing within this elite population. The results of the review have practical implications for sport psychology practitioners who are aiming to facilitate a successful transition for elite athletes through their end-of-athletic-career transition. The findings from the systematic review are discussed, and the article provides recommendations for future research and for current applied practice.

Major life changes and transitions are regularly viewed as stressors that place the individual under pressure to adjust (Wheaton, 1990). Research has found that transition can produce a wide range of effects on individuals' mental health (Wheaton, 1990). There are many types of transitions that individuals face throughout their life span, for example, transitioning from middle school to high school (e.g., Alspaugh, 1998) and career transition (e.g., Lavallee, 2005). Career adjustment is a major life-changing experience (Wheaton, 1990), in particular with elite athletes (Samuel & Tenenbaum, 2011). Previous research found that one could experience multiple changes and difficulties during this shift (Samuel & Tenenbaum, 2011). Taylor and Ogilvie (1998) identified numerous challenges that athletes may experience during this transitional period, including adjustment difficulties, occupational/financial problems, family/social problems, psychopathology, and substance abuse issues. In addition, Brewer, Van Raalte, and Petitpas (2000) further identified that athletes also struggle with identity issues when transitioning out of elite sport.

For decades, researchers have taken interest in how athletic career transitions influence and impact athletes (e.g., Hallden, 1965; Perna & Ahlgren, 1999). Participating in elite sport can challenge an athlete not only physically but also mentally during his or her career (Bruner, Munroe-Chandler, & Spink, 2008). During the elite sport experience, the transition between significant points in a career has been identified as a specifically critical period (Pearson & Petitpas, 1990). Whereas existing research (e.g., Bruner et al., 2008; Hallden, 1965) has focused on career transition, there appears to be an abundance of research focusing more on the negative ramifications of retirement from elite sport and a lack research exclusively focusing

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Received 17 September 2015; accepted 3 December 2015.

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on the examination of flourishing within the elite athlete career transition literature. Although research has examined various constructs of flourishing in elite athlete transition—for example, positive emotions (Alfermann, Stambulova, & Zemaityte, 2004; Stambulova, Stephan, & Japhag, 2007) and life satisfaction (Erpič, Wylleman, & Zupančič, 2004; Perna & Ahlgren, 1999; Stambulova et al., 2007)—no research has purely focused on flourishing in the elite athlete transition process.

*Flourishing* is defined as a state in which an individual feels positive emotions toward life and is functioning well psychologically and socially (Keyes, 2003). Flourishing is one of a range of ways of conceptualizing well-being, by focusing on the healthy end of the mental health spectrum (So & Huppert, 2009). Individuals can move up and down the mental health spectrum during different stages of their lifespan (So & Huppert, 2009); it is therefore important to be aware of the circumstances that may provoke this movement, such as transition.

Past literature on elite athletic career transition has revealed that among the numerous ramifications that athletes may experience postcareer, only a few studies have identified some of the positive outcomes (e.g., Alfermann et al., 2004; Erpič et al., 2004; Stambulova et al., 2007). Finally, within the sport psychology literature there is an abundance of research emphasizing the importance of athletes' well-being during their athletic careers (Blanchard, Amiot, Perreault, Vallerand, & Provencher, 2009; Reinboth & Duda, 2006). In effect, uncovering the factors that influence and promote flourishing would align well with and extend previous research (e.g., Alfermann et al., 2004; Erpič et al., 2004; Stambulova et al., 2007).

The purpose of this study was to systematically review the literature investigating athlete transition postretirement. The first aim of this systematic review was to examine the literature concerning elite athlete career transition. The second aim was to review the literature pertaining to flourishing/positive outcomes in end-of-athletic-career transitions. The third specific aim was to review and identify the major gaps within these two areas of interest. After reviewing the literature, it was discovered that the authors could not identify any literature that explicitly focuses on flourishing. Therefore, the sample was delimited to those articles that in part measured positive outcomes (e.g., positive emotions) and that fall under the constructs of flourishing. It is important to note that a meta-analysis was not conducted due to the absence of a comparison group; thus the data were unable to be quantifiably analyzed. Therefore, a qualitative analysis of the data was deemed more appropriate.

## TRANSITION

Schlossberg (1981) characterized *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 behavior and relationships” (p. 5). During the 1970s and early 1980s, psychologists and social scientists introduced the concept of transition into the field of sports psychology (e.g., Haerle, 1975). Sport psychologists have shown great interest not only in the development of the elite athletic career (e.g., Sosniak, 2006; Wylleman, De Knop, Menkehorst, Theeboom, & Annerel, 1993) but also in the occurrence of career transition (Wylleman, Alfermann, & Lavallee, 2004; Wylleman, Lavallee, & Theeboom, 2004). One of the most commonly encountered issues for applied sport psychologists involves assisting athletes coping with career transition (Murphy, 1995). The quality of adaptation to postsport life is significantly determined by the degree of voluntariness (Taylor & Ogilvie, 1994) and is understood as a result of both antecedent factors (e.g., Taylor & Ogilvie, 1994) and mediating factors (e.g., Alfermann, 2000).

Athletes will face one of two types of transitions throughout their athletic career: (a) predictable and anticipated or “normative” transitions, or (b) non-normative transitions (Schlossberg, 1984; Wylleman, Lavalée, et al., 2004). As a result, a systematic understanding of the phenomenon of career transitions and career stages is essential to support elite athletes’ career transitions (Wylleman & Reints, 2010). During a normative transition, the athlete typically exits one life stage and enters another stage (Wylleman & Lavalée, 2004). A normative transition for athletes may be the transition from junior- to senior-level sport, from regional to national level competition, from amateur to professional status, or from active participation to discontinuation from competitive sport (Wylleman & Lavalée, 2004).

On the other hand, non-normative transitions are commonly unpredicted, unanticipated, and involuntary (Schlossberg, 1984). They also include nonevents, or events that an athlete expects or hoped for that did not come to fruition (Schlossberg, 1984). In the athletic domain, these types of transitions could be a season-ending injury, the loss of a personal coach, or an unanticipated termination from the team. However, the concept of transition is a complicated one, as often it is not possible for elite athletes or researchers to identify when this process actually begins. It is important to note that the “nonevents” often are just as critical as predictable or normal events and signify that the elite athlete is entering a period of transition, yet they are often not identified or characterized as such until reflection.

## FLOURISHING

An operational definition of flourishing was developed based on 10 features (competence, emotional stability, engagement, meaning, optimism, positive emotion, positive relationships, resilience, self-esteem, and vitality) from the hedonic and eudemonic aspects of well-being (Huppert & So, 2013). The hedonic approach focuses on happiness and defines well-being in terms of pleasure attainment and pain avoidance, whereas the eudaimonic approach focuses on meaning and self-realization and defines well-being in terms of the degree to which a person is fully functioning (Ryan & Deci, 2001).

To be described as flourishing, an individual must encompass all core features and three of the six additional features. The core features consist of (a) positive emotions, (b) engagement/interest, and (c) meaning/purpose, whereas the additional features consist of self-esteem, optimism, resilience, vitality, self-determination, and positive relationships.

More recently, Diener et al. (2010)—the most prolific researcher in the field of subjective well-being—created the Flourishing Scale, consisting of eight items describing important features of human functioning ranging from positive relationships to feelings of competence and to having meaning and purpose in life. The Flourishing Scale also includes and assesses social relationships, such as an individual having supportive and rewarding relationships, contributing to the happiness of others, and being respected by others (Diener et al., 2010). Furthermore, the scale also examines items such as having a purposeful and meaningful life along with engagement and interest in activities (Diener et al., 2010). The Flourishing Scale has been applied in a number of studies, including studies examining optimism and pessimism in young adults (Palgi, Shrira, Ben-Ezra, Cohen-Fridel, & Bodner, 2011), measuring well-being for public policy (Forgeard, Jayawickreme, Kern, & Seligman, 2011), and flourishing across nations (So & Huppert, 2009). As of yet, the Flourishing Scale has not been applied to the sporting context.

As has been demonstrated, transition out of elite sport is a complex and multidimensional, multilevel, and multifactor process and experience (Martin, Fogarty, & Albion, 2014), and thus the need for a review of the literature pertaining to elite athlete transition is warranted. A

systematic exploration of this area will allow for a comprehensive understanding of the elite athletes' experiences of transition/retirement out of sport. Not only will the review enrich the literature, but it will also provide insight to sport psychologists and practitioners working with these elite individuals to promote the best possible outcome for their athletes' postathletic careers. It is also important to note that although a Flourishing Scale exists, studies within this review used a variety of measures around the concept of flourishing.

## METHOD

### Search Strategy

The purpose of this article was to set out to investigate athlete transition and flourishing postathletic retirement. However, after systematically reviewing the literature, the authors uncovered that there is no research within the field of elite athlete transition that has an explicit focus on flourishing. Therefore, the sample of publications included in the review was of those that in part measured positive outcomes that fall under the constructs of flourishing.

To acquire articles, eight electronic databases (MEDLINE, PsycINFO, Embase, AMED, CINHAI, SPORTDiscus, Scopus, and Web of Science) were searched from commencement of each database to March 2015. Database-specific search terms within the "core features" and "additional features" of flourishing, elite athlete, and transition were combined with their synonyms, and Boolean operators, wildcards, and truncations were used. Only English language articles that contained data relevant to flourishing, elite athletes, and/or transition were included in the present review. Key phrases included *professional athlete*, *athlete*, *sport*, *Olympic*, *phase transition*, *psychological adaptation*, *change*, *transition*, *career transition*, *retirement*, *end of career*, *quality of life*, *mental health*, *positive psychology*, and *well-being*. Studies that examined athletes competing at levels below national, international, or the highest professional level in their particular sport were excluded from the review. In addition, publications were excluded if the sample of athletes had a disability or secondary disability, as it is imagined that the issues of flourishing and transition would be different for this population of athletes.

### Inclusion and Exclusion Criteria

The inclusion criteria consisted of elite-level athletes competing at the national, international, or highest professional level in their particular sport and of American collegiate athletes. Although college athletes in the United States are not recognized as elite, in comparison to other countries it is the equivalent to their state or national level. Therefore, American collegiate athletes were included and considered as elite athletes within this systematic review. Athletes came from an individual or team sport. All ages, all ethnicities, and both genders were included. The study design had to be of a quantitative or mixed-method approach, with results measuring positive outcomes. The studies had to be full peer-reviewed articles in English.

Articles that were excluded from the review involved studies that examined athletes competing at only a district/regional and club/community level of sport, where it was not clear if the sample could be distinguished from recreational leisure participation and sport. This review also excluded articles if athletes had a disability or secondary disability or if the study included only individuals participating in leisure or recreational activities or social sport. Furthermore, if studies were of a qualitative design; if there were no positive outcomes measured; or if the publication type was a single-method qualitative research design, narrative review, thesis, opinion piece, abstract, book chapter, report, case report, editorial, report from conference

presentation, letter to the editor, review paper, or commentary, they were also excluded from the current systematic review.

## Procedure

Two reviewers independently assessed the methodological quality of the included articles. The initial search strategy yielded 3,787 articles that were assessed for eligibility. Twelve studies originally met the inclusion criteria through to the quality review process. All 3,787 articles were reviewed for relevance and for whether they met the inclusion criteria. The remaining articles then went through a strict screening process in which the two reviewers read through the remaining articles to ensure that they met the inclusion criteria.

The Preferred Reporting Items for Systematic Reviews and Meta-Analyses guidelines (Moher, Liberati, Tetzlaff, & Altman, 2009) were used to inform the design, implementation, analysis, and reporting stages of this systematic review. The two independent reviewers using a customized form based on five criteria carried out quality assessment simultaneously during the data extraction period. The quality criteria addressed sources of bias related to participant selection, recruitment, confounding variables, and the reliability and validity of outcome measures. These criteria were included given the expected broad range of quantitative study designs, as well as to ensure both that studies displayed an appropriate degree of internal validity and that results permitted accurate conclusions to be drawn. Each reviewer rated the five criteria as “satisfied,” “partially satisfied,” or “not met.” Ratings were compared, and any disagreements were resolved by having a third-party member review the article under question and then coming to a consensus. Two studies were excluded on the basis of quality. Furthermore, results of this quality assessment were accounted for when interpreting the data and making recommendations. Once these criteria had been satisfied, data were extracted by one reviewer and checked by the second reviewer. Data extraction included information about study design, participant characteristics (sample size, age, gender, country, sports, sporting level), recruitment method, and outcome characteristics of flourishing (outcome measures used, main results, and limitations).

The studies, which were systematically reviewed, are listed in Table 2. In addition, the reviewed studies are indicated with asterisks within the reference list.

## RESULTS

### Characteristics of Included Studies

The 10 studies included 1,089 elite athletes; the majority of athletes were male ( $n = 517$ ), 414 were female, and 158 did not specify. The age range of athletes was 14 to 59 years. Athletes competed at collegiate ( $k = 1$ ), national ( $k = 5$ ), international ( $k = 6$ ), or Olympic level ( $k = 1$ ) across 45 sports, drawing from a variety of Olympic sports and specific professional sporting codes.

The final 10 studies identified in the current review were analyzed to identify key research design and population data (e.g., country of study, age, gender, sports, measures, and concepts) and presented as summary tables in the Results section. First, characteristics of the studies (sample size, gender, mean age, competitive level, time postretirement, planned and unplanned retirement, country/continent, and number of sports examined in each study) were summarized by a frequency count. Second, the means and standard deviations of all measures used within the included studies were examined. Third, a table with a summary of the main

**Table 1**  
**Demographics**

| Characteristics                                    | Studies  |     |
|----------------------------------------------------|----------|-----|
|                                                    | <i>n</i> | %   |
| Sample size                                        |          |     |
| < 40                                               | 1        | 10  |
| 40–59                                              | 2        | 20  |
| 60–79                                              | 2        | 20  |
| 80–99                                              | 1        | 10  |
| 100+                                               | 4        | 40  |
| Gender                                             |          |     |
| Male only                                          | 1        | 10  |
| Female only                                        | —        | —   |
| Combined                                           | 7        | 70  |
| Not stated                                         | 2        | 20  |
| <i>M</i> age                                       |          |     |
| < 20                                               | 1        | 10  |
| 20–39                                              | 6        | 60  |
| Not stated                                         | 3        | 30  |
| Competitive level                                  |          |     |
| Collegiate                                         | 1        | 10  |
| National academies/institutes                      | 1        | 10  |
| National                                           | 1        | 10  |
| International                                      | 3        | 30  |
| National/International                             | 3        | 30  |
| Olympic                                            | 1        | 10  |
| Time postretirement ( <i>M</i> )                   |          |     |
| < 1 year                                           | 1        | 10  |
| 1–5 years                                          | 3        | 30  |
| 6–10 years                                         | 3        | 30  |
| 11+                                                | 1        | 10  |
| Not stated                                         | 2        | 20  |
| Examination of planned and/or unplanned retirement |          |     |
| Planned                                            | 4        | 40  |
| Unplanned                                          | —        | —   |
| Combination                                        | 3        | 30  |
| Not stated                                         | 3        | 30  |
| Total                                              | 10       | 100 |

findings/conclusions, limitations, future research recommendations, and practical implications (where available) was provided.

Analysis of the data provided a clear picture of the types of samples recruited and the types of research designs employed in order to investigate the constructs of flourishing and transition in sport. Thus, gaps within the literature could be highlighted in these specific descriptive aspects.

Table 1 provides a summary of the characteristics of the included studies and reveals that the studies within this systematic review had relatively small sample sizes. More than half of the studies recruited samples of both genders (70%). Sixty percent of the eligible studies reported a mean age of 20 to 39 years. Athletes examined in the studies had a relatively early retirement age of younger than 40; however, this is generally anticipated for a professional athlete. National athletes, or the combination of both national and international athletes, were

**Table 2**  
**Demographic Information**

| Study                                                            | Country/Continent              | No. of sports examined |
|------------------------------------------------------------------|--------------------------------|------------------------|
| Alfermann, Stambulova, and Zemaityte (2004)                      | Germany, Lithuania, and Russia | 11                     |
| Dimoula, Torregrosa, Psychountaki, and Gonzalez Fernandez (2013) | Greece and Spain               | 20                     |
| Stephan, Billard, Ninot, and Delignieres (2003)                  | France                         | 7                      |
| Sinclair and Orlick (1993)                                       | Canada                         | Not stated             |
| Erpič, Wylleman, and Zupančič (2004)                             | Slovenia                       | 17                     |
| Martin, Fogarty, and Albion (2014)                               | Australia                      | 9                      |
| Stambulova, Stephan, and Japhag (2007)                           | France and Sweden              | 19                     |
| Grove, Lavallee, and Gordon (1997)                               | Australia                      | 13                     |
| Perna and Ahlgren (1999)                                         | America                        | 3                      |
| Lavallee (2005)                                                  | England and Scotland           | 1                      |

recruited most frequently (60%), whereas collegiate athletes (10%), national academy/institute athletes (10%), national athletes (10%), and Olympic athletes (10%) were examined in only one study each. In addition, there was a wide spread of years postretirement: less than 1 year (10%), 1 to 5 years (30%), 6 to 10 years (30%), more than 10 years (10%); only two studies did not report the years postretirement. It is important to note that no single study solely investigated athletes with unplanned retirement.

Table 2 provides a summary of the demographic information of the included studies; half of the research examined European athletes (57%), and the remaining 44% was distributed among Australia (15%), the United Kingdom (15%), Canada (7%), and the United States (7%). The studies in the review examined numerous sports, with one third investigating between 16 and 20 sports (30%) at one time. Only one study (Lavellee, 2005) examined a single sport.

### Flourishing Constructs

The constructs, which were explicitly measured in the review, were life satisfaction, positive emotions, meaning and purpose, optimism, and engagement and interest. The following findings are all identified within the 10 publications included within the systematic review. No external publications are discussed or included in the Flourishing Constructs or Study Outcomes sections. It is also important to note that there was no single measure or survey consistently applied in the 10 reviewed publications. Findings from the constructs, which were measured in the review, are stated next and can be found in the provided tables.

Table 3 provides a summary of the instruments employed by each of the included studies. The means and standard deviations for each of the flourishing measures for all studies are provided. Ten instruments were adopted to measure the subjective well-being and satisfaction with life of retired/retiring athletes. Four of the instruments were used twice in 10 of the included studies (Alfermann et al., 2004; Dimoula, Torregrosa, Psychountaki, & Gonzalez Fernandez, 2013; Erpič et al., 2004; Lavallee, 2005; Martin et al., 2014; Stambulova et al., 2007), whereas the remaining two instruments were used only once.

The first study focused solely on male athletes (Grove, Lavallee, & Gordon, 1997), whereas the other study examined both male and female athletes (Martin et al., 2014). The studies were conducted 17 years apart, which potentially may make it difficult to compare results, because sport and athlete well-being and welfare literature has dramatically developed over this period (e.g., Henry, 2013; Kleiber & Brock, 1992; Stephan, Billard, Ninot, & Delignieres,

Table 3  
Means and Standard Deviations for Flourishing Component of Measures

|                                                                   | Retirement from Sports Survey | The Athlete Retirement Questionnaire | The 12-Item General Health Questionnaire | The Sports Career Termination Questionnaire | Satisfaction With Life Scale | The Athletic Identity Measure Scale | COPE Inventory       | British Athletes Lifestyle Assessment Needs in Career and Education | A shortened 5-item version of the scale of Brewer, Van Raalte, and Linder (1993) | 12-item coping scale from a questionnaire developed by Carver, Scheier, and Weintraub (1989) |
|-------------------------------------------------------------------|-------------------------------|--------------------------------------|------------------------------------------|---------------------------------------------|------------------------------|-------------------------------------|----------------------|---------------------------------------------------------------------|----------------------------------------------------------------------------------|----------------------------------------------------------------------------------------------|
| Study                                                             |                               |                                      |                                          |                                             |                              |                                     |                      |                                                                     |                                                                                  |                                                                                              |
| Alfermann, Stambulova, and Zemaityte (2004)                       |                               |                                      |                                          |                                             |                              |                                     |                      |                                                                     |                                                                                  |                                                                                              |
| Dimoula, Torregrosa, Psychoountaki, and Gonzalez Fernandez (2013) | $M = 2.9,$<br>$SD = 1.10$     |                                      |                                          |                                             |                              |                                     |                      |                                                                     |                                                                                  |                                                                                              |
| Stephan, Billard, Ninot, and Delignieres (2003)                   |                               |                                      | $M = 22.5, SD = 3.8$                     |                                             |                              |                                     |                      |                                                                     |                                                                                  |                                                                                              |
| Sinclair and Orlick (1993)                                        |                               | $M = 4.2, SD = 1.0$                  |                                          |                                             |                              |                                     |                      |                                                                     | $M = 3.3, SD = 1.2$                                                              | $M = 2.8, SD = 0.8$                                                                          |
| Erpić, Wylleman, and Zupanić (2004)                               |                               |                                      |                                          |                                             |                              |                                     |                      |                                                                     |                                                                                  |                                                                                              |
| Martin, Fogarty, and Albion (2014)                                |                               |                                      |                                          | $M = 4.1, SD = 0.8$                         |                              | $M = 25.7, SD = 5.2$                | $M = 33.1, SD = 6.1$ |                                                                     |                                                                                  | $M = 2.9, SD = 1.1$                                                                          |
| Stambulova, Stephan, and Japhag (2007)                            | $M = 3.1,$<br>$SD = 1.0$      |                                      |                                          |                                             |                              |                                     |                      |                                                                     |                                                                                  |                                                                                              |
| Grove, Lavallee, and Gordon (1997)                                |                               |                                      |                                          |                                             |                              |                                     | $M = 12.8, SD = 5.1$ |                                                                     |                                                                                  |                                                                                              |
| Perna and Ahlgren (1999)                                          |                               |                                      |                                          |                                             |                              |                                     |                      |                                                                     |                                                                                  |                                                                                              |
| Lavallee (2005)                                                   |                               |                                      |                                          |                                             |                              | $M = 25.4, SD = 4.9$                |                      |                                                                     |                                                                                  |                                                                                              |
| Total                                                             | 2                             | 1                                    | 1                                        | 1                                           | 2                            | 2                                   | 1                    | 1                                                                   | 1                                                                                | 2                                                                                            |

2003). The Retirement from Sports Survey (Alfermann et al., 2004), the Athlete Retirement Questionnaire (Sinclair & Orlick, 1993), and the Sports Career Termination Questionnaire (Erpič, 2001) were each utilized in five different studies (Dimoula et al., 2013; Erpič et al., 2004; Sinclair & Orlick, 1993; Stambulova et al., 2007).

Results from these five studies revealed very similar outcomes for both the means and standard deviations. Outcomes were also similar for the 12-item General Health Questionnaire and the Satisfaction With Life Scale. However, the range between the General Health Questionnaire and the Satisfaction With Life Scale outcomes was significantly different from outcomes on the Retirement from Sports Survey, the Athlete Retirement Questionnaire, and the Sports Career Termination Questionnaire measures.

Grove et al. (1997) utilized the Athletic Identity Measure Scale and the COPE Inventory measure, with the results from these two measures being almost identical. Of interest, results from Lavellee (2005), who adopted the British Athletes Lifestyle Assessment Needs in Career and Education measure, revealed a much larger mean outcome in comparison to the results from the other studies.

## Study Outcomes

Table 4 presents the main findings, limitations, recommendations for future research, and practical implications.

Examination of planned and/or unplanned retirement was one of the main areas of focus of the included studies (e.g., Alfermann et al., 2004; Erpič et al., 2004; Martin et al., 2014; Stambulova et al., 2007). Alfermann et al. (2004) emphasized that the athletes who planned their retirement in advance in comparison to the athletes who had an unplanned retirement had higher cognitive, emotional, and behavioral readiness for their career transition.

In addition, findings from the review indicated that retired/retiring athletes experienced a variety of emotional reactions and difficulties, such as being confronted with feelings of loss and void (Stephan et al., 2003). Furthermore, Sinclair and Orlick (1993) found that athletes who had a smoother adjustment to retirement tended to retire after they had achieved their sport-related goals. Martin et al. (2014) found that athletes who experienced involuntary retirement were at greater risk for experiencing adjustment issues. In the included studies, athlete identity was another major factor influencing retirement. High levels of athletic identity were typically associated with adjustment difficulties (Erpič et al., 2004; Grove et al., 1997; Martin et al., 2014), lack of retirement planning (Dimoula et al., 2013; Erpič et al., 2004), and more frequent and severe psychological difficulties (Erpič et al., 2004; Grove et al., 1997).

A general consensus was that an athlete's athletic identity strongly influenced the individual's experience of retirement from an elite sport. Furthermore, Erpič et al. (2004) also found that nonathletic factors, such as educational status and negative nonathletic transitions, significantly influence the quality of sport career transition and adaption to life after sport. Last, examination of life satisfaction and coping strategies were thoroughly explored in the current review.

Across the various studies, a number of research- and participant-focused recommendations were proposed: (a) examination of athlete retirement from a qualitative approach, with both prospective and retrospective designs (Dimoula et al., 2013; Grove et al., 1997); (b) focus on involuntary retired athletes (Stephan et al., 2003); (c) research with multimethod approaches to develop a richer understanding of the transition to postcareer (Grove et al., 1997; Stambulova et al., 2007); and (d) gain an understanding of how athletes use their support network, along with the efficacy of behavioral, cognitive, emotional, and social interventions for athletes in transition (Lavellee, 2005).

**Table 4**  
**Summary of Outcomes**

| Study                                                            | Main findings/Conclusions                                                                                                                                                                                                                          | Limitations                                                                                                                                                                                                                                         | Future research recommendations/Practical implications                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             |
|------------------------------------------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Alfermann, Stambulova, and Zemaityte (2004)                      | <ul style="list-style-type: none"><li>● Control planned = positive adaptation to life after the sport career than unplanned retirement</li><li>● Planned retirement = higher cognitive, emotional, and behavioral readiness</li></ul>              | <ul style="list-style-type: none"><li>● Different sports of the participants in different samples</li><li>● Some differences in the procedure of data collection</li></ul>                                                                          | Psychological training programs (for athletes approaching sport career termination but still active in competitive sport and for already retired athletes)                                                                                                                                                                                                                                                                                                                                                                                         |
| Dimoula, Torregrosa, Psychountaki, and Gonzalez Fernandez (2013) | <ul style="list-style-type: none"><li>● Retired athletes had a high athletic identity during sports career</li><li>● Athletes turned to a positive reinterpretation and coming up with strategy or plan as means to cope with retirement</li></ul> | <ul style="list-style-type: none"><li>● Very small/mixed sample size</li><li>● Retrospective design (recall bias)</li><li>● Quantitative (fail to capture entire complexity of retirement process)</li><li>● Risk of objectifying culture</li></ul> | <ul style="list-style-type: none"><li>● Qualitative approach (prospective and retrospective design)</li><li>● Development of sport career assistance programs</li></ul>                                                                                                                                                                                                                                                                                                                                                                            |
| Stephan, Billard, Ninot, and Delignieres (2003)                  | <p>Athletes were faced with feelings of loss and void</p> <ul style="list-style-type: none"><li>● The sense of job accomplishment and competence = increase in subjective well-being</li></ul>                                                     | Retrospective study (recall bias, memory decay)                                                                                                                                                                                                     | <ul style="list-style-type: none"><li>● Goal-developing skills- Timing and type of assistance during transitional period</li><li>● Progressive detraining program</li></ul> <p>Practitioners should help athletes become aware of, develop, and use transferable skills that may provide direction and motivation in their postathletic career</p> <ul style="list-style-type: none"><li>● Focus on involuntary retired athletes</li><li>● Methodology— semistructured interviews during a 1-year period</li></ul> <p>(Continued on next page)</p> |

**Table 4**  
**Summary of Outcomes (*Continued*)**

| <b>Study</b>                         | <b>Main findings/Conclusions</b>                                                                                                                                                                                                                                                                                                                                                                                    | <b>Limitations</b>                                                                                                                                                                                      | <b>Future research recommendations/Practical implications</b>                                                                                                                                                                                                   |
|--------------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Sinclair and Orlick, T (1993)        | <ul style="list-style-type: none"> <li>● Achievement of sport-related goals = smoother transition</li> <li>● Three reasons for retirement: (a) tired of the circuit or lifestyle/time to move on, (b) had achieved their goals, and (c) had difficulties with the coaching staff</li> </ul>                                                                                                                         | Not stated                                                                                                                                                                                              | <ul style="list-style-type: none"> <li>● Implementation of positive interventions:</li> <li>● Continuing financial support</li> <li>● Seminars regarding adjustment</li> <li>● Practical resource centers</li> <li>● Mental skills training programs</li> </ul> |
| Erpič, Wylleman, and Zupančič (2004) | <ul style="list-style-type: none"> <li>● Difficulties of sports career termination: voluntariness of career termination, subjective evaluation of athletic achievements, and prevalence of athletic identity</li> <li>● Nonathletic factors educational status and negative nonathletic transitions have a significant effect on the quality of sport career transition and adaptation to postsport life</li> </ul> | Not stated                                                                                                                                                                                              | <ul style="list-style-type: none"> <li>● Sport psychology practitioners to diagnose both athletic and non-athletic aspects of the athletes life</li> </ul>                                                                                                      |
| Martin, Fogarty, and Albion (2014)   | <ul style="list-style-type: none"> <li>● High levels of athletic identity may be associated with adjustment difficulties</li> <li>● Career planning = positive life satisfaction</li> <li>● Involuntary retirement = greatest risk of adjustment issues</li> </ul>                                                                                                                                                  | <ul style="list-style-type: none"> <li>● Low power associated with the small sample size</li> <li>● Retirement status and age were confounded</li> <li>● 5-year gap between data collections</li> </ul> | <ul style="list-style-type: none"> <li>● Important to continue support for athletes post-retirement</li> <li>● Athletes are and should be encouraged to access individualized support services through programs</li> </ul>                                      |

*(Continued on next page)*

**Table 4**  
**Summary of Outcomes (*Continued*)**

| Study                                  | Main findings/Conclusions                                                                                                                                                                                                                                                                                                    | Limitations                                                                                                                                                                                                                                | Future research recommendations/Practical implications                                                                                                                                                                                                                                                                                                          |
|----------------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Stambulova, Stephan, and Japhag (2007) | <ul style="list-style-type: none"> <li>● Retirement planning = favorable emotions and coping behaviors in the transition</li> <li>● Athletes used a combination of coping strategies</li> <li>● Retirement planning = more favorable emotional and behavioral reaction to career termination</li> </ul>                      | <p>Retrospective design (recall bias, memory selection/reinterpretation small sample size)</p> <p>Measurements should be improved</p>                                                                                                      | <ul style="list-style-type: none"> <li>● More research in transition to the postcareer and to emphasize the role of some principles/approaches in the psychological work with retiring/retired athletes</li> <li>● Applied sport psychologists should analyze not only the athletes' microsocial environment but also macro- and meso-social factors</li> </ul> |
| Grove, Lavalley, and Gordon (1997)     | <ul style="list-style-type: none"> <li>● Coping strategies = Acceptance, positive reinterpretation, planning</li> <li>● Athletic identity at the time of retirement exhibited significant relationships to coping processes, adjustment, preretirement planning, and anxiety</li> </ul>                                      | Not stated                                                                                                                                                                                                                                 | <ul style="list-style-type: none"> <li>● A multimethod approach to research in this area in order to achieve a better understanding of the retirement process</li> <li>● The collection of prospective data</li> </ul>                                                                                                                                          |
| Perna and Ahlgren (1999)               | <ul style="list-style-type: none"> <li>● Injured athletes were significantly different from noninjured athletes in their ability to state an occupational plan</li> <li>● Nonsport or sport-related career plans = higher satisfaction with life</li> <li>● Vocational plans = higher degree of life satisfaction</li> </ul> | <ul style="list-style-type: none"> <li>● Athletes designated themselves with respect to injury status as opposed to a medical professionals determinations</li> <li>● Time between injury occurrence and Satisfaction With Life</li> </ul> | Not stated                                                                                                                                                                                                                                                                                                                                                      |

*(Continued on next page)*

**Table 4**  
**Summary of Outcomes (*Continued*)**

| <b>Study</b>    | <b>Main findings/Conclusions</b>                                                                                                                                                    | <b>Limitations</b>                                                                                                                                                                   | <b>Future research recommendations/Practical implications</b>                                                                                                                                                              |
|-----------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Lavallee (2005) | <ul style="list-style-type: none"> <li>• Life development intervention can significantly assist elite athletes who experience career termination adjustment difficulties</li> </ul> | <ul style="list-style-type: none"> <li>• Intervention protocol varied</li> <li>• Small sample size</li> <li>• Long recruitment period</li> <li>• Potential selection bias</li> </ul> | <ul style="list-style-type: none"> <li>• Understanding how athletes use their support networks</li> <li>• The efficacy of behavioral, cognitive, emotional, and social interventions for athletes in transition</li> </ul> |

Practical implications and recommendations were also provided. There was great emphasis on the need for the implementation of psychological training programs for athletes (e.g., Alfermann et al., 2004; Dimoula et al., 2013; Sinclair & Orlick, 1993), such as the implementation of positive interventions—including continuing financial support (Sinclair & Orlick, 1993), seminars regarding adjustment (Sinclair & Orlick, 1993), practical resource centers (Sinclair & Orlick, 1993), and mental skills training programs (Sinclair & Orlick, 1993).

In addition, there is a need for the development of interventions, progressive detraining programs (Dimoula et al., 2013), and sport career assistance programs for the athletes during and after retirement (Dimoula et al., 2013). Furthermore, practitioners should be encouraged to assist athletes in becoming more aware of, developing, and using transferrable skills, which may provide direction and motivation during their postathletic careers.

## DISCUSSION

Results from this review offer insight into the extant research on transition to retirement for elite athletes. Given that the present analysis is based on 10 studies, the results need to be considered in this light, and caution is necessary when interpreting these findings.

Elite athletes face various challenges that influence the course of their career (Wylleman & Reints, 2010) and life after sport. The current analysis provides support for the notion that athletes face numerous challenges during the transition to retirement, including occupational/financial problems (Dimoula et al., 2013) and family/social problems (Erpič et al., 2004). In addition, within the sport retirement literature a significant amount of attention has been dedicated to life satisfaction (Dimoula et al., 2013; Martin et al., 2014; Perna & Ahlgren, 1999), coping strategies (e.g., Alfermann et al., 2004; Dimoula et al., 2013; Grove et al., 1997; Sinclair & Orlick, 1993; Stambulova & Wylleman, 2007), and planned versus unplanned retirement (e.g., Alfermann et al., 2004; Erpič et al., 2004; Martin et al., 2014). Although researchers have thoroughly examined the consequences (e.g., Alfermann et al., 2004; Dimoula et al., 2013; Stambulova et al., 2007) and factors (e.g., Kerr & Dacyshyn, 2000) of retirement, the transition from sport has been predominantly approached from a deficit perspective. Although the literature has identified some positive outcomes of elite athlete retirement, there

appears to be no study that has focused solely on measuring and examining flourishing/positive outcomes among retired elite athletes. It may be useful to examine aspects of flourishing such as positive emotions, engagement, purpose, optimism, resilience, and self-determination. This knowledge will aid practitioners in assisting athletes to achieve and sustain a flourishing life after an athletic career.

Studies included in this review had a relatively even distribution of male and female athletes. However, there appears to be a paucity of research examining a single gender, or comparing male and female athletes' experiences of transition/retirement from elite sport. Previous research has identified that there are several differences based on gender (Crocker & Graham, 1995). There is also evidence that female and male athletes cope differently with performance-related stress in sport (Sinclair & Orlick, 1993). There may also be gender-specific differences in flourishing, and future studies should aim to compare male and female athletes' levels of flourishing postretirement.

Athlete transition/retirement has been studied at various competitive levels. Collegiate (Perna & Ahlgren, 1999), national (Alfermann et al., 2004), international (Stambulova et al., 2007), and Olympic sports (Sinclair & Orlick, 1993) studies included in this review examined athlete retirement at 1 to 10 years postretirement; to date, only one study has examined a sample of athletes immediately after retirement, or during the exit process (e.g., Stephan et al., 2003). Therefore, it would be beneficial to the literature to provide more insight into the initial reactions of elite athletes immediately after their retirement.

Half of the studies in the present review were conducted in Europe (e.g., Alfermann et al., 2004; Dimoula et al., 2013; Erpič et al., 2004; Stambulova et al., 2007; Stephan et al., 2003). Furthermore, the majority of studies examining retirement and transition in elite athletes assessed multiple sports at one time (e.g., Dimoula et al., 2013; Grove et al., 1997; Martin et al., 2014; Stambulova et al., 2007; Stephan et al., 2003). Rather than focus on multiple sports, it may be beneficial for future research to examine a single sport. It may also be of benefit to conduct a comparison study among athletes from different sports. Athletes may have different experiences based on a number of factors—type of sport, level, team versus individual, exposure, and salary, among others.

Our study revealed that there appears to be no instrument to solely measure flourishing in athlete transition, a critical outcome of our analysis. Across the 10 studies included, 10 different psychometric measures were utilized. None of the measures utilized in the included studies focused specifically on flourishing. Although a number of researchers have conducted qualitative research around transitioning athletes (e.g., Lally, 2007; Lavalley & Robinson, 2007) there appears to be no research that has explicitly focused on flourishing/positive outcomes among retired elite athletes. Therefore, to identify which measure is the best, most suitable, and most accurate measure of flourishing, additional qualitative research with transitioning athletes is warranted.

It has been well documented within the area of career transition/retirement from elite sport that athletes are faced with an extensive range of psychological, interpersonal, and financial adjustments when they end their competitive careers (Lavalley & Wylleman, 2000). Although it is inevitable that an elite sporting career will come to an end, the way in which it ends plays an influential role in the athlete's transition experience. For example, studies have revealed that athletes who planned or had a voluntary retirement experienced higher self-efficacy with respect to post-athletic career adaptation (Blinde & Stratta, 1992; McPherson, 1980; Taylor & Ogilvie, 1994, 2001). The majority of studies included in this review focused specifically on planned retirement, as opposed to unplanned retirement (e.g., Alfermann et al., 2004; Erpič et al., 2004; Martin et al., 2014). Therefore, it would be of benefit to the transition literature to further investigate the effect of unplanned retirement in elite athletes.

Numerous limitations were identified within the included studies in the present review; however, it is important to note that limitations were not explicitly stated in all of the studies. Nevertheless, a number of inherent methodological limitations were identified. For example, (a) retrospective studies (i.e., Dimoula et al., 2013; Stambulova & Wylleman, 2007; Stephan et al., 2003) could lead to recall bias and memory selection/reinterpretation, (b) data collection procedures (Alfermann et al., 2004; Martin et al., 2014), (c) sample size (e.g., Dimoula et al., 2013; Lavalley, 2005; Martin et al., 2014; Stambulova et al., 2014), and (d) measurement (i.e., measures failing to capture the entire complexity of the retirement process; Dimoula et al., 2013). Quantitative research can typically provide breadth but often lack depth in findings, which was noted in one of the studies (i.e., Dimoula et al., 2013). In addition, there were multiple limitations specific to individual studies, such as small and/or mixed samples (Martin et al., 2014; Stambulova et al., 2007), inconsistent data collection procedures (Alfermann et al., 2004), examination of different sports compared across different samples (Alfermann et al., 2004), weak measurement tools (Stambulova et al., 2007), participant self-selection method (e.g., Alfermann et al., 2004; Lavalley, 2005), and long recruitment periods (Lavalley, 2005).

### FUTURE RECOMMENDATIONS

Based on the current review, it is suggested that future research is required—in particular, a qualitative approach to gain a deeper understanding and focus of flourishing among retired elite athletes, with a larger sample size, and an examination of athletes who have just entered into the transition phase of retirement. A qualitative approach using both a prospective and retrospective design is recommended to capture a richer experience of retired athletes' postcareer transition. Furthermore, research should focus on involuntarily retired athletes, as well as implementing interventions to assist athletes through this stage of their career. In effect, research examining elite athletes at the period of retirement could help provide a more comprehensive picture of the life cycle of the elite athlete. Such research could lead to the development of more tailored interventions aimed at helping improve postcareer athletes' mental health.

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