

ORIGINAL SCIENTIFIC PAPER

Life Well-Being and Reasons for the Termination of Sport Careers among Croatian Elite Athletes

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Abstract

Ending a sports' career can be a traumatic event in elite athletes' lives. The success of the adjustment to a new way of life can greatly depend on the reasons for ending the career. This research paper aimed to establish a relationship between life well-being and reasons for the ending of sport careers. This research study was conducted on a sample of 170 elite Croatian male and female athletes who terminated their active sport career. Three scales measuring life well-being were employed: Scale of Life Quality, Scale of Life Well-being, and Extended Satisfaction with Life Scale. The eight most common reasons for ending a sport career were offered; the answers were given in binary mode with the possibility to give more reasons for career termination. The relationship between life well-being and reasons for ending one's sport career was determined via canonical and quasi-canonical correlation analysis. Prior to analysis, binary variables were normalized. A canonical correlation analysis showed one significant correlation with a magnitude of 0.362, significant at $p=0.036$, while a quasi-canonical analysis showed only one significant correlation with a magnitude of 0.23, significant at $p=0.003$. The analyses show two different relationships between the current life well-being of retired athletes and the reasons for their career ending; they could be explained by sport identity and deliberate or involuntary sport retirement.

Key words: *life well-being, elite athletes, reasons for sport career termination*

Introduction

A sport career is, according to European Federation of Sport Psychology (FEPSAC, 2000), defined as a perennial engagement in sport activities directed at a high level of achievement of an individual and on his improvement in sport. It lasts from their entry until their exit from sport, and during their sport careers, athletes go through several developmental phases: initial phase, mastery phase, and exit phase, or post-career (Wylleman, Alfermann, & Lavallee, 2004).

The termination of a sport career can be a difficult and destructive process. Early and long-term identification with the role of an athlete at an exit from a sport can lead to confusion and can be a significant stressor. Problems with alcohol and drug abuse arise, as well as acute depression, eating disorders, identity disorders, confusion, a decline in self-con-

fidence, and even suicide attempts (Wylleman et al., 2004). Results of early papers show that 70-80% of athletes are faced with various difficulties and traumas after retiring (Hallden, 1965; Mihovilović, 1968; Haerle, 1975, according to Wylleman, Lavallee, & Alfermann, 1999; Wylleman et al., 2004). However, afterwards, it was established that this happens to a small number (13-19%) of athletes (Wylleman et al., 2004). Ceci Erpič, Wylleman, and Zupančič (2004) have ascertained that quality of retirement depends on the voluntariness of career termination, the subjective evaluation of sport achievement, the intensity of sport identity, educational status and apparition of negative non-sports related transitions. Athletes' experiences at the elite level of sport are of crucial importance (Tshube & Feltz, 2015). The importance of social support and interpersonal relationships for adjustment



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to the termination of a sport career has been confirmed as it is for adjustment to post-sport life (Cecić Erpić & Wylleman, 2005). In addition, a significant determinant of adjustment is undoubtedly a change in sport identity (Lavalley, Gordon, & Grove, 1997). Quality can be affected by sport factors (voluntariness and gradualness of sports retirement, subjective sense of achievement, planning of life after sports career termination, sports identity) and non-sports factors (age, education degree), as well as various sport career difficulties (Marthinus, 2007). Park, Tod, and Lavalley (2012) emphasize the importance of making a decision about retiring, including cognitive and behavioural changes, as well as internal and external influences. Torregrosa, Boixadós, Valiente, and Cruz (2004) indicate that athletes, while still in a competitive period of their sports career, gradually build a picture of their retirement to make it less problematic. The most significant influences on the difficulty of a transition are the result of involuntary retirement (injury or deselection), strong, exclusively sport-centred identity as well as lack of planning and using pre-retirement support services (Smith & McManus, 2008). Athletes can also voluntarily retire, which can be linked to personal reasons (financial problems), social (improvement of interpersonal and family relationships), psychological (decline in life satisfaction) or combinations of those reasons (Wylleman et al., 2004).

Every athlete wishes to stay healthy and to compete free from any injury during his/her career.

Reasons for sport retirement can be various (Leung, Carre, & Fu, 2005), but the cause is primarily a combination of factors as opposed to a single factor (Stambulova, 1994). The most frequent reasons for career termination are injuries, chronological age, deselection and personal choice. Athletes find involuntary and unexpected retirement hard to accept. The most unfortunate involuntary reason for retirement is injuries. Significant causes for retiring include increase in age, not managing to advance to the next level of elite competition, and being excluded from the team (Wylleman et al., 2004). For a large number of athletes, retiring from elite sport is not within their control (Wylleman et al., 1999; 2004).

According to Diener (2005), subjective well-being is a term that is superordinate to different evaluations of our own life, life events, and the conditions in which we live. It encompasses cognitive evaluations, such as life satisfaction, interests, engagement and affective (emotional) reactions to life events constituted of positive affects, such as joy, pride, and happiness, and negative affects, such as fear, anger, and depression.

Life satisfaction is a report of a person's evaluation of his/her life in its entirety. It can pertain to a person's satisfaction with the past, but also with the future. It is primarily a cognitive evaluation of a person's quality of experience during his or her life (DeNeve & Cooper, 1998). In everyday life, as in scientific literature, happiness has multiple meanings. It can denote a general good mood, a global evaluation of life satisfaction, living a good life, or it can relate to causes of happiness. Quality of life can be defined as a measure of desirable characteristics in life. In addition to the quality of living conditions, it also includes a person's subjective perception: their thoughts, feelings, and reactions to those conditions.

Life satisfaction, subjective well-being, happiness, and (subjective) quality of life are terms that are often equated in scientific research. Veerhoeven considers those terms to be synonyms while other authors (e.g., Lucas, Diener, & Suh, 1996; Andrews & Withey, 1976) are opposed to such a ge-

neralization because they think that those terms do not have the same meaning and that they do not necessarily pertain to same concepts (according to Mišura, 2011). However, when reading a greater number of articles from that domain, one can observe the overlapping and interweaving of the aforementioned terms.

In recent articles, there is an increase in usage of terms such as evaluative well-being (EWB) and affective well-being (AWB). Evaluative well-being is defined as a global, deliberate, and long-term evaluation of the state of well-being, which reflects a sense quality of life. It pertains to the course of life, not just one moment. Affective well-being is concerned with present well-being. It is measured with positive and negative affects (influences), which are experiences of a specific moment or of everyday life (Eger & Maridal, 2015). Croatian psychologists most commonly use the term "quality of life", because it implies a combination of objective and subjective factors (Vuletić & Misajon, 2011). Satisfaction with life, quality of the transition, and career satisfaction can be described as a subjective experience of life satisfaction and well-being.

This research paper aimed to establish relationship between life well-being and reasons for ending a sport career.

Methods

According to the criteria of Croatian Olympic Committee, elite athletes are those who won medals at the Olympic Games, Mediterranean Games, World Championships and World Cups, and European Championships and Cups. In the period from 1992 to 2012, from the Olympic Games in Barcelona to the Olympic Games in London, 1016 athletes won medals for Croatia at those prominent international sport events. From 2014 to 2017, an attempt was made to find as many athletes as possible. Finally, 638 athletes were contacted and asked to participate in research; almost all of them agreed, but only 304 of them completed the forms. The questionnaires were offered by mail, electronic mail, the Lime Survey internet application and direct contact with the researcher. In the sample of 304 elite Croatian athletes, 171 had terminated their active sport careers. One of them does not have complete results, and statistical analyses were done on the sample of 170 elite athletes; 74 of them are male and 96 are female athletes.

The subjects were given three scales measuring life well-being. These were: Scale of Life Quality (SLQ; Krizmanić & Kolesarić, 1992), Scale of Life Well-being (SLW; Penezić, 1999) and Extended Satisfaction with Life Scale (ESWL; Sindik & Rendulić, 2012, according to SWL-Scale of Life Well-being, Pavot & Diener, 1993). The SLQ consists of two subscales and produces two results; the first subscale has 15 questions with the intention of measuring the global level of well-being, including different aspects of life; the second subscale, containing six questions, measures the global level of well-being in the life-span perspective. The SLW consists of 20 items and is composed of items from the Satisfaction with Life Scale (Diener, Emmons, Larsen, & Griffin, 1985), the General Life Satisfaction Scale (Bezinović, 1988), the Positive Attitudes Toward Life (Grob, 1995) and the Joy in the Life Scale (Grob, 1995). Although the scale includes items from different authors, it is a unifactor instrument and has high reliability. The ESWL consists of five items from the SWL Scale of Life Well-being (Pavot & Diener, 1993) extended by the twelve new questions. The five items in ESWL are the same as those in SLW and were excluded from the version of the scale used in this research.

All items in all three questionnaires were measured on the five-point scale. Metric properties of scales were evaluated on the full sample of athletes. The reliability of the results was estimated by Cronbach's alpha coefficient of internal consistency; for SLW it is 0.091, for ESWL is 0.84, SLQ1 (first part) is 0.81 and SLQ2 (second part) is 0.71. The values are satisfactory, even for SLQ2, considering that it has only six items.

The eight most common reasons, according to literature, for ending a sport career were offered: age, deselection, injury, family matters, burnout, finances, unsatisfactory relations with persons in sport, and entering further education or employment (Schlossberg, 1981; Petitpas, Champagne, Chartrand, Danish, & Murphy, 1997; Wylleman et al., 1999; Wylleman & Lavallee, 2003). The answers were given in binary mode with

“yes” and “no” with the possibility for former athletes to give more reasons for career termination.

The relationship between life well-being and reasons for sports career ending was determined via canonical (Hotelling, 1936) and quasi-canonical correlation analysis (Momirović, Dobrić, & Karaman, 1983). The algorithm used (QCCR) is described in Momirović et al. (1984) and is written in the MATRIX language of SPSS. Prior to analysis, binary variables were normalized.

Results

The correlations of the scales measuring life well-being are in Table 1 showing high values from 0.51 to 0.77; without question, all four measures belong to the same set.

Table 1. Intercorrelations of the Scales Measuring Life Well-being

	SLQ1	SLQ2	SLW	ESWL
SLQ1	1.000	0.639	0.636	0.657
SLQ2	0.639	1.000	0.702	0.511
SLW	0.636	0.702	1.000	0.765
ESWL	0.657	0.511	0.765	1.000

The correlations of the reasons for termination the sports career are in Table 2, being small or near to zero.

Table 2. Product-Moment Correlations of the Normalized Values of the Reasons for Sport Career Termination

	age	deselection	injury	family	burnout	finances	relations	education
age	1.000	-0.110	-0.187	-0.020	-0.048	-0.107	0.034	-0.225
deselection	-0.110	1.000	-0.072	-0.058	0.066	-0.034	0.140	-0.063
injury	-0.187	-0.072	1.000	-0.195	-0.046	0.019	-0.062	-0.173
family	-0.020	-0.058	-0.195	1.000	0.069	-0.064	0.050	-0.038
burnout	-0.048	0.066	-0.046	0.069	1.000	-0.078	0.074	-0.100
finances	-0.107	-0.034	0.019	-0.064	-0.078	1.000	0.163	0.110
relations	0.034	0.140	-0.062	0.050	0.074	0.163	1.000	-0.064
education	-0.225	-0.063	-0.173	-0.038	-0.100	0.110	-0.064	1.000

The highest correlation is negative -0.23 between age and leaving sport because of education or employment. The cross-correlations of the variables of two sets are in Table 3; the

values are small or near to zero. The highest correlation is 0.196 between SLW and leaving sport because of education or employment.

Table 3. Cross-Correlations of the Scales Measuring Life Well-being and Normalized Values of the Reasons for Sport Career Termination

	age	deselection	injury	family	burnout	finances	relations	education
SLQ1	0.060	-0.093	-0.122	-0.032	0.025	-0.083	-0.157	0.117
SLQ2	-0.016	0.022	-0.082	0.108	0.048	-0.019	-0.134	0.001
SLW	-0.114	-0.66	-0.002	0.083	0.002	0.015	-0.094	0.196
ESWL	0.003	-0.081	-0.063	-0.031	0.055	-0.056	-0.107	0.172

Canonical correlation analysis showed one significant correlation with the magnitude of 0.362, significant at

$p=0.036$ (with degrees of freedom). This correlation is dominantly defined by SLW in the first set of variables (Table 4).

Table 4. The Results of Canonical and Quasicanonical Analyses: Coefficients and Factors of the Measures of Life Well-being

	CC1	CF1	QC1	QF1
SLQ1	-0.664	-0.384	-0.589	-0.869
SLQ2	-0.452	-0.086	-0.283	-0.775
SLW	1.677	0.357	-0.511	-0.899
ESWL	-0.758	-0.142	-0.559	-0.881

Legend: CC1 - unstandardized canonical coefficients, CF1 - canonical factor, QC1 - quasi-canonical coefficients; QF1 - quasicanonical factor

Regarding the high correlations of life well-being measures, SLW can be understood as the representative of four scales. In the second set, canonical correlation is mainly defined

by the sport career ending due to injury, family, and education with positive sign and sports career ending due to age with a negative sign (Table 5).

Table 5. The Results of Canonical and Quasicanonical Analyses: Coefficients and Factors of the Reasons for Sport Career Termination

	CC2	CF2	QC2	QF2
age	-0.438	-0.628	0.061	0.112
deselection	0.034	0.010	0.308	0.361
injury	0.524	0.450	0.316	0.358
family	0.524	0.374	-0.088	-0.128
burnout	-0.211	-0.209	-0.144	-0.052
finances	0.246	0.363	0.187	0.201
relations	0.259	0.245	0.573	0.611
education	0.315	0.333	-0.640	-0.677

The quasi-canonical analysis showed also only one significant correlation with the magnitude of 0.23, significant at $p=0.003$. All variables of life well-being are active in the formation of the quasi-canonical factors, all having a negative symbol (Table 4); they are positively related to ending one's sport career due to education or employment opportunity (with negative symbol), while their negative relation is due to bad relationships with individuals from sport, injury, and the deselection process (with positive sign). The other reasons for sport career termination (age, family, burnout and finances) have small or near to zero values (Table 5).

Discussion

The analyses show two different forms of the relationship between current life well-being of retired athletes and reasons for their career ending. The results of canonical correlation analysis show the positive relation of general life well-being and termination of a sport career due to different reasons but not age. To grow older is an unavoidable process, and it is expected that athletes be prepared to accept it; the reason for subjective less well-being when ending career because of being too old to continue can be due to the high intensity of sports identity. The athletes who have lengthy careers often develop strong sports identities, and sometimes it is their sole identity; the stronger the sports identity is, the stronger the crisis is after ending the sport career (Alfermann, Stambulova, & Zemaityte, 2004; Stambulova, Alfermann, Statler, & Côté, 2009), and the longer the adaptation to a new situation is; it is also accompanied by more life problems (Fraser, Fogarty, & Albion, 2009). Several researchers have recognized sports identity as a crucial negative factor in the quality of sport career termination (Cecić Erpić et al., 2004; Lavalley et al., 1997; Marthinus, 2007; Smith & McManus, 2008); the possible relation of low well-being, termination of sports career because of age and intensity of sports identity could be the subject of further research.

In the quasi-canonical correlation analysis, all the variables of life well-being are included in forming quasi-canonical variables; as in the canonical correlation analysis, it can be recognised as general life well-being. The second quasi-canonical variable is defined by the sport career ending due to education or employment at the negative side and bad relationships with individuals from sport, injury and deselection process at the positive side. The positive relation of general life well-being and sport career ending because of education or employment and the negative relation with ending due to bad relationships with individuals from sport, injury, and deselection can be explained by deliberate or involuntary sport retirement. The least distressing way to finish sport career is

to plan the termination and to plan life after the sport career (Marthinus, 2007); the most difficult way is involuntary ending, for example, because of injury or deselection (Smith & McManus, 2008).

The results of this research show that relationship of life well-being and the reasons of elite sport career termination are not simple and that different ways of association can exist; here, sports identity and deliberate or involuntary sports career termination are recognized as factors defining the relationship.

Acknowledgements

There are no acknowledgements.

Conflict of Interest

The authors declare that there are no conflicts of interest.

Received: 15 March 2019 | **Accepted:** 15 May 2019 | **Published:** 01 October 2019

References

- 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(1), 61–75. [https://doi.org/10.1016/S1469-0292\(02\)00050-X](https://doi.org/10.1016/S1469-0292(02)00050-X)
- Andrews, F.M., & Withey, S.B. (1976). Social Indicators of Well-Being, Americans' Perceptions of Life Quality. *Springer US, Plenum Press, New York*. doi 10.1007/978-1-4684-2253-5.
- Bezinović, P. (1988). *Perception of personal competence as a dimension of self-respect*. Doctoral thesis. Faculty of Philosophy. University of Zagreb, Zagreb.
- Cecić Erpić, 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.
- Cecić Erpić, S., & Wylleman, P. (2005). Socio-psychological perspective on traumatic retirement from sports. In D. Milanović, & F. Prot (Eds.), *Proceedings of 4th International Scientific Conference on Kinesiology: Science and profession - Challenge for the future* (pp. 654–657). Opatija: Faculty of Kinesiology, University of Zagreb.
- DeNeve, K.M., & Cooper, H. (1998). The Happy Personality: A Meta-Analysis of 137 Personality Traits and Subjective Well-Being. *Psychological Bulletin*, 124(2), 197–229. <http://psycnet.apa.org/buy/1998-10661-003>
- Diener, E., Emmons, R.A., Larsen, R.J., & Griffin, S. (1985). The Satisfaction With Life Scale. *Journal of Personality Assessment*, 49(1), 71–75.
- Diener, E., & Diener, C. (1996). Most People Are Happy. *Psychological Science*, 3(7), 181–185. <https://doi.org/10.1111/j.1467-9280.1996.tb00354.x>
- Diener, E., (2005). Guidelines for National Indicators of Subjective Wellbeing and Ill-being. (Distributed by e-mail communication to ISQOLS list server group).
- Eger, R.J., & Maridal, J.H. (2015). A statistical meta-analysis of the well-being literature. *International Journal of Well-being*, 5(2), 45–74. doi:10.5502/ijw.v5i2.
- Fraser, L., Fogarty, G., & Albion, M. (2009). 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(2), e174. <https://doi.org/10.1016/j.jsams.2009.10.366>
- Grob, A. (1995). A Structural Model of Environmental Attitudes and Behavior. *Journal of Environmental Psychology*, 15, 209–220. [https://doi.org/10.1016/0272-4944\(95\)90004-7](https://doi.org/10.1016/0272-4944(95)90004-7)

- 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.
- Hallden, O. (1965). The adjustment of athletes after retiring from sport. In F. Antonelli (Ed.), *Proceedings of the first international congress of sport psychology* (pp. 730–733). Rome: International Society of Sport Psychology.
- Hotelling, H. (1936). Relations between two sets of variates. *Biometrika*, 28, 321–377. <https://doi.org/10.1093/biomet/28.3-4.321>
- Krizmanić, M., & Kolesarić, V. (1992). *Handbook for Quality Scale Implementation*. Jastrebarsko: Naklada slap.
- 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. <https://doi.org/10.1080/10811449708414411>
- 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. <http://www.athleticinsight.com/Vol6Iss3/WhatEverHappened.htm>
- Lucas, R.E., Diener, E., & Suh, E. (1996). Discriminant validity of well-being measures. *Journal of Personality and Social Psychology*, 3(71), 616–628. <http://dx.doi.org/10.1037/0022-3514.71.3.616>
- Marthinus, J. (2007). *Psychological Effects on Retirement on Elite Athletes Dissertation (Sport Science)*. At Stellenbosch University Promoter: Professor Justus R. Potgieter. <http://scholar.sun.ac.za/handle/10019.1/1133>
- Mihovilić, M. (1968). The status of former sportsmen. *International Review of Sport Sociology*, 3, 73–93. <https://doi.org/10.1177/101269026800300105>
- Mišura, D. (2011). Model of Sustainable Happiness. In G.Vuletić, ed., *Quality of Life and Health*, (pp. 21–31). Osijek: Faculty of Philosophy University of J. Strossmayer in Osijek https://bib.irb.hr/datoteka/592441.KVALITETA_IVOTA_I_ZDRAVLJE.pdf
- Momirović, K., Dobrić, V., & Karaman, Z. (1983) Canonical covariance analysis. *Proceedings of 50 International Symposium "Computer at the University"*, 5(1), 1–11.
- Momirović, K., Štalec, J., Prot, F., Bosnar, K., Viskić-Štalec, N., Pavičić, L., & Dobrić, V. (1984) *Computer Programming and Selection, Programming and Control Training*. Faculty of Physical Culture, Zagreb.
- Pavot, W., & Diener, E. (1993). Review of the Satisfaction with Life Scale. *Psychological Assessment*, 5(2), 164–172. https://link.springer.com/chapter/10.1007/978-90-481-2354-4_5
- Park, S., Tod, D., & Lavallee, D. (2012). Exploring the Retirement from Sport Decision-making Process based on the Transtheoretical Model. *Psychology of Sport and Exercise*, 13, 444–453. <https://doi.org/10.1016/j.psychsport.2012.02.003>
- Penezić, Z. (1999). *Life Satisfaction: Relationships with Lifetime and Some Personal Features* (Master's Thesis). Zagreb: Faculty of Philosophy, University of Zagreb
- Petitpas, A.J., Champagne, D., Chartrand, J., Danish, S., & Murphy, S. (1997). *Athlete's guide to career planning. Keys to success from the playing field to professional life*. Champaign, IL: Human Kinetics. <https://cvt823cmj06.storage.googleapis.com/MDg3MzlyNDU5MA==06.pdf>
- Sindik, J., & Rendulić, D. (2012). Life satisfaction and general life experience in judo and other sport coaches. *Sport Science*, 5(1), 53–58.
- Schlossberg, N.K. (1981). A model for analyzing human adaptation to transition. *The Counseling psychologist*, 9(2), 2–18. <http://journals.sagepub.com/doi/abs/10.1177/001100008100900202>
- Smith, J.L., & McManus, A. (2008). A Review on Transitional Implications for Retiring Elite Athletes: What Happens When the Spotlight Dims? *The Open Sports Sciences Journal*, 1, 45–49. <http://sportsconflict.org/wp-content/uploads/2014/05/Review-of-Transitional-Implications-for-Retiring-Elite-Athletes.pdf> doi: 10.2174/1875399X00801010045
- Stambulova, N. (1994). Developmental sports career investigations in Russia: A post-Perestroika analysis. *The Sport Psychologist*, 8, 221–237. <https://doi.org/10.1123/tsp.8.3.221>
- Stambulova, N., Alfermann, D., Statler, T., & Côté, J. (2009). Career Development and Transitions of Athletes. *IJSEP Position Stand: IJSEP*, 7, 395–412. <https://doi.org/10.1080/1612197X.2009.9671916>
- Torregrosa, M., Boixadós, M., Valiente, L., & Cruz, J. (2004). Elite athletes' image of retirement: the way to relocation in sport. *Psychology of Sport and Exercise*, 5(1), 35–43. [https://doi.org/10.1016/S1469-0292\(02\)00052-3](https://doi.org/10.1016/S1469-0292(02)00052-3)
- Tshube, T., & Feltz D.L. (2015). The relationship between dual-career and post-sport career transition among elite athletes in South Africa, Botswana, Namibia and Zimbabwe. *Psychology of Sport and Exercise*, 21, 109–114. <https://doi.org/10.1016/j.psychsport.2015.05.005>
- Veenhoven, R. (2006a). *Sociology's blind eye for happiness*. Paper presented at the 16th World Congress of Sociology, Durban, South Africa.
- Veenhoven, R. (2006b). *How do we assess how happy we are?* Tenets, implications and tenability of three theories. Paper presented at conference on 'New Directions in the Study of Happiness: United States and International Perspectives', University of Notre Dame, USA, October 22–24.
- Vuletić, G., & Misajon, R. (2011). Subjective quality of life: historical review. In G. Vuletić, ed., *Quality of Life and Health*, (pp. 9–16). Osijek: Faculty of Philosophy University of J. J. Strossmayer in Osijek. https://bib.irb.hr/datoteka/592441.KVALITETA_IVOTA_I_ZDRAVLJE.pdf
- Wylleman, P., Lavallee, D., & Alfermann, D. (1999). Transitions in the career of competitive athletes. Lund, Sweden: FEPSAC.
- Wylleman, P., Lavallee, D. (2003). A developmental perspective on transitions faced by athletes. In M. Weiss (Ed.), *Developmental sport psychology*. Morgantown, WV: Fitness Information Technology.
- Wylleman, P., Alfermann, D., & Lavallee, D. (2004). Career transitions in sport: European perspectives. *Psychology of Sport and Exercise*, 57–20, 126. [https://doi.org/10.1016/S1469-0292\(02\)00049-](https://doi.org/10.1016/S1469-0292(02)00049-)