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Athletes' career transition out of sport: a systematic review

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The purpose of this study was to provide a systematic review of studies on athletes' career transition out of sport from 1968 until the end of 2010. A total of 126 studies were evaluated and reported in three sections: sample characteristics, research designs and correlates of athletes' career transition adjustment. Samples ranged from 1 to 1617. Investigators examined a wide range of competitive levels, both genders and various sports. Researchers have used qualitative (44%), quantitative (44%), and mixed-model (12%) designs. Variables correlated to athletes' career transition adjustment were categorized into factors related to career transition (e.g., self-identity) and available resources during the career transition process (e.g., social support). The discussion focuses on the current status of the study area, limitations in its knowledge, suggested practical implications (e.g., providing proactive support) and future research directions (e.g., examining athletes' retirement decision-making process).

Keywords: career transitions in sport; retirement from sport; systematic review

Research on career transitions in sport has been growing gradually over the past three decades, and as a result investigators have found various predictors (e.g., athletic identity, voluntary control over the decision to retire) of the quality of the career transition process for athletes (e.g., Kerr & Dacyshyn, 2000; Lally, 2007). In the early stages, researchers focused on the consequences of athletes' career transition out of sport, but more recently they have distinguished between specific types of transitions, such as young athletes' disengagement/withdrawal from sport and within-sport career transitions. Since the 1990s, researchers have developed appropriate models describing athletes' career transitions (e.g., Taylor & Ogilvie, 1994), and several review papers have also been published on the phenomenon providing guidance for future research directions (e.g., Baillie & Danish, 1992; Wylleman, Alfermann, & Lavallee, 2004).

In recent years, several sport psychology textbooks have included chapters on career transitions in sport (e.g., Lavallee & Andersen, 2000; Wylleman, De Knop, Verdet, & Cecić Erpič, 2007). Lavallee, Wylleman, and Sinclair (2000) briefly reviewed existing publications related to career transitions in sport up to 1998. Their review aimed to provide a descriptive account of each publication and an annotated reference list for readers. It has been more than a decade since Lavallee et al. published their annotated bibliography, and there have been numerous investigations

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published on the topic of career transitions in sport. In addition, a systematic review methodology has not previously been used to analyse studies on athletes' career transitions. Craig et al. (2008) highlighted the benefits of conducting systematic reviews in developing interventions and designing future studies. According to Craig et al., systematic reviews allow researchers to use the best available evidence and appropriate theories to develop future research directions and intervention strategies, as well as to raise awareness of the range of research methods employed in the study area. Therefore, it is useful to conduct a systematic review of career transition studies in order to identify current knowledge of the study area, future research directions and practical implications for practitioners and sport organizations.

The purpose of this study was to provide a systematic review of studies on athletes' career transition out of sport, focusing on sample characteristics, research designs and correlates focused on psychological predictors associated with the quality of athletes' career transitions. Studies conducted from the 1960s to the end of 2010 were included, while publications (e.g., Fleuriel & Vincent, 2009) not containing or examining information associated with the career transition process out of sport were excluded. In addition, although the topic of athletes' within-sport career transitions is an important and growing area of research, the current review focused on identifying issues related to athletes' career transition out of sport.

Method

Sources

The search strategy initially included the use of the following electronic databases: Dissertation Abstracts International, Google Scholar, Pubmed, ProQuest and The World of Knowledge. We then examined the tables of contents of the following journals: *Academic Athletic Journal*, *Adapted Physical Activity Quarterly*, *Athletic Insight*, *Australian Journal of Career Development*, *Australian Psychologist*, *Avante*, *British Journal of Sport Medicine*, *International Journal of Sport and Exercise Psychology*, *International Journal of Sport Psychology*, *International Review for the Sociology of Sport*, *Journal of Aging Studies*, *Journal of Applied Sport Psychology*, *Journal of Personal and Interpersonal Loss*, *Journal of Clinical Sport Psychology*, *Journal of Sport Behavior*, *Journal of Sport and Exercise Psychology*, *Journal of Vocational Education and Training*, *Sport and Exercise Psychology Review*, *Journal of Sports Sciences*, *Perceptual and Motor Skills*, *Psychology of Sport and Exercise*, *Quest*, *Sociology of Sport Journal* and *The Sport Psychologist*. Additional citations were subsequently gathered through reading the reference lists of the articles already obtained. Keyword combinations employed in the search strategies included *career transitions in sport*, *career transition out of sport*, *athletes' retirement*, *retirement from sport*, *sport career end*, *sport career termination*, *withdraw from sport*, *disengagement from sport* and *drop-out from sport*.

Inclusion criteria for the current investigation were as follows. Studies had to be: (a) related to athletes' career transition out of sport; (b) based on independent participant populations; and (c) written in English. These criteria included journal articles, published conference proceedings, book chapters and dissertations, and imposed no limits on characteristics of samples and research designs. If data from a study were published in multiple ways (e.g., a conference proceeding, a journal

article), then we reported the study only once in the following order: (a) journal article, (b) dissertation, and (c) published conference proceeding. We excluded publications not containing data on athletes' career transition out of sport.

Procedure

Hard copies of studies were collected and assessed against the inclusion criteria. After identifying the studies, the same systematic review procedure as used by Sallis, Prochaska, and Taylor (2000) and Goodger, Gorely, Lavalley, and Harwood (2007) was applied for analysis. The protocols included the creation of detailed tables (Tables 1 and 2) classifying (a) research designs and sample characteristics and (b) correlates of the quality of athletes' career transitions. The reasons for focusing on three features (i.e., research designs, sample characteristics and correlates) were: (a) to identify detailed methodological aspects of the studies to help researchers develop better methods in the future; (b) to examine detailed characteristics of sample populations to help investigators identify sampling gaps; and (c) to analyse factors related to the quality of athletes' career transitions across studies and identify the evidence base for theories and models to provide practical implications and future research directions.

Assignment of bibliography numbers

Early in the analysis, we coded each study with a bibliography number. These numbers were based on the number of independent samples. For example, if there was more than one independent sample in a publication, then each sample was given a separate bibliography number. In some instances, when the same data were published more than once (e.g., in a journal article and in a published conference proceeding), they were assigned the same bibliography number.

Research designs and sample characteristics

Samples were distinguished by size, gender, competitive level, type of sport, age and location. We also classified studies by data collection method and research design. Additionally, if the same sample was published more than once, but assessed different correlates on each occasion, we assigned it the same bibliography number and also a sub-number. For example, the sample associated with reference number 59 was published in three different journals, but each publication examined different variables, so the reports were assigned sub-numbers (i.e., 59/1, 59/2 and 59/3) to identify the publications.

Correlates of athletes' career transition adjustment

We created a summary table based on the correlates of the quality of career transitions (Table 2). The summary table was created over several stages. Firstly, we selected and classified the career transition variables from each of the studies. At this stage of analysis, only correlates with more than three independent samples were included in the summary table. Correlates with fewer than three studies were grouped, where possible, with other similar variables (e.g., self-perception includes

Table 1. Research designs and sample characteristics.

Study Characteristics	Reference Number	Samples	<i>k</i>
Design			
Qualitative	2, 8, 10, 11, 13, 14, 16, 17, 18, 19, 21, 22, 23, 24, 28, 29, 30, 32, 34, 39, 41, 47, 48, 49, 53, 54, 55, 61, 62, 66, 69, 70, 74, 75, 76, 77, 78, 81, 85, 87, 93, 94, 100, 102, 103, 105, 106, 108, 109, 110, 113, 114, 115, 116, 117	55	
Quantitative	1, 4, 5, 6, 7, 9, 12, 15, 20, 25, 26, 27, 31, 33, 36, 37, 38, 42, 43, 45, 51, 52, 56, 57, 58, 59, 60, 63, 64, 67, 71, 72, 79, 82, 83, 84, 86, 88, 89, 90, 91, 92, 96, 97, 99, 104, 107, 112, 118, 119, 120, 121, 122, 123, 125, 126	56	
Combined	3, 35, 40, 44, 46, 50, 65, 68, 73, 80, 95, 98, 101, 111, 124	15	
Longitudinal	2, 3, 14, 28, 33, 51, 55, 75, 80, 87, 98, 121, 124	13	
Cross-sectional	1, 4, 5, 6, 7, 8, 9, 10, 11, 12, 13, 15, 16, 17, 18, 19, 20, 21, 22, 23, 24, 25, 26, 27, 29, 30, 31, 32, 34, 35, 36, 37, 38, 39, 40, 41, 42, 43, 44, 45, 46, 47, 48, 49, 50, 52, 53, 54, 56, 57, 58, 59, 60, 61, 62, 63, 64, 65, 66, 67, 68, 69, 70, 71, 72, 73, 74, 76, 77, 78, 79, 81, 82, 83, 84, 85, 86, 88, 89, 90, 91, 92, 93, 94, 95, 96, 97, 99, 100, 101, 102, 103, 104, 105, 106, 107, 108, 109, 110, 111, 112, 113, 114, 115, 116, 117, 118, 119, 120, 122, 123, 125, 126	113	
Data Collection			
Interview	2, 3, 8, 10, 11, 13, 14, 16, 17, 18, 19, 21, 22, 23, 24, 28, 29, 30, 32, 34, 35, 39, 40, 41, 44, 46, 47, 48, 49, 50, 53, 54, 55, 61, 62, 65, 66, 68, 69, 70, 73, 74, 75, 76, 77, 78, 80, 81, 85, 87, 93, 94, 95, 98/2, 100, 101, 102, 103, 105, 106, 108, 109, 110, 111, 113, 114, 115, 116, 117, 124	70	68
Questionnaire related to athletes' career transition	1, 15, 20, 31, 40, 44, 57, 58, 63, 68, 86, 95, 96, 97, 120	15	10
Questionnaire related to psychology	12, 33, 42, 57, 59/1, 59/2, 59/3, 60, 72, 79/1, 79/2, 83, 88, 89, 90, 91, 97, 98/1, 102, 111, 121, 124	22	15
Self-created questionnaire	4, 5, 6, 7, 9, 25, 26, 27, 35, 36, 37, 38, 42, 43, 45, 46, 50, 51, 52, 56, 64, 65, 67, 71, 72, 73, 79/2, 80, 82, 84, 88, 92, 98/2, 99, 101, 104, 107, 112, 118, 119, 122, 123, 125, 126	43	33
Sample Size			
1–10	1, 2, 8, 10, 13, 16, 19, 24, 28, 41, 48, 49, 55, 61, 62, 66, 69, 70, 74, 76, 77, 78, 81, 93, 100, 103, 110, 111, 117	29	

Table 1 (*Continued*)

Study Characteristics	Reference Number	Samples	<i>k</i>
11–50	3, 7, 11, 14, 15, 17, 18, 21, 22, 23, 26, 29, 30, 32, 34, 39, 42, 45, 47, 51, 53, 54, 59, 60, 73, 75, 85, 87, 89, 98, 102, 105, 106, 107, 108, 113, 114, 115, 116, 121, 123, 124	42	
51–100	4, 5, 20, 33, 43, 46, 50, 57, 58, 67, 72, 79, 80, 91, 97, 99, 109, 112, 118, 120, 126	21	
101–200	35, 36, 40, 44, 52, 63, 68, 71, 83, 84, 86, 90, 92, 95, 96	15	
201–300	6, 9, 31, 56, 65, 94, 125	7	
301–500	12, 27, 38, 122	4	
500–1000	25, 64, 82, 104	4	
Over 1000	37, 88, 101	3	
Not identified	119	1	
Gender			
Females	2, 3, 7, 8, 10, 18, 19, 22, 28, 35, 41, 42, 46, 49, 50, 62, 71, 74, 75, 81, 93, 110, 117, 123	24	
Males	1, 11, 13, 21, 24, 27, 29, 32, 34, 38, 43, 45, 51, 52, 53, 57, 58, 61, 64, 66, 67, 69, 70, 73, 78, 79, 82, 83, 88, 100, 102, 103, 111, 113, 118, 119, 120, 124	38	
Combined	4, 5, 6, 9, 12, 14, 16, 17, 20, 25, 30, 31, 33, 36, 37, 39, 40, 44, 47, 48, 55, 59, 60, 63, 65, 68, 72, 76, 77, 80, 84, 86, 89, 90, 92, 94, 95, 96, 97, 98, 99, 101, 104, 105, 106, 107, 108, 109, 112, 114, 115, 116, 121, 122, 125, 126	56	
Not identified	15, 23, 26, 54, 56, 85, 87, 91	8	
Competitive Level			
High school or college	8, 10, 11, 12, 14, 16, 18, 26, 36, 37, 39, 40, 41, 42, 51, 55, 56, 65, 75, 78, 79, 80, 84, 87, 89, 93, 97, 107, 119, 124, 125, 126	32	
Club (non-professional)	27, 31, 46, 53, 58, 62, 73	7	
Elite (national, international, Olympic)	2, 3, 5, 6, 15, 17, 19, 20, 21, 22, 23, 25, 30, 33, 35, 44, 47, 49, 50, 52, 54, 59, 60, 61, 63, 68, 72, 76, 77, 81, 85, 86, 91, 92, 94, 95, 96, 98, 99, 101, 104, 105, 106, 108, 109, 110, 114, 117, 118, 120	50	
Professional	1, 7, 13, 24, 28, 29, 32, 34, 38, 43, 45, 48, 57, 64, 66, 67, 69, 70, 82, 83, 88, 100, 103, 111, 113, 121, 123	27	
Mixed	9, 71, 74, 102, 112, 122	6	

Table 1 (*Continued*)

Study Characteristics	Reference Number	Samples	<i>k</i>
Disabled	115, 116	2	
Not identified	4, 90	2	
Type of Sport			
Team sport	1, 2, 9, 10, 11, 13, 19, 27, 32, 34, 38, 41, 42, 43, 45, 48, 51, 57, 58, 64, 66, 69, 70, 71, 73, 78, 81, 82, 83, 88, 111, 113, 118, 120, 124, 126	36	
Individual sport	3, 4, 7, 18, 28, 46, 49, 54, 62, 65, 67, 68, 74, 85, 86, 87, 91, 93, 98, 100, 102, 110, 117, 121, 122, 123	26	
Combined	5, 6, 8, 12, 14, 15, 16, 17, 20, 21, 22, 23, 25, 29, 30, 31, 33, 36, 35, 37, 39, 40, 44, 47, 50, 53, 52, 55, 59, 60, 63, 64, 72, 75, 76, 77, 79, 80, 84, 89, 90, 92, 94, 95, 96, 97, 99, 101, 103, 104, 105, 106, 108, 109, 112, 114, 115, 116, 125	59	
Not identified	26, 56, 61, 107, 119	5	
Ages			
Under 16	46, 80	2	
16–26	1, 3, 5, 8, 10, 12, 14, 16, 18, 19, 22, 26, 31, 36, 39, 40, 41, 42, 49, 51, 52, 55, 56, 58, 59, 62, 64, 65, 66, 70, 71, 75, 78, 79, 84, 86, 87, 89, 90, 93, 95, 97, 107, 110, 112, 117, 118, 119, 121, 122, 124, 125, 126	53	
27–40	4, 6, 17, 24, 28, 32, 34, 44, 47, 57, 60, 63, 69, 74, 76, 96, 98, 99, 100, 102, 115	21	
Over 40	15, 68, 105, 109, 120	5	
Wide Range (15–85)	11, 20, 25, 27, 29, 35, 50, 67, 73, 83, 88, 92, 94, 101, 103, 104, 116	17	
Not identified	2, 7, 9, 13, 21, 23, 30, 33, 37, 38, 43, 45, 48, 53, 54, 61, 72, 77, 81, 82, 85, 91, 106, 108, 111, 113, 114, 123	28	
Location			
North America	7, 8, 9, 10, 11, 12, 20, 24, 26, 27, 29, 36, 37, 38, 39, 40, 41, 42, 45, 48, 49, 50, 51, 55, 56, 61, 64, 65, 66, 70, 71, 74, 75, 76, 77, 78, 79, 82, 83, 87, 88, 89, 91, 92, 97, 103, 104, 105, 109, 111, 113, 114, 115, 116, 117, 118, 119, 122, 124, 125, 126	61	60
Europe	3, 4, 5, 6, 13, 16, 17, 18, 19, 20, 21, 25, 28, 30, 31, 34, 35, 43, 44, 47, 52, 53, 54, 57, 58, 62, 69, 73, 80, 84, 85, 86, 93, 94, 95, 96, 98, 99, 100, 101, 106, 107, 108, 110, 112, 116, 121	47	45

Table 1 (*Continued*)

Study Characteristics	Reference Number	Samples	<i>k</i>
Australia	2, 23, 32, 33, 59, 60, 67, 81, 102, 123	10	10
Other nations	1, 15, 120 (Brazil), 22 (Hong Kong), 44, 63 (China), 68 (South Africa), 90, 116 (Israel)	9	9
Not identified	46, 72	2	2

Note: *k* = number of sample populations.

1 = Agresta, Regina, Brandão, Paula, & Rebustini (2003); 2 = Albion (2007); 3 & 4 = Alfermann (1995); 5 = Alfermann & Gross (1997); 6 = Alfermann, Stambulova, & Zemaityte (2004); 7 = Allison & Meyer (1988); 8 = Archer (2010); 9 = Baillie (1992); 10 = Barners (2002); 11 = Beamon (2007); 12 = Blackburn (2003); 13 = Blæsild & Steler (2003); 14 = Blinde & Stratta (1992); 15 = Brandão et al. (2001); 16 = Butt & Molnar (2009); 17 = Ceciç Erpič (2003); 18 = Ceciç Erpič (2007a); 19 = Ceciç Erpič (2007b); 20 = Ceciç Erpič, Wylleman, & Zupančič (2004); 21 = Chamalidis (1997); 22 = Chow (2001); 23 = Clemmet, Hanrahan, & Murray (2010); 24 = Coakley (2006); 25 = Conzelmann & Nagel (2003); 26 = Cramer-Hamman (1994); 27 = Curtis & Ennis (1988); 28 = Douglas & Carless (2009); 29 = Drahota & Eitzen (1998); 30 & 31 = Fernandez, Stephan, & Fouquereau (2006); 32 = Fortunato & Marchant (1999); 33 = Fraser, Fogarty, & Albion (2010); 34 = Gearing (1999); 35 = Gilmore (2008); 36 = Goddard (2004); 37 = Greendorfer & Blinde (1985); 38 = Haerle (1975); 39 = Harrison & Lawrence (2003); 40 = Harrison & Lawrence (2004); 41 & 42 = Herman (2002); 43 = Houlston (1982); 44 = Huang (2002); 45 = Hughes (1990); 46 = Johns, Lindner, & Wolko (1990); 47 = Kadlcik & Flemr (2008); 48 = Kane (1991); 49 = Kerr & Dacyshyn (2000); 50 = Kirby (1986); 51 = Kolbasovsky (2001); 52 = Koukouris (1991); 53 = Koukouris (1994); 54 = Koukouris (2001); 55 = Lally (2007); 56 = Lantz (1995); 57 = Lavalée (2005); 58 = Lavalée, Golby, & Lavalée (2002); 59/1 = Lavalée, Gordon, & Grove (1996); 59/2 = Grove, Lavalée, & Gordon (1997); 59/3 = Lavalée, Grove, & Gordon (1997); 60 = Lavalée, Gordon, & Grove (1997); 61 = Lavalée, Nesti, Borkoles, Cockerill, & Edge (2000); 62 = Lavalée & Robinson (2007); 63 = Leung, Carre, & Fu (2005); 64 = Lewis (1997); 65 = Lipton (1997); 66 = Lotysz & Short (2004); 67 = Lynch (2006); 68 = Marthinus (2007); 69 = McKenna & Thomas (2007); 70 = McKnight (1996); 71 = McKnight (2007); 72 = Menkenhorst & Van Den Berg (1997); 73 = Mihovilovic (1968); 74 = Missler (1996); 75 = Munroe, Albinson, & Hall (1999); 76 = Muscat (2010); 77 = Newell (2005); 78 = Parker (1994); 79/1 = Perna, Zaichkowsky, & Bocknek (1996); 79/2 = Perna, Ahlgren, & Zaichkowsky (1999); 80 = Piffaretti, Schnyder, Mahler, Barbat, & Keller (2003); 81 = Redmond, Gordon, & Chambers (2007); 82 = Reynolds (1981); 83 = Rhodes (1993); 84 = Schmid & Schilling (1997); 85 = Schmid & Seiler (2003); 86 = Schmidt & Hackfort (2001); 87 = Schwendener-Holt (1994); 88 = Schwenk, Gorenflo, Dopp, & Hipple (2007); 89 = Selden (1997); 90 = Shachar, Brewer, Cornelius, & Petitpas (2004); 91 = Shaffer (1990); 92 = Sinclair & Orlick (1993); 93 = Sparkes (1998); 94 = Stambulova (1994); 95 = Stambulova (2001); 96 = Stambulova, Stephan, & Jäphag (2007); 97 = Stankovich (1998); 98/1 = Stephan, Bilard, Ninot, & Delignières (2003a); 98/2 = Stephan, Bilard, Ninot, & Delignières (2003b); 99 = Stephan, Torregrosa, & Sanchez (2007); 100 = Stier (2007); 101 = Strählmán (2006); 102 = Stronach & Adair (2010); 103 = Swain (1991); 104 = Tate (1993); 105 = Tinley (2002); 106 = Torregrosa, Boixadós, Valiente, & Cruz (2004); 107 = Torregrosa, Mateos, Sanchez, & Cruz (2007); 108 = Torregrosa, Sanchez, & Cruz (2003); 109 = Ungerleider (1997); 110 = Warriner & Lavalée (2008); 111 = Washington (1981); 112 = Webb, Nasco, Riley, & Headrick (1998); 113 = Weiss (1992); 114 = Werthner & Orlick (1986); 115 = Wheeler, Malone, VanVlack, Nelson, & Steadward (1996); 116 = Wheeler, Steadward, Legg, Hutzler, Campbell, & Johnson (1999); 117 = Wilder (1999); 118 = Williams-Rice (1990); 119 = Williams (1991); 120 = Winterstein, Brandão, Pinheiro, Agresta, Akel, & Martini (2001); 121 = Wippert & Wippert (2008); 122 = Wong (2010); 123 = Young, Pearce, Kane, & Pain (2006); 124 = Zaichkowsky, King, & McCarthy (2000); 125 & 126 = Zaichkowsky, Lipton, & Tucci (1997)

Table 2. Correlates associated with athletes' career transition adjustment and the quality of career transition.

Correlates	Reference numbers	No. of studies	Associations (%)				Sum code
			+	—	0	?	
Factors related to the quality of career transition							
Athletic identity	6 —, 8 —, 11 —, 12 —, 13 —, 20 —, 21 —, 24 —, 28 —, 34 =, 35 —, 41 —, 42 —, 49 —, 51 —, 55 —, 59/2* —, 60 —, 62 —, 66 —, 67 —, 68 —, 75 —, 76 —, 84 —, 93 —, 95 —, 100 —, 101 —, 109 —, 110 —, 111 —, 112 —, 115 —, 116 —	35		97 (34)	3 (1)	—	
Demographical issues	Genders 31* =, 37 =, 95 ≠ (Female +), 125 =, Age 20 =, 22+, 35*+, 63 =, Social status 25+, 43+, 53+, Types of sport 31* =, 35* =, 104 =, Races 64 ≠? (African American +), 79/1* ≠? (Caucasian American +), Marital status 31*+, 70+, Competitive level 35+, 63+, Nations 6 =, 86 =, 96?, Cultures 44 ≠?	24 (<i>k</i> = 20)	37 (9)		42 (10)	21 (5) ?	
Voluntariness of decision	1+, 2+, 4 =, 13+, 14+, 16+, 20+, 29+, 32+, 35+, 49 =, 50+, 59/3*+, 66+, 67+, 69+, 76+, 80+, 99 =, 112+, 116 +	21	86 (18)		14 (3)	+	
Injuries/health problems	35 —, 45 —, 47 —, 66 —, 76 —, 79/2* =, 95 —, 101 —, 114 —, 116 —, 122 —	11		91 (10)	9 (1)	—	
Career/personal development	22+, 48+, 56+, 59/1*+, 76+, 101+, 102+, 103+, 117 +	9	100 (9)			+	
Sport career achievement	2+, 20+, 22+, 25+, 53+, 91+, 92+, 114+, 116 +	9	100 (9)			+	
Educational status	20+, 22+, 25+, 53+, 68+, 82+, 103+, 119 +	8	100 (8)			+	
Financial status	52+, 53+, 66+, 72+, 101+, 103+, 114+, 116 +	8	100 (8)			+	
Self-perception	Body image, 49+, 62+, 93+, 98/2*+, 99+, Self-worth, 74+, 98/1*+, Self-confidence, 77 +	8 (<i>k</i> = 7)	100(8)			+	
Control of life	14+ (Sport system), 48+ (Life), 49+ (Life), 78+ (Sport system), 110+ (Life), 112+ (Life), 118+(Life)	7	100 (7)			+	
Disengagement/Drop-out	3 —, 5 —, 16 —, 46?, 52 —, 53 —, 54 —	7		86 (6)	14 (1)	—	

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Table 2 (Continued)

Correlates	Reference numbers	No. of studies	Associations (%)				Sum code
			+	–	0	?	
Time passed after retirement	28+, 37+, 55+, 69+ 83+, 98/2*+, 121 +	7	100 (7)				+
Relationships with coach	22+, 46+, 49+, 62+, 76+, 114 +	6	100 (6)				+
Life changes	47–, 48–, 49–, 88–, 98/2* –	5		100 (5)			–
Balance of life while competing	39+, 40+, 49 +	3	100 (3)				+
Available resources during the career transition							
Coping strategies	5?, 6?, 10?, 15?, 35?, 52?, 55?, 59/2*?, 72?, 95?, 96?, 98/2*?, 105?, 113?, 115?, 118?, 120?, 121? Searching for new career/interest, 16+, 23+, 28+, 74+, 85+, 90 =, 91 =, 92+, 101+, 114+, 116+, 117+ Keeping busy, 9 =, 15 =, 47+, 66+, 92 =, 120 =	32	38 (12)		6 (2)	56 (18)	?
Pre-retirement planning	6+, 8+, 9+, 14+, 19+, 20 =, 22+, 24+, 26+, 32+, 35+, 38+, 40+, 43+, 45+, 64+, 65+, 66+, 68+, 76+, 77+, 79/2*+, 96+, 101+, 109+, 110+, 122+, 123+, 125 +	29	97 (28)		3 (1)		+
Psychosocial support	Emotion & esteem, 10+, 60+, 61 =, 66+, 70+, 79/1*+, 85+, 101+, 110+, 114+, Information, 31+, 70+, 98/2+, 121+, Social network, 13+, 48+, 77+, 87+, 88+, 117+, Tangible, 63+, 85+, Not identified (social support), 3+, 22+, 26+, 35?, 47+, 74+, 82 +	29 (<i>k</i> = 28)	92 (27)		4 (1)	4 (1)	+
Support programme involvement	2+, 35+, 36+, 57+, 81+, 89+, 97+, 107 +	8	100 (8)				+

Note: *k* = number of sample population.

*Same samples (59/1, 59/2, 59/3; 79/1, 79/2; 98/1, 98/2).

self-perceived body image, self-confidence, and self-worth) based on previous literature before being included (Murphy, 2009; Taylor & Ogilvie, 1994). Additionally, some studies examined multiple variables, and in these cases variables were listed separately in the summary table. Secondly, we examined the direction of association of the variables based on study findings. Each variable has its own relationship with athletes' career transition adjustment experiences, whether positive (+), negative (−), no association (0), or indeterminate (?). The last stage of the analysis was the determination of association for each variable through summarizing the state of each correlate by calculating the percentage of samples supporting the direction of association. The guidelines provided by Sallis et al. (2000) for labelling the association were used, which include 0–33% = no association, 34–59% = indeterminate or inconsistent and 60–100% = positive or negative association. Throughout the analysis process, the three authors had regular meetings to discuss the process of identifying correlates and categorizing the themes.

Results

General findings

A total of 139 studies met the inclusion criteria, and among them 13 were inaccessible and four were excluded because of a lack of information (e.g., sample characteristics, methods or findings). The remaining 122 study papers included 57 published journal articles, 23 published conference proceedings, four published book chapters and 38 dissertations. Among the 122 papers, four contained two independent samples (Alfermann, 1995; Fernandez, Stephan, & Fouquereau, 2006; Herman, 2002; Zaichkowsky, Lipton, & Tucci, 1997). A total of 122 papers were reviewed, and in a final bibliography table (Tables 1 and 2), 126 studies were listed. Among the 126 studies, 10 were published before 1990, 48 in the 1990s and 68 between 2000 and 2010.

Research design

Table 1 presents design and sample characteristics. Researchers have used qualitative (55), quantitative (56), or a combination of both (15) methods to examine athletes' career transition experiences. Three studies, which examined the effectiveness of athletes' support programme involvement, were conducted via experiments (Lavalée, 2005; Selden, 1997; Stankovich, 1998). Investigators used longitudinal designs in 13 studies and employed cross-sectional methods in 113 studies. Slightly over half of the studies (68) collected data via interviews and the rest (58) via questionnaires. The questionnaire used can be divided into three categories: (a) questionnaires developed for assessing athletes' career transitions (10); (b) instruments which examine general psychological variables (15); and (c) surveys developed for the purpose of the particular study (33). The most frequently used questionnaire was the Athletic Identity Measurement Scale (AIMS; Brewer, Van Raalte, & Linder, 1993), employed in nine studies (Blackburn, 2003; Fraser, Fogarty, & Albion, 2010; Grove, Lavalée, & Gordon, 1997; Herman, 2002; Lavalée, Gordon, & Grove, 1997; Selden, 1997; Shachar, Brewer, Cornelius, & Petitpas, 2004; Stronach & Adair, 2010; Zaichkowsky, King, & McCarthy, 2000).

Sample characteristics

The total number of participants was 13,511 and the range of sample sizes was between 1 and 1617. Across the samples, 1909 were current athletes, 51 were athletes' entourage (e.g., families and coaches), 219 were non-athletes and 11,332 were retired athletes. The number of studies with fewer than 50 participants was 71, and 36 studies were conducted with samples between 51 and 200. Eleven studies had samples between 201 and 500, seven studies examined over 500 participants and one was not identified because of a lack of information. Most studies (121) investigated athletes' career transition experiences or compared experiences between athlete and non-athlete groups, and five included both athletes and their entourages (Gilmore, 2008; Kane, 1991; Redmond, Gordon, & Chambers, 2007; Stambulova, 1994; Zaichkowsky et al., 2000). These five studies aimed to discover how athletes' families, coaches and administrators influence or are influenced by athletes' sport career termination.

Across the studies, 56 contained both genders, 38 contained male athletes only, 24 contained female athletes only and gender was unspecified in eight studies. The studies included a wide range of competitive levels, including student (32), club (7), professional (27) and elite/Olympic-level athletes (50). Mixed-level athletes were examined in six studies, two studies were conducted with disabled athletes and in two studies the level was not identified.

Researchers have examined team sports (36), individual sports (26) or a combination of both (59), and five did not report the type of sport. In 53 studies the athletes were aged between 16 and 26, in 21 studies athletes were aged between 27 and 40 and in five studies the athletes were over 40. A wide range of age groups (aged between 15 and 84) were examined in 17 studies, two studies were done with athletes aged under 16 and 28 studies did not report the age of participants. The majority of studies were conducted in Western countries (60 in North America, 45 in Europe and 10 in Australia). Three studies had been conducted in Asia and South America, and two studies had been done in the Middle East. One study existed with African athletes, and two studies did not identify where data originated.

Correlates and consequences of career transition

Slightly under half (55) of the studies investigated the psychological, emotional, social and physical consequences of athletes' retirement from sport. The other studies examined variables that influence the quality of athletes' career transition out of sport. Among the 13,511 participants, 11,332 (84%) of them had experienced termination from their sport and 1768 (16%) of them reported that their career transition experiences had accompanied adjustment difficulties or problems. In addition, the majority of studies (86) reported that some of their participants expressed career transition difficulties or negative emotions, including feelings of loss, identity crisis and distress, when they ended their career and adjusted to post-sport life (e.g., Baillie, 1992; Kerr & Dacyshyn, 2000; McKenna & Thomas, 2007). Four studies reported that the career transition process for athletes was neither a positive nor negative event for them (e.g., Alfermann, 1995; Johns, Lindner, & Wolko, 1990; Schwendener-Holt, 1994; Torregrosa, Sanchez, & Cruz, 2003).

We identified 63 correlates related to the quality of athletes' career transitions. These variables were reduced to 19 during the analysis and categorized into two

themes based on two existing models (e.g., Gordon, 1995; Taylor & Ogilvie, 1994): (a) factors related to the quality of career transition; and (b) available resources during the career transition.

Factors related to the quality of career transition

Table 2 shows the correlates and their directions associated with the quality of career transition. We identified 15 variables associated with the quality of athletes' career transitions, including athletic identity, demographical issues, voluntariness of retirement decision, injuries/health problems, career/personal development, sport career achievement, educational status, financial status, self-perception, control of life, disengagement/drop-out, time passed after retirement, relationship with coach, life changes and balance of life. These variables are presented below in the order of the number of studies that examined each of them.

Athletic identity

Athletic identity refers to self-identity in the sport domain (Brewer, Van Raalte, & Petitpas, 2000). A total of 35 independent studies demonstrated correlations between athletic identity and athletes' career transitions. Among them, 34 studies indicated that both a strong athletic identity and high tendency towards identity foreclosure were negatively associated with the quality of athletes' career transitions. These studies have revealed that the retired athletes experienced a loss of identity when they had a strong athletic identity at the time of their sport career termination (e.g., Kerr & Dacyshyn, 2000; Lally, 2007), and they needed a longer period of time to adjust to post-sport life (e.g., Grove et al., 1997; Warriner & Lavalley, 2008).

Demographical issues

Although 24 studies examined demographic differences between athletes at the time of career termination, such as gender, age, social status, type of sport, race, marital status, competitive levels and cultural or national factors, the overall association was indeterminate.

Four studies examined differences in adjustment to post-sport life between male and female athletes, and only one study (Stambulova, 2001) reported that female former athletes adapted to post-sport life more quickly than male former athletes. Studies conducted by Cecić Erpič, Wylleman, and Zupančič (2004) and Leung, Carre, and Fu (2005) indicated positive relationships between retired athletes' ages and experienced transition difficulties, but Chow (2001) and Gilmore (2008) reported that those who terminated their sport career at a younger age expressed higher career transition difficulties. Three studies reported that athletes' social status was positively related to the quality of their career transitions (Conzelmann & Nagel, 2003; Houlston, 1982; Koukouris, 1994). Three studies examined relationships between type of sport and transition difficulties, but no differences were found (Fernandez et al., 2006; Gilmore, 2008; Tate, 1993). Two studies, which demonstrated transitional differences between Caucasian student athletes and African American student athletes, showed opposite directions (Caucasian American athletes experienced more

transition difficulties [Lewis, 1997]; African American athletes experienced more transition difficulties [Perna, Zaichkowsky, & Bocknek, 1996]). Two studies assessed marital status (Fernandez et al., 2006; McKnight, 1996), and both showed that married athletes experienced a higher degree of perceived support from their partners and less difficulty in the transitional process. Two studies showed that competitive level is positively related to financial and occupational adjustment (Gilmore, 2008; Leung et al., 2005).

In cross-national comparisons among European countries, three studies reported some differences, such as age of career termination, athletic career satisfactions and use of coping strategies. Researchers, however, concluded that athletes' degree of athletic identity and pre-retirement planning had more influence on the quality of their career transitions than their nationalities or cultural differences (Alfermann, Stambulova, & Zemaityte, 2004; Schmidt & Hackfort, 2001; Stambulova, Stephan, & Jäphag, 2007). Huang (2002) examined cultural differences between Chinese and German elite-level athletes' career transition experiences. The study reported differences in several areas of post-sport life, including involvement in sport after retirement (more Germans involved in sport) and current occupations (more Chinese working in sport fields), but no significant differences were found in age of career termination and perspective of sport career termination.

Voluntariness of retirement decision

Voluntariness of retirement decision can be explained as the degree of control athletes have over their decision to retire. The variable has been examined in 21 studies, with 18 indicating a positive association with the quality of career transition and three finding no relationship. Studies (7) with athletes who experienced forced retirement found that participants experienced high levels of negative emotions, such as fear of a social death or dying (Blinde & Stratta, 1992; Fortunato & Marchant, 1999; Zaichkowsky et al., 2000), a sense of betrayal and social exclusion (McKenna & Thomas, 2007) and a loss of identity (Butt & Molnar, 2009; Lotysz & Short, 2004; Lynch, 2006).

Injuries/health problems

Ten out of 11 studies found that injuries and health issues were sources of transitional difficulties for retired athletes (e.g., Gilmore, 2008; Kadlcik & Flemer, 2008; Muscat, 2010). Injuries and health problems were negative factors for retired athletes wishing to move towards post-sport life, and the participants who had physical problems needed longer periods of time to adjust after entering post-sport life (e.g., Werthner & Orlick, 1986). In addition, retired athletes' physical condition was one of the most immediate concerns for the quality of their post-sport lives, and some athletes expressed difficulties in dealing with post-sport life because of their physical pains (Gilmore, 2008; Hughes, 1990). In contrast, Perna, Ahlgren, and Zaichkowsky (1999) did not find any relationship between former collegiate athletes' injuries and their long-term life satisfaction.

Career/personal development

All nine studies that examined vocational and life skills development indicated positive associations with the quality of athletes' career transitions. Former professional athletes showed difficulties in dealing with non-sporting situations, and they experienced delayed identity shifts because of a lack of non-sporting life experiences during their sport careers (Kane, 1991; Muscat, 2010). Educational involvement and career planning were also positively associated with post-sport life adjustment among college athletes (Lantz, 1995), and athletes attributed their limitation of life choices after sport career termination to a lack of personal development (Chow, 2001; Stronach & Adair, 2010; Swain, 1991).

Sport career achievement

The number of studies measuring sporting goal achievement was nine, and all of them reported a positive correlation with the quality of career transition. Retired athletes who had succeeded in their sport showed stable levels of self-identity, self-esteem and global self-concept, and fewer occupational difficulties (Cecić Erpić et al., 2004). In contrast, those who had not achieved their expected sporting goals expressed a high degree of psychosocial difficulties, such as loneliness, missing people related to sport and difficulty in organizing their post-sport lives, including taking a longer period to adjust to post-sport life and having negative evaluations of their adaptation process (Chow, 2001; Koukouris, 1994). Additionally, Sinclair and Orlick (1993) revealed that those who achieved more in their sport showed a higher satisfaction in post-sport life.

Educational status

All eight studies that examined educational status reported positive correlations with the quality of athletes' career transitions. Athletes reported that their educational progress was negatively influenced by their sport career, and low educational attainment was related to vocational difficulties during the career transition process (Marthinus, 2007; Stronach & Adair, 2010). In addition, athletes' educational and college graduation status influenced both short-term and long-term adjustment after retirement (e.g., Williams, 1991).

Financial status

Financial status has been reported in eight studies, and all indicated positive associations with the quality of career transition for former athletes. The studies found that some former athletes experienced financial problems, which caused transition difficulties and limited their post-sport life choices (e.g., Lotysz & Short, 2004; Menkenhorst & Van Den Berg, 1997).

Self-perception

Self-perception incorporated athletes' perceived body image, self-confidence and self-worth. Eight studies discovered a positive correlation between self-perception and

the quality of athletes' career transitions. Five studies revealed that athletes' body image can be influenced by their retirement and their negative perceptions of their body can be a source of distress during the career transition process (Kerr & Dacyshyn, 2000; Lavalley & Robinson, 2007; Sparkes, 1998, Stephan, Bilard, Ninot, & Delignières, 2003a, 2003b; Stephan, Torregrosa, & Sanchez, 2007). In addition, findings indicated that athletes' feelings of loss of control over their bodies can be sources of identity crisis during the career transition process (Sparkes, 1998). Three studies discussed athletes' perceived self-worth and self-confidence (Missler, 1996; Newell, 2005; Stephan et al., 2003a). Missler's (1996) study suggested that gaining self-worth without sport performance was positively related to former golfers' quality of career transition. Stephan et al. (2003a) revealed that former Olympians showed a significantly lower mean physical self-worth and self-perceived physical strength than active athletes. Newell (2005) indicated that retired athletes who had high self-confidence also showed positive perspective on their post-sport career in terms of self-belief in their abilities to achieve new career goals.

Control of life

Control of life refers to athletes' perceived autonomy and power over their decisions while competing and during the career transition process. Seven studies examined control of life, and all of them indicated that athletes who had less control over their life expressed more negative emotions during the transition process than those who had more control (e.g., Kane, 1991; Kerr & Dacyshyn, 2000). College athletes who showed more control over their lives had greater self-esteem, higher life satisfaction and were more positive about the future (Webb, Nasco, Riley, & Headrick, 1998). Some athletes attributed their forced retirement and negative emotional experiences during the career transition to unbalanced power in their sporting system, which they could not control (Blinde & Stratta, 1992; Parker, 1994).

Disengagement/drop-out

Koukouris (1991, 1994, 2001) applied the term 'disengagement' to examine Greek adolescent and young adult athletes' drop-out experiences, and four other studies (Alfermann, 1995; Alfermann & Gross, 1997; Butt & Molnar, 2009; Johns et al., 1990) also explored athletes' drop-out experiences. Drop-out refers to the premature sport career termination among young athletes before they reach their full potential (Alfermann, 1995). Findings indicated that athletes who dropped out mostly terminated their sport careers voluntarily. The decision might have been premature and related to lack of control over their situation and decisions (e.g., anticipation of deselection, conflicts with coaches [Butt & Molnar, 2009; Koukouris, 1994]). Feelings of failure, therefore, can be sources of career transition difficulties (Alfermann, 1995; Butt & Molnar, 2009). For this reason, researchers have distinguished 'drop-out' from the term 'retirement' (e.g., Alfermann, 1995; Wylleman et al., 2004).

Among seven studies examining athletes' disengagement/drop-out, six indicated a negative association between disengagement/drop-out experiences and the quality of career transition, and one showed no association with the quality of career transition. Alfermann's (1995) and Alfermann and Gross's (1997) studies reported that some athletes who dropped out from their sport experienced identity problems

and negative emotions, and they also used more passive coping strategies than those who experienced retirement from sport. Butt and Molnar (2009) revealed that athletes who dropped out expressed a loss of social networks similar to retired athletes, but they also reported feelings of rejection from former friends who were still in sport teams. Transition difficulties were found among disengaged athletes in Koukouris's (2001) study as well. The study highlighted that athletes' disengagement from sport could lead to social, psychological and medical difficulties during their post-sport life adjustment. In contrast, Johns et al. (1990) showed that young gymnasts who dropped out from the sport perceived their sport career termination in both positive and negative terms, including changes in social relationships and lifestyles.

Time passed after retirement

Seven studies reported positive associations between time passed after retirement and former athletes' perception of the quality of their adjustment to their post-sport life. Five of those seven studies used a longitudinal design, and the results revealed that retired athletes perceived fewer transition difficulties over time (Douglas & Carless, 2009; Lally, 2007; McKenna & Thomas, 2007; Stephan et al., 2003b; Wippert & Wippert, 2008). Stephan et al. (2003b) found that post-sport life adjustment difficulties reduced as time passed, and in the other studies the participants started to experience a balance in their lives after 18 months of their sport career ending (Douglas & Carless, 2009; McKenna & Thomas, 2007). Lally (2007) reported that athletes appeared to have new roles and identities a year after sport career termination. Wippert and Wippert (2008) also revealed that retired athletes' self-perceived stress levels significantly declined three months following the end of their career, compared to after 10 days of retirement.

Relationship with coach

All six studies that investigated coach–athlete relationships revealed that conflict between both could be a source of athletes' career transition difficulties. Retired athletes who did not have a good relationship with their coach expressed more difficulties during the career transition process (Chow, 2001; Kerr & Dacyshyn, 2000; Muscat, 2010) and the participants in the studies blamed their coaches for an unsatisfying retirement (Lavalley & Robinson, 2007). The studies also indicated that unbalanced power between coaches and athletes and an unpleasant coach–athlete relationship were associated with injury or disengagement from sport (Johns et al., 1990; Werthner & Orlick, 1986).

Life changes

Life changes refer to changes in lifestyles and daily routines (Stephan et al., 2003a). Five studies indicated that changes in former athletes' lives had negative associations with the quality of career transition among retired athletes. Former athletes reported feelings of anxiety associated with their new routines and feelings of being lost resulting from no more competition and training (Kerr & Dacyshyn, 2000; Schwenk,

Gorenflo, Dopp, & Hipple, 2007). In addition, accepting a new lifestyle was one of the transitional difficulties for athletes (Stephan et al., 2003b).

Balance of life while competing

A total of three studies reported positive correlations between the balance of sporting and non-sporting lives prior to retirement and the quality of career transition. Harrison and Lawrence (2003, 2004) found that student athletes perceived balancing academic and athletic activities during their sport participation as a significant predictor for post-sport life adjustment. Kerr and Dacyshyn (2000) revealed that retired gymnasts who had found the right balance between sporting and non-sporting lives during their athletic careers reported higher life satisfaction after their retirement compared with those who did not have a balanced life while competing.

Available resources during the career transition

We examined four correlates in the available resources category with respect to the quality of athletes' career transitions, including coping strategies, pre-retirement planning, psychosocial support and support programme involvement.

Coping strategies

A total of 32 studies examined the frequency of coping strategy used during the career transition process and found no clear evidence that certain strategies are more effective than others, except for searching for new careers or interests. Additionally, studies have shown that finding new careers or interests was closely related to identity shift processing because of role changes following the end of a sport career (e.g., Kerr & Dacyshyn, 2000; Lally, 2007). Six studies reported that athletes employed keeping themselves busy as a way of coping. Furthermore, results from two studies revealed that keeping busy during the career transition period was one of the beneficial coping strategies for athletes to reduce career transition difficulties (Kadlcik & Flemr, 2008; Lotysz & Short, 2004).

Searching for psychosocial support and getting support from others (29 studies: e.g., Barners, 2002; Gilmore, 2008; Lotysz & Short, 2004; Schwenk et al., 2007; Stephan et al., 2003b) have been reported more than other coping strategies among retired athletes. Other coping strategies include searching for new careers or interests (12 studies: e.g., Butt & Molnar, 2009; Clemmet, Hanrahan, & Murray, 2010; Douglas & Carless, 2009; Shachar et al., 2004; Sinclair & Orlick, 1993), avoidance/denial (six studies: Alfermann et al., 2004; Barners, 2002; Grove et al., 1997; Lally, 2007; Stambulova et al., 2007; Weiss, 1992), keeping busy (six studies: Barners, 2002; Brandão et al., 2001; Kadlcik & Flemr, 2008; Lotysz & Short, 2004; Sinclair & Orlick, 1993; Winterstein et al., 2001) and acceptance (five studies: Alfermann et al., 2004; Grove et al., 1997; Stambulova, 2001; Tinley, 2002; Weiss, 1992).

Some researchers (e.g., Grove et al., 1997) attempted to investigate associations between certain variables (e.g., athletic identity, nationality) and the use of coping strategies. Grove et al. (1997) reported that higher athletic identity was positively associated with the use of denial, venting emotions and searching for social support.

Alfermann and Gross (1997) discovered that athletes who dropped out from their sports used more passive ways of coping than retired athletes who did not drop out from their sport. Stambulova et al. (2007) found that French former athletes used a denial strategy more than Swedish former athletes. In addition, six studies noted maladaptive coping strategies among retired athletes, such as alcohol dependence, increased smoking, committing suicide or drug use (Douglas & Carless, 2009; Koukouris, 1991; Mihovilovic, 1968; Schwenk et al., 2007; Sinclair & Orlick, 1993; Wippert & Wippert, 2008).

Pre-retirement planning

Pre-retirement planning included vocational, psychological and financial considerations following the end of a sport career. Twenty-nine studies described pre-retirement planning as a variable, and 28 of them reported that it was positively associated with the quality of athletes' career transitions. Planning for post-sport life included psychological preparation before sport career end, and having a clear goal outside of sport gave retired athletes a feeling of comfort (e.g., Warriner & Lavallee, 2008; Young, Pearce, Kane, & Pain, 2006). Pre-retirement planning was also related to former athletes' vocational adjustment to post-sport life (Coakley, 2006), and financial planning was one of the influential factors in the quality of athletes' post-sport life adjustment (Fortunato & Marchant, 1999).

Psychosocial support

Psychosocial support incorporated all kinds of support from non-sporting (e.g., spouses, families, friends and significant others) and sporting sources (e.g., coaches, trainers and teammates). Investigators have reported various kinds of psychosocial support, including emotional, esteem, information, network and tangible support. Among 29 studies, 27 reported that support from others had a positive influence on the quality of career transition. The results showed that being supported by close others eased transition difficulties during the post-sport adjustment period (Alfermann, 1995; Werthner & Orlick, 1986; Young et al., 2006). Participants in two studies (McKnight, 1996; Schmid & Seiler, 2003) discussed more than one kind of psychosocial support (i.e., emotional, information and tangible) and seven studies did not specify the kind of support that participants had received from close others.

Among 29 studies, 10 reported the value of emotion and esteem support for athletes' career transitions. Emotion and esteem support included encouragement and help for emotional challenges through storytelling, account making and mentoring. Studies revealed that greater amounts of account making were related to decreases in athletic identity, and completion of account-making procedures was associated with greater overall success in coping with retirement (Barners, 2002; Lavallee, Gordon, & Grove, 1997). Studies that examined mentoring effectiveness found that higher mentoring scores were positively associated with intimacy levels among athletes and athletes' demands of mentoring during the career transition process (Lavallee, Nesti, Borkoles, Cockerill, & Edge, 2000; Perna et al., 1996).

Information support has been examined by four studies and included supportive transition (i.e., providing information prior to a transition [Fernandez et al., 2006; Wippert & Wippert, 2008]) and information from organizations, former teammates

and coaches during the career transition (McKnight, 1996; Stephan et al., 2003b). Fernandez et al. (2006) and Wippert and Wippert (2008) discovered that athletes who had been given pre-retirement information from coaches or trainers before being cut from the team expressed fewer transition difficulties or negative emotions during the career transition process compared to those who did not receive the information. Results from McKnight's (1996) study showed that the recognition of guidance on post-sport life or preparation within organizational policies was positively associated with athletes' career transitions, and participants from Stephan et al. (2003b) perceived teammates' and coaches' support during career transition as helpful for post-sport adjustment.

Six studies reported that social networks played an important role in athletes' career transitions. Studies revealed that a loss of social networks after a sport career termination was one career transition difficulty (e.g., Kane, 1991), and athletes who experienced less difficulty in career transition had a stronger social support network (Schwendener-Holt, 1994).

Tangible support was discussed in two studies (Leung et al., 2005; Schmid & Seiler, 2003). The study by Leung et al. (2005) showed that tangible support from national organizations mediates the quality of athletes' career transitions, and participants who had such opportunities when seeking a career after retiring from sport (e.g., funding) experienced a relatively healthier transition than athletes who did not receive organizational support. Schmid and Seiler (2003) revealed that tangible support from athletes' close others was positively related to successful transitions.

Support programme involvement

Eight studies indicated positive associations between athletes' support programme involvement and their life skills development and the quality of career transition. Albion (2007) and Redmond et al. (2007) evaluated the effectiveness of the Athlete Career and Education (ACE) programme in Australia and found that the programme helped athletes become less inclined towards identity foreclosure and increased motivation to make career decisions. Gilmore (2008) examined Scottish former athletes in a performance lifestyle programme and found that they perceived job seeking and interview skills development as useful institutional support. Four studies examined college student athletes' support programme involvement and revealed that the programme helped them to develop their life skills, including leadership skills, decision-making, career planning and communication skills (Godard, 2004; Selden, 1997; Stankovich, 1998; Torregrosa, Mateos, Sanchez, & Cruz, 2007). Lavalley (2005) revealed that providing Life Development Interventions (LDI; Danish, Petitpas, & Hale, 1992) had a positive influence on athletes' career transition experiences because it helped them to develop appropriate coping skills.

Discussion

The present study aimed to provide a systematic review of athletes' career transition out of sport. A total of 126 studies met the inclusion criteria, and results demonstrated that the study area has been growing steadily. Investigators have used both qualitative and quantitative methods, and the number of studies that

employed longitudinal designs has increased since 1990. A wide range of competitive levels, both genders and various types of sports have been examined. The current review identified 19 variables related to the quality of athletes' career transitions, and the correlates were categorized into two themes: factors related to career transition (e.g., athletic identity, voluntariness of decision and degree of individual development) and available resources during the career transition (e.g., coping strategies, psychosocial support and pre-retirement planning).

Lavallee et al. (2000) reported 80 independent sample studies in their review, and the present review found 126 studies, showing that the study area has grown significantly over the past 10 years. The findings from the current review also revealed that studies conducted via qualitative methods (44% compared with 29% reported by Lavallee et al., 2000), with female athletes (19% compared with 11% in 2000) and with participants from non-Western regions (nine studies compared with no studies in 2000) have increased gradually over the past decade. These results can be interpreted as a diversification of the methodologies used and a broadening of sample populations in the study area.

Early reviews (e.g., Baillie & Danish, 1992; Crook & Robertson, 1991) pointed to the importance of individual development, self-identity, voluntariness of retirement and social support in the career transition process. The current review supports the significance of these factors. Indeed, to review existing studies from the early stages up to 2010 made it possible to examine changes in research trends. As Wylleman et al. (2004) highlighted, in the early stages of investigation researchers focused on causes and consequences of athletes' retirement and then moved on to identify predictors for the quality of athletes' career transitions. Since then, researchers have also refined well-known variables (e.g., athletic identity) and have examined a broader range of correlates. For example, a number of previous studies (e.g., Sparkes, 1998) discussed athletes' identity shift after leaving their sport, but a more recent longitudinal study (Lally, 2007) revealed that athletes experience decreases in athletic identity in the latter stages of their sport career, not just after actually retiring. These findings from longitudinal studies (Lally, 2007; Stephan et al., 2003a) have documented detailed changes in athletes' perceptions and attitudes through the career transition process, including the latter stages of their sport careers and post retirement. They have also made recommendations for how to support athletes not just in terms of the kind of support they need, but also when this support should be provided.

Although previous literature has highlighted the importance of social support in athletes' career transition experiences (e.g., Baillie & Danish, 1992), past reviewers have typically not stratified research according to specific kinds of support. Social support is conceptualized in many different ways across psychology. Recently, in sport and performance psychology, Murphy (2009) introduced five types of social support (emotional, esteem, information, network and tangible), which help interpret existing data. Some researchers (e.g., Curtona & Russell, 1990) have claimed that certain forms of social support (e.g., tangible, emotional) may have more beneficial influence on specific kinds of stress (e.g., losses, transitions) than others. Therefore, identifying types of social support and examining the forms of support athletes received during the career transition out of sport may help practitioners design appropriate social support-based interventions.

This review has several limitations. Only English language studies were included. During the search process four foreign language studies (two Chinese [Liu & Li, 2007; Wang, 2008] and two Korean [Chung, 2010; Hong, 2010]) were excluded. The exclusion of these non-English studies might influence sample characteristics (e.g., location of study) and lead to the omission of potential correlates, such as cultural or sport system-related issues. Finally, the review could not present all examined correlates individually, due to limited space. In line with previous and accepted guidelines (Goodger et al., 2007; Sallis et al., 2000), correlates with fewer than three individual studies were either grouped into similar predictors during the analysis process or dropped from the summary table. Providing categories with conceptually similar variables might lead to more robust results in terms of suggesting directions for examining similar correlates.

Based on previous findings, several future research directions can be identified. There has been a growing body of interest in the development of conceptual models in athletes' career transitions, but these models have not been systematically tested. Only one doctoral dissertation, for example, examined Taylor and Ogilvie's (1994) model (Coakley, 2006), and one study developed theories through the grounded theory method (Torregrosa, Boixadós, Valiente, & Cruz, 2004). Testing available models and developing sport-specific theoretical frameworks might help researchers to clarify the conceptualization of athletes' career transition out of sport.

In terms of research design, the majority of investigators have employed retrospective data collection methods, and many of them have noted memory and recall bias as a limitation (e.g., Kerr & Dacyshyn, 2000; Lavalley & Robinson, 2007). Employing prospective longitudinal research designs to study athletes' career transitions might allow researchers to examine the dynamic processes over time. Therefore, more prospective longitudinal studies are needed in the study area.

Nearly half of the studies used a qualitative research method, and most researchers employed individual interviews for data collection and thematic analysis of transcripts. Investigators analysed data in different ways, including interpretative phenomenological analysis (e.g., Warriner & Lavalley, 2008) and narrative analysis (e.g., Gearing, 1999), yet there are more ways to explore athletes' career transition phenomena from a qualitative perspective. Since various types of research designs provide different methodological advantages and limitations, we recommend future researchers build upon this research by employing diverse methods, including focus groups, case studies and action research methods.

Several investigators (e.g., Cecić Erpič, 2000; Lavalley & Wylleman, 1999) have developed measurement tools to investigate athletes' career transitions, but these available questionnaires have not been validated with a range of samples. Further validation research of the questionnaires may assess their utility in athlete populations.

The results from the present review showed that there are many different variables that influence the quality of athletes' career transition adjustment. Since findings revealed that coach–athlete relationships (e.g., Chow, 2001; Lavalley & Robinson, 2007) and athletes' physical health (e.g., Gilmore, 2008) were positively associated with the quality of athletes' career transitions, employing relevant issues from other study areas (e.g., burnout, coach–athlete relationships and injury) may help to explain the multidimensional aspect of the career transition process.

Regarding sample characteristics, although several studies have attempted to discover demographic differences, such as gender, age, types of sport and marital status, no consistent evidence has been found except for a positive association between marital, social, educational and financial status and the quality of career transition (e.g., Lotysz & Short, 2004; Marthinus, 2007). Research findings across studies have indicated that athletes who are of different ages during their career transitions showed different needs post sport career, because of diversities in individual development stages and life plans. For example, studies with student athletes who terminated their sport career in their teens or early 20s showed that they often chose to become students rather than find employment (e.g., Lally, 2007; Lavalley & Robinson, 2007). In contrast, the majority of professional or elite-level athletes who retired in their late 20s or 30s made a transition into the world of work (e.g., Lavalley, Gordon, & Grove, 1996; Marthinus, 2007). Some studies (e.g., Allison & Meyer, 1988) did not report specific details of sample characteristics (e.g., age, type of sport), and only four studies examined athletes from more than one country in order to identify cultural or social differences in the quality of their career transitions (i.e., Alfermann et al., 2004; Schmidt & Hackfort, 2001; Stambulova et al., 2007; Wheeler et al., 1999). Examining differences in demographic variables might help practitioners to provide appropriate support for each athlete, whether the differences are based on individual factors (e.g., age, gender) or environmental factors (e.g., culture, sport context). Future research needs to focus on examining sport-specific or life span and age-related issues in the quality of career transitions.

As Stambulova, Alfermann, Statler, and Côte (2009) noted, athletes' career transition studies have been conducted mainly in European countries, North America and Australia. Findings from the current review confirmed this trend and revealed that eight out of nine studies from non-Western countries (i.e., Africa, Asia, the Middle East and South America) were conducted between 2001 and 2007. We agree with Stambulova and Alfermann (2009), who have called for more cultural studies in the career transition area, in terms of investigating the influence of sport systems and environmental contexts on the quality of athletes' career transitions. Moreover, as several researchers have suggested (Berry, Poortinga, Segall, & Dasen, 2002; Si & Lee, 2007), investigating cultural similarities and differences could assist in testing the generality and validity of existing knowledge and theories and lead to practical implications, such as providing suitable and appropriate support in applied work.

Few studies mentioned the importance of the decision-making process for post-sport life adjustment (e.g., Cecić Erpič, 2007b; Kirby, 1986; McPherson, 1980). Kerr and Dacyshyn (2000) indicated that the sport career termination decision-making process is multifaceted and complex. Athletes' sport career termination decision-making processes usually occur over an extended period of time (Kerr & Dacyshyn, 2000) and are considered different from retirement itself (Kirby, 1986). Recently, investigators have tried to specify aspects of the decision-making process, both athletic and non-athletic elements, that lead to sport career termination (Cecić Erpič et al., 2004), and the (anti-)pull or (anti-)push factors related to sport career retirement decision making (Fernandez et al., 2006). According to Fernandez et al. (2006), a better understanding of the retirement decision-making process is useful for applied work, when practitioners assist athletes who are planning for post-sport life.

Numerous authors (e.g., Taylor & Ogilvie, 1994) have discussed intervention strategies to support athletes' career transitions. However, only one published study (Lavalley, 2005), three published conference proceedings (Albion, 2007; Redmond et al., 2007; Torregrosa et al., 2007) and four dissertations (Gilmore, 2008; Goddard, 2004; Selden, 1997; Stankovich, 1998) have tested the effectiveness of a specific intervention strategy or programme for supporting athletes' career transition out of sport. In order to evaluate the effectiveness of interventions, further research is required into whether specific psychological interventions can assist practitioners in supporting athletes in transitions. For example, although researchers have frequently examined coping strategies employed by athletes during the career transition process, no study has been conducted on how sport psychologists can support athletes in developing effective coping strategies.

None of the previous reviews divided the voluntariness of the retirement decision and disengagement/drop-out factors into different categories. However, the current review supports the suggestion by Wylleman et al. (2004) to separate the two factors, in terms of differences in the processes between athletes' voluntariness of retirement decisions and disengagement/drop-out issues. The processes involved in disengagement and dropping out from sport participation are non-normative and occur without individuals' intention, but they are still different from forced retirement. Disengagement and drop-out processes are not as uncontrollable as forced sport career termination because athletes often have a choice to continue or stop their sports career (e.g., Piffaretti, Schnyder, Mahler, Barbat, & Keller, 2003). In addition, findings have suggested that disengagement/drop-out can be related to burnout (Smith, 1986). Research examining disengagement/drop-out and forced retirement might extend knowledge on outcomes of specific transitions.

Several practical implications for sport psychologists, advisors working with athletes in transition and sport organizations emerged from the present review. The findings provided positive associations between the quality of athletes' career transitions and athletes' programme involvement. In addition, results from longitudinal studies (e.g., Douglas & Carless, 2009; Lally, 2007) indicated that athletes showed changes in their degree of athletic identity and required certain periods of time to adjust to their post-sport lives. Therefore, to assist athletes' career transitions, practitioners need to provide athletes with both proactive (e.g., career planning, education in transferable skills) and reactive support (e.g., coping with emotions, supporting the identity reformation process) programmes to help them prepare for their career transition out of sport and to adjust to post-sport lives.

Findings indicated that coach–athlete relationships influenced the quality of athletes' career transitions, in terms of coaches' influences on athletes' retirement decision making and athletes' expectations for coaches' support (e.g., Chow, 2001). Practitioners may need to examine coach–athlete relationships and consider using coaches' support to assist athletes' career transitions.

Studies (e.g., Alfermann, 1995) revealed that dropping out from sport without reaching their full potential could lead young athletes to feel like failures and require special attention. Practitioners may need to employ different kinds of assistance to support these young athletes as they withdraw from their sport, such as helping them to reduce feelings of failure or self-disappointment through building positive self-image and self-confidence.

Researchers (e.g., Albion, 2007; Lavallee, 2005) revealed that many athletes did not participate or use career transition intervention programmes even if they had opportunities to receive such services. Previous literature (e.g., Petitpas, Danish, McKelvain, & Murphy, 1992) also highlighted athletes' resistance to such programmes while actively competing and attributed this attitude to their perception that involvement would be a distraction from their sport performance. For active athletes with negative perceptions regarding support programme involvement, practitioners need to provide education related to the importance of pre-transition planning and life skills development.

Conclusion

Research in the area of career transitions in sport has increased gradually over time, as reflected in the growing number of studies and reviews. The investigations to date have contributed to a better understanding of the athletic career transition process, but further research is needed. This systematic review reported the current status of athletes' career transition study and also highlighted limitations in its knowledge. In addition, the present review suggested several future directions, including diversification in research design (e.g., employing longitudinal designs), sample characteristics (e.g., examining demographical differences), correlates (e.g., discovering roles of coach–athlete relationships in career transitions) and practical implications (e.g., providing proactive intervention).

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References

- Agresta, M.C., Regina, M., Brandão, F., De Paula, S.C., & Rebutini, F. (2003, July). *The problem of the sport career termination*. Paper presented at the 11th European Congress of Sport Psychology, Copenhagen, Denmark. Retrieved from http://www.ktn.gv.at/24078_DE-PDF-Abstractband_FEPSAC.pdf
- Albion, M.J. (2007, September). *Restoring the balance: Women's experiences of retiring from elite sport*. Paper presented at the International Women's Conference: Education, Employment and Everything...the Triple Layers of a Woman's Life, Toowoomba, Queensland, Australia. Retrieved from <http://eprints.usq.edu.au/3447/>
- Alfermann, D. (1995, July). *Career transitions of elite athletes: Drop-out and retirement*. Paper presented at the 9th European Congress of Sport Psychology, Brussels, Belgium.
- Alfermann, D., & Gross, A. (1997, July). *Coping with career termination: It all depends on freedom of choice*. Paper presented at the 9th World Congress of Sport Psychology, Netanya, Israel.
- Alfermann, D., Stambulova, N., & Zemaityte, A. (2004). Reactions to sport career termination: A cross-national comparison of German, Lithuanian, and Russian athletes. *Psychology of Sport and Exercise*, 5, 61–75. doi: 10.1016/S1469-0292(02)00050-X
- Allison, M.T., & Meyer, C. (1988). Career problems and retirement among elite athletes: The female tennis professional. *Sociology of Sport Journal*, 5, 212–222.
- Archer, D.E. (2010). *Preparing for exit from sport: A phenomenological examination of the pre-transition experiences of division I female intercollegiate athletes* (Doctoral dissertation). Retrieved from ProQuest Dissertations and Theses Database (ProQuest document ID: 3422257).

- Baillie, P.H.F. (1992). *Career transition in elite and professional athletes: A study of individuals in their preparation for and adjustment to retirement from competitive sports* (Doctoral dissertation). Retrieved from ProQuest Dissertations and Theses Database (ProQuest document ID: 746766031).
- Baillie, P.H.F., & Danish, S.J. (1992). Understanding the career transition of athletes. *The Sport Psychologist*, 6, 77–98.
- Barners, C.J. (2002). *The retirement experiences of female collegiate team sport athletes* (Doctoral dissertation). Retrieved from ProQuest Dissertations and Theses Database (ProQuest document ID: 727429271).
- Beamon, K.K. (2007). *The league or the grind: A sociological examination of the post-collegiate experience of African-American male athletes* (Doctoral dissertation). Retrieved from ProQuest Dissertations and Theses Database (ProQuest document ID: 1283968571).
- Berry, J.W., Poortinga, Y.H., Segall, M.H., & Dasen, P.R. (2002). *Cross-cultural psychology: Research and applications* (2nd ed.). New York: Cambridge University Press.
- Blackburn, J.Z. (2003). *A cross-sectional comparison of college athletes and nonathletes on factors of career exploration, academic motivation, and ego identity status: Implications for sport retirement research* (Doctoral dissertation). Retrieved from ProQuest Dissertations and Theses Database (ProQuest document ID: 765220741).
- Blæsild, K., & Steler, R. (2003, July). *Psychological and social consequences of career transition out of professional football – A multiple case study*. Paper presented at the 11th European Congress of Sport Psychology, Copenhagen, Denmark. Retrieved from http://www.ktn.gv.at/24078_DE-PDF-Abstractband_FEPSAC.pdf
- Blinde, E.M., & Stratta, T.M. (1992). The 'sport career death' of college athletes: Involuntary and unanticipated sports exits. *Journal of Sport Behavior*, 15, 3–20.
- Brandão, M.R.F., Winterstein, P., Pinheiro, C., Agresta, M., Akel, M.C., & Martini, L. (2001, May). *Career transitions of former Brazilian top level athletes*. Paper presented at the 10th World Congress of Sport Psychology, Skiathos, Hellas, Greece.
- Brewer, B.W., Van Raalte, J.L., & Linder, D.E. (1993). Athletic identity: Hercules' muscles or Achilles heel? *International Journal of Sport Psychology*, 24, 237–254.
- Brewer, B.W., Van Raalte, J.L., & Petitpas, A. (2000). Self-identity issues in sport career transitions. In D. Lavalley & P. Wylleman (Eds.), *Career transition in sport: International perspectives* (pp. 29–48). Morgantown, WV: Fitness Information Technology.
- Butt, J., & Molnar, G. (2009). Involuntary career termination in sport: A case study of the process of structurally induced failure. *Sport in Society*, 12, 240–257. doi: 10.1080/17430430802591027
- Cecić Erpič, S. (2000). *Konec vrhunske športne kariere in napoved prilagoditve na pošportno življenje* [Elite sports career transition and prediction of the adaptation to the post-sports life] (Unpublished doctoral dissertation). University of Ljubljana, Slovenia.
- Cecić Erpič, S. (2003, July). *Sport career transition phase: An entity or a sum of sub-phases?* Paper presented at the 11th European Congress of Sport Psychology, Copenhagen, Denmark. Retrieved from http://www.ktn.gv.at/24078_DE-PDF-Abstractband_FEPSAC.pdf
- Cecić Erpič, S. (2007a, September). *Qualitative study of an early retirement from competitive sport: Preliminary results*. Paper presented at the 12th European Congress of Sport Psychology, Halkidiki, Greece. Retrieved from www.fepsac.com/index.php/download_file/-/view/49
- Cecić Erpič, S. (2007b, September). *Sport career counseling: Is step back in the career always a bad decision?* Paper presented at the 12th European Congress of Sport Psychology, Halkidiki, Greece. Retrieved from www.fepsac.com/index.php/download_file/-/view/49
- Cecić Erpič, S., Wylleman, P., & Zupančič, M. (2004). The effect of athletic and non-athletic factors on the sports career termination process. *Psychology of Sport and Exercise*, 5, 45–59. doi: 10.1016/S1469-0292(02)00046-8
- Chamalidis, P. (1997, July). *Identity conflicts during and after retirement from top-level sports*. Paper presented at the 9th World Congress of Sport Psychology, Netanya, Israel.
- Chow, B.C. (2001). Moving on? Elite Hong Kong female athletes and retirement from competitive sport. *Women in Sport and Physical Activity Journal*, 1, 47–81.

- Chung, J.H. (2010). In research of women's national basketball team players' perception of retirement. *Korean Journal of Sport Science*, 21, 1051–1069.
- Clemmet, S., Hanrahan, S., & Murray, J. (2010). Transition out of sport: An examination of the loss of athletic careers. *Journal of Science and Medicine in Sport*, 12, e232. doi:[10.1016/j.jsams.2009.10.228](https://doi.org/10.1016/j.jsams.2009.10.228)
- Coakley, S.C. (2006). *A phenomenological exploration of the sport-career transition experiences that affect subjective well-being of former National Football League players* (Doctoral dissertation). Retrieved from ProQuest Dissertations and Theses Database (ProQuest document ID: 1264617981).
- Conzelmann, A., & Nagel, S. (2003). Professional careers of the German Olympic athletes. *International Review for the Sociology of Sport*, 38, 259–280. doi: [10.1177/10126902030383001](https://doi.org/10.1177/10126902030383001)
- Craig, P., Dieppe, P., Macintyre, S., Michie, S., Nazareth, I., & Petticrew, M. (2008). Developing and evaluating complex interventions: The new Medical Research Council guide. *British Medical Journal*, 337, a1655. doi:[10.1136/bmj.a1655](https://doi.org/10.1136/bmj.a1655)
- Cramer-Hamman, B. (1994). *Predicting successful adjustment to disengagement from collegiate athletes* (Unpublished master's thesis). University of North Carolina Chapel Hill, NC.
- Crook, J.M., & Robertson, S.E. (1991). Transitions out of elite sport. *International Journal of Sport Psychology*, 22, 115–127.
- Curtis, J., & Ennis, R. (1988). Negative consequences of leaving competitive sport? Comparative findings for former elite-level hockey players. *Sociology of Sport Journal*, 5, 87–106.
- Cutrona, C.E., & Russell, D. (1990). Type of social support and specific stress: Toward a theory of optimal matching. In B.R. Sarason, I.G. Sarason, & G.R. Pierce (Eds.), *Social support: An interactional view* (pp. 319–366). New York: Wiley.
- Danish, S. J., Petitpas, A., & Hale, B. D. (1992). A developmental-educational intervention model of sport psychology. *The Sport Psychologist*, 6, 403–415.
- Douglas, K., & Carless, D. (2009). Abandoning the performance narrative: Two women's stories of transition from professional sport. *Journal of Applied Psychology*, 21, 213–230. Retrieved from <http://dx.doi.org/10.1080/10413200902795109>
- Drahota, J.A.T., & Eitzen, D.S. (1998). The role exit of professional athletes. *Sociology of Sport Journal*, 15, 263–278.
- Fernandez, A., Stephan, Y., & Fouquereau, E. (2006). Assessing reasons for sports career termination: Development of the athletes' retirement decision inventory (ARDI). *Psychology of Sport and Exercise*, 7, 407–421. doi: [10.1016/j.psychsport.2005.11.001](https://doi.org/10.1016/j.psychsport.2005.11.001)
- Fleuriet, S., & Vincent, J. (2009). The quest for a successful career change among elite athletes in France: A case study of a French rugby player. *Leisure Studies*, 28, 173–188. doi: [10.1080/02614360902774589](https://doi.org/10.1080/02614360902774589)
- Fortunato, V., & Marchant, D. (1999). Forced retirement from elite football in Australia. *Journal of Personal and Interpersonal Loss*, 4, 269–280. doi: [10.1080/10811449908409735](https://doi.org/10.1080/10811449908409735)
- Fraser, L., Fogarty, G., & Albion, M. (2010). A longitudinal analysis of the transition to retirement from elite sport: Athletic identity, life satisfaction, and career indecision. *Journal of Science and Medicine in Sport*, 12, e174. doi:[10.1016/j.jsams.2009.10.366](https://doi.org/10.1016/j.jsams.2009.10.366)
- Gearing, B. (1999). Narratives of identity among former professional footballers in the United Kingdom. *Journal of Aging Studies*, 13, 43–58.
- Gilmore, O. (2008). *Leaving competitive sport: Scottish female athletes' experiences of sport career transitions* (Unpublished doctoral dissertation). University of Stirling, Scotland.
- Goddard, M. (2004). *An assessment of the effectiveness of the CHAMPS/Life Skills program at the University of North Texas: A pilot study* (Doctoral dissertation). Retrieved from ProQuest Dissertations and Theses Database (ProQuest document ID:765816191).
- Goodger, K., Gorely, T., Lavallee, D., & Harwood, C. (2007). Burnout in sport: A systematic review. *The Sport Psychologist*, 21, 127–151.
- Gordon, S. (1995). Career transitions in competitive sport. In T. Morris & J. Summers (Eds.), *Sport psychology: Theory, applications and issues* (pp. 474–493). Milton, Queensland: Wiley.
- Greendorfer, S.L., & Blinde, E.M. (1985). 'Retirement' from intercollegiate sport: Theoretical and empirical considerations. *Sociology of Sport Journal*, 2, 101–110.

- Grove, J.R., Lavalley, D., & Gordon, S. (1997). Coping with retirement from sport: The influence of athletic identity. *Journal of Applied Sport Psychology*, 9, 191–203. doi: [1041/3200970191-020351S1.00/0](https://doi.org/10.1080/104132000970191-020351S1.00/0)
- Haerle, R.K. (1975). Career patterns and career contingencies of professional baseball players: An occupational analysis. In D.W. Ball & J.W. Loy (Eds.), *Sport and social order* (pp. 461–519). Reading, MA: Addison-Wesley.
- Harrison, C.K., & Lawrence, S.M. (2003). African American student athletes' perceptions of career transition in sport: A qualitative and visual elicitation. *Race Ethnicity and Education*, 6, 373–394. doi: [10.1080/1361332032000146384](https://doi.org/10.1080/1361332032000146384)
- Harrison, C.K., & Lawrence, S.M. (2004). Female and male student athletes' perceptions of career transition in sport and higher education: A visual elicitation and qualitative assessment. *Journal of Vocational Education and Training*, 56, 485–505.
- Herman, C.R. (2002). *Transitional loss and athletic identity: An ethical obligation to assist NCAA athletes through the retirement process* (Doctoral dissertation). Retrieved from ProQuest Dissertations and Theses Database (ProQuest document ID: 727396441).
- Hong, S.H. (2010). The relationships between the attributes, athletic career, and retirement of professional players. *Journal of Sport and Leisure Studies*, 39, 943–951.
- Houlston, D.R. (1982). The occupational mobility of professional athletes. *International Review for the Sociology of Sport*, 17, 15–28. doi: [10.1177/101269028201700202](https://doi.org/10.1177/101269028201700202)
- Huang, Z. (2002). *Athletic career transition in former Chinese elite athletes: An empirical investigation and cross-cultural comparison with finding from Germany* (Unpublished doctoral dissertation). München University, Bundeswehr, Germany.
- Hughes, W.R. (1990). *Professional athletic disengagement: The physical, psychological, and social consequences of athletes' retirement* (Masters' thesis). Retrieved from ProQuest Dissertations and Theses Database (ProQuest document ID: 747921851).
- Johns, D.P., Lindner, K.J., & Wolko, K. (1990). Understanding attrition in female competitive gymnastics: Applying social exchange theory. *Sociology of Sport Journal*, 7, 154–171.
- Kadlcik, J., & Flemr, L. (2008). Athletic career termination model in the Czech Republic: A qualitative exploration. *International Review for the Sociology of Sport*, 43, 251–269. doi: [10.1177/1012690208098544](https://doi.org/10.1177/1012690208098544)
- Kane, M.A. (1991). *The metagonic transition: A study of career transition, marital stress and identity transformation in former professional athletes* (Doctoral dissertation). Retrieved from ProQuest Dissertations and Theses Database (ProQuest document ID: 746446081).
- Kerr, G., & Dacyshyn, A. (2000). The retirement experiences of elite, female gymnasts. *Journal of Applied Sport Psychology*, 12, 115–133. doi: [10.1080/10413200008404218](https://doi.org/10.1080/10413200008404218)
- Kirby, S.L. (1986). *High performance female athlete retirement* (Unpublished doctoral dissertation). University of Alberta, Canada.
- Kolbasovsky, A.D. (2001). *When the cheering stops: Adjustment to life after college basketball* (Doctoral dissertation). Retrieved from ProQuest Dissertations and Theses Database (ProQuest document ID: 728442751).
- Koukouris, K. (1991). Quantitative aspects of the disengagement process of advanced and elite Greek male athletes from organized competitive sport. *Journal of Sport Behavior*, 14, 227–246.
- Koukouris, K. (1994). Constructed case studies: Athletes' perspectives of disengaging from organized competitive sport. *Sociology of Sport Journal*, 11, 114–139.
- Koukouris, K. (2001, May). *Disengagement of elite gymnastics from organized competitive gymnastics*. Paper presented at the 10th World Congress of Sport Psychology, Skiathos, Hellas, Greece.
- Lally, P. (2007). Identity and athletic retirement: A prospective study. *Psychology of Sport and Exercise*, 8, 85–99. doi: [10.1016/j.psychsport.2006.03.003](https://doi.org/10.1016/j.psychsport.2006.03.003)
- Lantz, C.D. (1995). *Validation of a conceptual model characterizing college student-athletes' readiness to retire from competitive sport participation* (Doctoral dissertation). Retrieved from ProQuest Dissertations and Theses Database (ProQuest document ID: 741149991).
- Lavalley, D. (2005). The effect of a life development intervention on sport career transition adjustment. *The Sport Psychologist*, 19, 193–202.
- Lavalley, D., & Andersen, M. (2000). Leaving sport: Easing career transitions. In M. Andersen (Ed.), *Doing sport psychology* (pp. 249–260). Champaign, IL: Human Kinetics.

- Lavallee, D., Golby, J., & Lavallee, R. (2002). Coping with retirement from professional sport. In I. Cockerill (Ed.), *Solutions in sport psychology* (pp. 184–197). London: Thomson.
- Lavallee, D., Gordon, S., & Grove, R. (1996). A profile of career beliefs among retired Australian athletes. *Australian Journal of Career Development*, 5(2), 35–38.
- Lavallee, D., Gordon, S., & Grove, J.R. (1997). Retirement from sport and the loss of athletic identity. *Journal of Personal and Interpersonal Loss*, 2, 129–147. doi: [10.1080/10811449708414411](https://doi.org/10.1080/10811449708414411)
- Lavallee, D., Grove, J.R., & Gordon, S. (1997). The causes of career termination from sport and their relationship to post-retirement adjustment among elite-amateur athletes in Australia. *Australian Psychologist*, 32, 131–135.
- Lavallee, D., Nesti, M., Borkoles, E., Cockerill, I., & Edge, A. (2000). Intervention strategies for athletes in transition. In D. Lavallee & P. Wylleman (Eds.), *Career transitions in sport: International perspectives* (pp. 111–130). Morgantown, WV: Fitness Information Technology.
- Lavallee, D., & Robinson, H.K. (2007). In pursuit of an identity: A qualitative exploration of retirement from women's artistic gymnastics. *Psychology of Sport and Exercise*, 8, 119–141. doi: [10.1016/j.psychsport.2006.05.003](https://doi.org/10.1016/j.psychsport.2006.05.003)
- Lavallee, D., & Wylleman, P. (1999). Toward an instrument to assess the quality of adjustment to career transitions in sport: The British Athlete Lifestyle Assessment Needs in Career and Education (BALANCE) scale. In V. Hosek, P. Tilinger, & L. Bilek (Eds.), *Psychology of sport and exercise: Enhancing the quality of life* (pp. 322–324). Prague: Charles University.
- Lavallee, D., Wylleman, P., & Sinclair, D.A. (2000). Career transitions in sport: An annotated bibliography. In D. Lavallee & P. Wylleman (Eds.), *Career transitions in sport: International perspectives* (pp. 207–258). Morgantown, WV: Fitness Information Technology.
- Leung, M.I., Carre, A., & Fu, F.H. (2005). Retirement rationale for Chinese female elite athletes. *International Journal of Eastern Sport and Physical Education*, 3(1), 87–94.
- Lewis, L.E. (1997). *A career profile of professional athletes: A study of the effect of professional football on social support, career perception and expectations, and pre-retirement planning* (Unpublished doctoral dissertation). University of Minnesota.
- Lipton, G. (1997). *Transition from competitive intercollegiate sport: Variables related to the degree of difficulty experienced* (Doctoral dissertation). Retrieved from ProQuest Dissertations and Theses Database (ProQuest document ID: 739659231).
- Liu, F., & Li, Q. (2007). The influence of group characteristics on career development after retirement of table tennis athletes in China. *Journal of Beijing Sport University*, 12. doi: [CNKI:SUN:BJTD.0.2007-12-043](https://doi.org/CNKI:SUN:BJTD.0.2007-12-043)
- Lotysz, G.J., & Short, S.E. (2004). 'What ever happened to....' The effects of career termination from the National Football League. *Athletic Insight*, 6, 47–66. Retrieved from <http://www.athleticinsight.com/Vol6Iss3/WhatEverHappened.htm>
- Lynch, D. (2006). *Adjustment to retirement of horse racing jockey* (Unpublished master's thesis). Victoria University, Melbourne.
- Marthinus, J.M. (2007). *Psychological effects of retirement on elite athletes* (Unpublished doctoral dissertation). Stellenbosch University, South Africa.
- McKenna, J., & Thomas, H. (2007). Enduring injustice: A case study of retirement from professional rugby union. *Sport, Education, and Society*, 12, 19–35. doi: [10.1080/13573320601081500](https://doi.org/10.1080/13573320601081500)
- McKnight, J.N. (1996). *The perception of transition for double-A male professional baseball players* (Doctoral dissertation). Retrieved from ProQuest Dissertations and Theses Database (ProQuest document ID: 739516321).
- McKnight, K. (2007). *Athletic career transition and transferable skills* (Master's thesis). Retrieved from ProQuest Dissertations and Theses Database (ProQuest document ID: 1459912651).
- McPherson, B.D. (1980). Retirement from professional sport: The process and problems of occupational and psychological adjustment. *Sociological Symposium*, 30, 126–143. Retrieved from <http://www.getcited.org/pub/103377267>
- Menkenhorst, H., & Van Den Berg, F.J. (1997, July). *Retirement from high-level competition – a new start!* Paper presented at the 9th World Congress of Sport Psychology, Netanya, Israel.

- Mihovilovic, M.A. (1968). Status of former sportsmen. *International Review of Sport Sociology*, 3, 73–93. Retrieved from <http://www.getcited.org/pub/103335058>
- Missler, S.M. (1996). *Female golfers' transition from highly competitive sport: A naturalistic inquiry* (Doctoral dissertation). Retrieved from ProQuest Dissertations and Theses Database (ProQuest document ID: 741795991).
- Munroe, K.J., Albinson, J.G., & Hall, C.R. (1999). The effects of non-selection on first year female varsity athletes. *Avante*, 5, 63–81.
- Murphy, S. (2009). Isolation. In K.F. Hays (Ed.), *Performance psychology in action* (pp. 203–223). Washington, DC: American Psychological Association.
- Muscat, A.C. (2010). *Elite athletes' experience of identity changes during a career-ending injury: An interpretative description* (Unpublished doctoral dissertation). University of British Columbia, Vancouver.
- Newell, C.P.Q. (2005). *Identification of intrinsic, interpersonal, and contextual factors influencing disengagement from high performance sport* (Doctoral dissertation). Retrieved from ProQuest Dissertations and Theses Database (ProQuest document ID: 1051260701).
- Parker, K.B. (1994). 'Has-beens' and 'Wanna-bes': Transition experiences of former major college football players. *The Sport Psychologist*, 8, 287–304.
- Perna, F.M., Ahlgren, R.L., & Zaichkowsky, L. (1999). The influence of career planning, race, and athletic injury on life satisfaction among recently retired collegiate male athletes. *The Sport Psychologist*, 13, 144–156.
- Perna, F.M., Zaichkowsky, L., & Bocknek, G. (1996). The association of mentoring with psychosocial development among male athletes at termination of college career. *Journal of Applied Sport Psychology*, 8, 76–88. doi: 10.1080/10413209608406309
- Petitpas, A., Danish, S., McKelvain, R., & Murphy, S. (1992). A career assistance program for elite athletes. *Journal of Counseling and Development*, 70, 383–386. Retrieved from http://eric.ed.gov/ERICWebPortal/search/detailmini.jsp?_nfpb=true&_ERICExtSearch_SearchValue_0=EJ444157&ERICExtSearch_SearchType_0=no&accno=EJ444157
- Piffaretti, M., Schnyder, P., Mahler, P., Barbat, S., & Keller, L. (2003, July). *Pursuing competitive sports or dropping out: A longitudinal study on young athletes' career transitions*. Paper presented at the 11th European Congress of Sport Psychology, Copenhagen, Denmark. Retrieved from http://www.ktn.gv.at/24078_DE-PDF-Abstractband_FEPSAC.pdf
- Redmond, J., Gordon, S., & Chambers, T. (2007, September). *An in-depth evaluation of the Australian Athlete Career Education (ACE) program*. Paper presented at the 12th European Congress of Sport Psychology, Halkidiki, Greece. Retrieved from www.fepsac.com/index.php/download_file/-/view/49
- Reynolds, M.J. (1981). The effects of sports retirement on the job satisfaction of the former football player. In S.L. Greendorfer & A. Yiannakis (Eds.), *Sociology of sport: Diverse perspectives* (pp. 127–137). West Point, NY: Leisure Press.
- Rhodes, B.A. (1993). *Self-concept, andragogical orientation, and adaptation to transition in a group of retired professional football players, with implications for the design of a career transition program* (Doctoral dissertation). Retrieved from ProQuest Dissertations and Theses Database (ProQuest document ID: 744218391).
- Sallis, J.F., Prochaska, J.J., & Taylor, A.C. (2000). A review of correlates of physical activity of children and adolescents. *Medicine and Science in Sport and Exercise*, 32, 963–975. doi: 0195-9131/00/3205-0963/0
- Schmid, J., & Schilling, G. (1997, July). *Self-identity and adjustment to the transition out of sports*. Paper presented at the 9th World Congress of Sport Psychology, Netanya, Israel.
- Schmid, J., & Seiler, R. (2003, July). *Leaving competitive sports: Reasons for positive and negative transitions*. Paper presented at the 11th European Congress of Sport Psychology, Copenhagen, Denmark. Retrieved from http://www.ktn.gv.at/24078_DE-PDF-Abstractband_FEPSAC.pdf
- Schmidt, U., & Hackfort, D. (2001, May). *Convergent and divergent results of a bi-national study on career transitions of former French and German athletes*. Paper presented at the 10th World Congress of Sport Psychology, Skiathos, Hellas, Greece.

- Schwendener-Holt, M.J. (1994). *The process of sport retirement: A longitudinal study of college athletes* (Doctoral dissertation). Available from ProQuest Dissertations and Theses Database (ProQuest document ID: 740933881).
- Schwenk, T.L., Gorenflo, D.W., Dopp, R.R., & Hipple, E. (2007). Depression and pain in retired professional football players. *Medicine and Science in Sport and Exercise*, 39, 599–605.
- Selden, A.F. (1997). *Career transition groups for college student-athletes* (Doctoral dissertation). Retrieved from ProQuest Dissertations and Theses Database (ProQuest document ID: 736616081).
- Shachar, B., Brewer, B.W., Cornelius, A.E., & Petitpas, A.J. (2004). Career decision-making, athletic identity, and adjustment difficulties among retired athletes: A comparison between coaches and non-coaches. *Kinesiologia Slovenica*, 10(1), 71–85.
- Shaffer, K.A. (1990). *Identity, self-esteem, and self-concept upon retirement from elite level sport* (Master's thesis). Retrieved from ProQuest Dissertations and Theses Database (ProQuest document ID: 747815711).
- Si, G., & Lee, H. (2007). Cross-cultural issues in sport psychology research. In S. Jowett & D. Lavallee (Eds.), *Social psychology in sport* (pp. 279–288). Champaign, IL: Human Kinetics.
- Sinclair, D.A., & Orlick, T. (1993). Positive transition from high-performance sport. *The Sport Psychologist*, 7, 138–150.
- Smith, R. E. (1986). Toward a cognitive-affective model of athletic burnout. *Journal of Sport Psychology*, 8, 36–50.
- Sparkes, A.C. (1998). Athletic identity: An Achilles' heel to the survival self. *Qualitative Health Research*, 8, 644–664.
- Stambulova, N.B. (1994). Developmental sport career investigations in Russia: A post-perestroika analysis. *The Sport Psychologist*, 8, 221–237.
- Stambulova, N.B. (2001, May). *Sport career termination of Russian athletes: Readiness to the transition*. Paper presented at the 10th World Congress of Sport Psychology, Skiathos, Hellas, Greece.
- Stambulova, N., & Alfermann, D. (2009). Putting culture into context: Cultural and cross-cultural perspectives in career development and transition research and practice. *International Journal of Sport and Exercise Psychology*, 7, 292–308. doi: [10.1080/1612197X.2009.9671911](https://doi.org/10.1080/1612197X.2009.9671911)
- Stambulova, N., Alfermann, D., Statler, T., & Côte, J. (2009). ISSP position stand: Career development and transitions of athletes. *International Journal of Sport and Exercise Psychology*, 7, 395–412. doi: [10.1080/1612197X.2009.9671916](https://doi.org/10.1080/1612197X.2009.9671916)
- Stambulova, N., Stephan, Y., & Jäphag, U. (2007). Athletic retirement: A cross-national comparison of elite French and Swedish athletes. *Psychology of Sport and Exercise*, 8, 101–118. doi: [10.1016/j.psychsport.2006.05.002](https://doi.org/10.1016/j.psychsport.2006.05.002)
- Stankovich, C.E. (1998). *The effectiveness of a career development intervention program designed to assist student-athletes through the sport retirement transition* (Doctoral dissertation). Retrieved from ProQuest Dissertations and Theses Database (ProQuest document ID: 737999211).
- Stephan, Y., Bilard, J., Ninot, G., & Delignières, D. (2003a). Bodily transition out of elite sport: A one-year study of physical self and global self-esteem among transitional athletes. *International Journal of Sport and Exercise Psychology*, 34, 192–207. doi: [10.1080/1612197X.2003.9671712](https://doi.org/10.1080/1612197X.2003.9671712)
- Stephan, Y., Bilard, J., Ninot, G., & Delignières, D. (2003b). Repercussions of transition out of elite sport on subjective well-being: A one-year study. *Journal of Applied Sport Psychology*, 15, 354–371. doi: [10.1080/714044202](https://doi.org/10.1080/714044202)
- Stephan, Y., Torregrosa, M., & Sanchez, X. (2007). The body matters: Psychophysical impact of retiring from elite sport. *Psychology of Sport and Exercise*, 8, 73–83. doi: [10.1016/j.psychsport.2006.01.006](https://doi.org/10.1016/j.psychsport.2006.01.006)
- Stier, J. (2007). Game, name, and fame-afterwards, will I still be the same? *International Review for the Sociology of Sport*, 42, 99–111. doi: [10.1177/1012690207081830](https://doi.org/10.1177/1012690207081830)
- Stråhlman, O. (2006). *Elite sport retirement process: Career analysis of former Swedish elite athletes* (Unpublished doctoral dissertation). Göteborg University, Sweden.

- Stronach, M., & Adair, D. (2010). Lords of the square ring: Future capital and career transition issues for elite indigenous Australian boxers. *Cosmopolitan Civil Societies Journal*, 2, 46–70. Retrieved from <http://epress.lib.uts.edu.au/journals/index.php/mcs/article/view/Article/1512>
- Swain, D.A. (1991). Withdrawal from sport and Schlossberg's model of transitions. *Sociology of Sport Journal*, 8, 152–160.
- Tate, G.F. (1993). *The effects of the transformation in the Olympic Games on the athletic retirement transition process: American Olympians and retired National Football League athletes* (Doctoral dissertation). Retrieved from ProQuest Dissertations and Theses Database (ProQuest document ID: 745524301).
- Taylor, J., & Ogilvie, B.C. (1994). A conceptual model of adaptation to retirement among athletes. *Journal of Applied Sport Psychology*, 6, 1–20. doi: [10.1080/10413209408406462](https://doi.org/10.1080/10413209408406462)
- Tinley, S.P. (2002). *Athlete retirement: A qualitative inquiry and comparison* (Unpublished master's thesis). San Diego State University.
- Torregrosa, M., Boixadós, L., Valiente, L., & Cruz, J. (2004). Elite athletes' image of retirement: The way to relocation in sport. *Psychology of Sport and Exercise*, 5, 35–43. doi: [10.1016/S1469-0292\(02\)00052-3](https://doi.org/10.1016/S1469-0292(02)00052-3)
- Torregrosa, M., Mateos, M., Sanchez, X., & Cruz, J. (2007, September). *Evaluation of a programme to combine elite sport and university education*. Paper presented at the 12th European Congress of Sport Psychology, Halkidiki, Greece. Retrieved from www.fepsac.com/index.php/download_file/-/view/49
- Torregrosa, M., Sanchez, X., & Cruz, J. (2003, July). *Prospective vs. retrospective analysis of withdrawing from active sport*. Paper presented at the 11th European Congress of Sport Psychology, Copenhagen, Denmark. Retrieved from http://www.ktn.gv.at/24078_DE-PDF-Abstractband_FEPSAC.pdf
- Ungerleider, S. (1997). Olympic athletes' transitions from sport to workplace. *Perceptual and Motor Skills*, 84, 1287–1295.
- Wang, J. (2008). A qualitative psychological analysis of the retirement process of athletes: Successful and unsuccessful case studies. *Acta Psychologica Sinica*, 3. doi: [CNKI:SUN:XLXB.0.2008-03-014](https://doi.org/10.1080/10413200801998564)
- Warriner, K., & Lavalée, D. (2008). The retirement experiences of elite gymnasts: Self identity and the physical self. *Journal of Applied Sport Psychology*, 20, 301–317. doi: [10.1080/10413200801998564](https://doi.org/10.1080/10413200801998564)
- Washington, M.A. (1981). *Consideration of selected social theories of aging as evidenced by patterns of adjustment to retirement among professional football players* (Doctoral dissertation). Retrieved from ProQuest Dissertations and Theses Database (ProQuest document ID: 752814391).
- Webb, W.M., Nasco, S.A., Riley, S., & Headrick, B. (1998). Athlete identity and reactions to retirement from sport. *Journal of Sport Behavior*, 21, 338–362.
- Weiss, E.H. (1992). *A qualitative study of the retirement experience of former professional ice hockey players* (Doctoral dissertation). Retrieved from ProQuest Dissertations and Theses Database (ProQuest document ID: 747208831).
- Werthner, P., & Orlick, T. (1986). Retirement experiences of successful Olympic athletes. *International Journal of Sport Psychology*, 17, 337–363.
- Wheeler, G.D., Steadward, R.D., Legg, D., Hutzler, Y., Campbell, E., & Johnson, A. (1999). Personal investment in disability sport careers: An international study. *Adapted Physical Activity Quarterly*, 16, 219–237.
- Wheeler, G.D., Malone, L.A., VanVlack, S., Nelson, E.R., & Steadward, R.D. (1996). Retirement from disability sport: A pilot study. *Adapted Physical Activity Quarterly*, 13, 382–399.
- Wilder, K.C. (1999). *The career transition process: Perspectives of elite female cyclists* (Doctoral dissertation). Retrieved from ProQuest Dissertations and Theses Database (ProQuest document ID: 733522861).
- Williams, J.C. (1991). *Socialization experience and identity foreclosure: An exploration of the effects of role disengagement on the personal adjustment of former college athletes* (Doctoral dissertation). Retrieved from ProQuest Dissertations and Theses Database (ProQuest document ID: 746444361).

- Williams-Rice, B.T. (1990). After the final snap: Cognitive appraisal, coping, and life satisfaction among former collegiate athletes. *Academic Athletic Journal* (Spring), 30–39.
- Winterstein, P., Brandão, M.R.F., Pinheiro, C., Agresta, M., Akel, M.C., & Martini, L (2001, May). *Transition in sport career in Brazilian professional soccer players*. Paper presented at the 10th World Congress of Sport Psychology, Skiathos, Hellas, Greece.
- Wippert, P., & Wippert, J. (2008). Perceived stress and prevalence of traumatic stress symptoms following athletic career termination. *Journal of Clinical Sport Psychology*, 2, 1–16.
- Wong, H. (2010). *The transition process from competitive sport to retirement: Future engagement in physical activity and involvement in figure skating* (Master's thesis). Retrieved from ProQuest Dissertations and Theses Database (ProQuest document ID: MR62451).
- Wylleman, P., Alfermann, D., & Lavallee, D. (2004). Career transition in sport: European perspectives. *Psychology of Sport and Exercise*, 5, 7–20. doi: [10.1016/S1469-0292\(02\)00049-3](https://doi.org/10.1016/S1469-0292(02)00049-3)
- Wylleman, P., De Knop, P., Verdet, M., & CeciĆ Erpič, S. (2007). Parenting and career transitions of elite athletes. In S. Jowett & D. Lavallee (Eds.), *Social psychology in sport* (pp. 233–248). Champaign, IL: Human Kinetics.
- Young, J.A., Pearce, A.J., Kane, R., & Pain, M. (2006). Leaving the professional tennis circuit: Exploratory study of experiences and reactions from elite female athletes. *British Journal of Sport Medicine*, 40, 477–483. doi: [10.1136/bjsm.2005.023341](https://doi.org/10.1136/bjsm.2005.023341)
- Zaichkowsky, L., King, E., & McCarthy, J. (2000). The end of an era: The case of forced transition involving Boston University football. In D. Lavallee & P. Wylleman (Eds.), *Career transitions in sport: International perspectives* (pp. 195–205). Morgantown, WV: Fitness Information Technology.
- Zaichkowsky, L., Lipton, G., & Tucci, G. (1997, July). *Factors affecting transition from intercollegiate sport*. Paper presented at the 9th World Congress on Sport Psychology, Netanya, Israel.