Athletic Engagement and Athletic Identity in Top Croatian Sprint Runners

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ABSTRACT

The aim of the research was to determine construct validity and reliability for two questionnaires (Athlete Engagement Questionnaire – AEQ and Athletic Identity Measurement Scale – AIMS), applied on elite Croatian athletes-sprinters, as well as the correlations among the dimensions in these measuring instruments. Then, we have determined the differences in the dimensions of sport engagement and sport identity, according to gender, education level and winning medals on international competitions. A total of 71 elite athletes-sprinters (former and still active) are examined, from which 27 (38%) females and 44 (62%) males. The results of factor analyses revealed the existence of dimensions very similar as in the original instruments, which showed moderate to high reliabilities. A small number of statistically significant correlations have been found between the dimensions of sport engagement and sport identity, mainly in male sprinter runners. Small number of statistically significant differences in the dimensions of sport engagement and sport identity have been found according to the gender, education level and winning medals on the international competitions. The most reasonable explanation of these differences could be given in terms of very similar characteristics of elite athletes on the same level of sport excellence.

Key words: psychometric properties, runners, sport excellence

Introduction

Athletic engagement and athletic identity are important aspects of sports psychology, since they have a significant impact on athlete's success in sport and well-being in general. However, both topics are rarely studied in Croatia, especially in the elite sprinters' population. This article therefore represents a pioneer research investigating and measuring athletic engagement and athletic identity among top athlete-sprinters across the country.

Athlete engagement (AE) is an enduring, relatively stable sport experience, which refers to a generalized positive affect and cognition about one's sport as a whole[1,2]. Previous studies have shown a positive correlation of AE with the construct of flow[3] and a negative correlation with burnout[1], making it a valued sport specific measurement. Athlete engagement (AE) may allow researchers to better understand the complexities of human behavior in sport, and provide a framework for the promotion of positive sport experiences. Lonsdale, Hodge, and Jackson (2007) also suggested that AE may be particularly relevant for

elite athletes, who must invest extraordinary amounts of time and effort to be successful[1,4].

Athletic identity refers to the degree of strength and exclusivity to which a person identifies with the athlete role[5]. It is a significant social dimension of self-concept, which is affected by experience, relations with others and involvement in sport activities[6]. Athletic identity can also be defined as one's special attention to sport relative to other activities in his or her life. It affects other aspects of people's sport participation and even provides reasons for lack of participation in other activities including education and social interactions[5].

To date, only several investigations have been published on athlete engagement[1,2] and little empirical research has been conducted in the sports field to understand the role of athletes' engagement in a sport environment. Of the few studies about this topic, Hodge, Lonsdale and Jackson (2009) focused on an elite sport context and identified the antecedents (basic psychological needs) and consequences (dispositional flow) of athlete en-

gagement[3]. Prior studies also highlighted that expert performance results from a long-term systematic engagement in a deliberate practice in a domain[7,8]. In this sense, examining the role of engagement of athletes in different competitive levels may prove to be vital to understand how they are driven to master skills, and continue to practice their sports[8,9]. A focus on an inductive approach in measurement (e.g. self-reported measures of athletes' cognitive engagement) has proven to be important in understanding the multidimensional nature of engagement in sport environments[10], so studies have increasingly focused on the development of measurement tools to assess athletes' perceived engagement with sports activities[1,2]. For example, Lonsdale, Hodge and Jackson (2007) conducted an exploratory study using New Zealand elite athletes, and developed the Athlete Engagement Questionnaire (AEQ) consisting of four dimensions: confidence, dedication, vigor, and enthusiasm[1]. In the subsequent study, Lonsdale, Hodge, and Raedeke (2007) examined the proposed factor structure using a larger sample of New Zealand and Canadian elite athletes[2]. The AEQ revealed good psychometric properties proving to be a reliable tool to assess engagement in sport competitive environments, as well as to understand the relationship between burnout and engagement in athletes.

Since athletic identity affects other aspects of people's sport participation and even provides reasons for lack of participation in other activities including education and social interactions, it has been referred to as »Achilles' Heel« for athletes[5]. Attempts have therefore been made to develop a precise and standard instrument for its measurement in order to provide the practitioners with valuable information about the efficient role of athletic identity in realization of the athletes' goals. Brewer et al. (1993) constructed an instrument to determine strength and exclusivity through athletic role and called it the Athletic Identity Measurement Scale (AIMS)[5]. In validation of this scale, athlete identity has been applied to elite athletes, recreational athletes, and non-athlete samples[5]. Subsequent research showed that individuals with strong athletic identities establish self-concepts premised on their athletic role and that athletes with an exclusive athletic identity may have emotional difficulty adjusting to nonsport participation[11,12]. Furthermore, Brewer (1990) reported a significant correlation between exclusivity and depression for athletes suffering from a sport injury[11] and Lavallee (1997) found significant decreases of athletic identity upon sport career termination[13]. It has been reported that high athletic identity contributes to more problems in the adaptation process after the sports career end[14,15], but is also consistent with pursuing a career in sport[16], and athletes can benefit from having strong emotional connections to their sport in terms of positive effects on athletic performance and a potential long-term involvement in physical activities[17]. Research by Hale and Waalkes (1994) also suggested that athletes with high AIMS scores were more willing to use performance enhancing drugs and had less interest in academics compared to athletes with lower AIMS scores[18].

A focus on reliable psychological instruments when analyzing athletes' mental skills is a pre-requisite in the sport-related literature[19,20]. Therefore, we intend to further validate AEQ and AIMS instruments in a Croatian athletes' sport setting, given that every new application of the instruments is a contribution to their validity consummation, and offers an important theoretical value[21]. Both athletic engagement and athletic identity have not been studied extensively in Croatia or in the region, especially in the elite sprinters' population. A recent Croatian study on sport turism included the analysis of athletic identity in windsurfers[22] and one Serbian study investigated the correlation between self-esteem, athletic identity and motivation in basketball players[23]. Therefore, this study represents a pioneer research investigating athletic engagement and athletic identity among top athlete-sprinters in Croatia, using both the Athlete Engagement Questionnaire (AEQ) and the Athletic Identity Measurement Scale (AIMS).

The first goal of this research was to determine construct validity and reliability type internal consistency for two questionnaires (Athlete Engagement Questionnaire – AEQ and Athletic Identity Measurement Scale – AIMS), applied on elite Croatian athletes-sprinters. The second goal was to determine the differences in the dimensions of these two questionnaires, according to gender, education level and winning medals on international competitions. Finally, the third goal was to determine the correlations among the dimensions in these measuring instruments, stratified by gender.

Methods

Participants

A total of 71 elite athletes-sprinters are examined, from which 27 (38%) females and 44 (62%) males. On average, female athletes-sprinters were involved in sport at the top level for more than 12 years (range 4-20 years), while the average for males was 13 years (range 3-31 years). In relation to their education level, 12 female athletes (45%) had secondary school education, 4 (15%) higher education, 9 (33%) university graduates and 2 (7%) master's degree or doctorate. From the male athletes, 1 (2%) had primary school education, 12 (27%) had secondary school education, 14 (32%) had higher education, 15 (34%) had university graduates and 2 (5%) had master's degree or doctorate. In terms of marital status, 9 female athletes (33%) were unmarried, 15 (52%) were married, 3 (11%) were divorced and 1 (4%) was a widow. From the male athletes, 25 (57%) were unmarried, 18 (41%) were married and 1 (2%) was divorced. All female and male athletes-sprinters in this study won medals in regional competitions and state championships, but only 9 females (33%) and 19 (43%) males won medals in international championships.

Data collection

All participants accepted voluntarily to participate in the study under the guarantee of anonymity of their responses. They were instructed about the purpose and procedures of the study and they all signed an informed consent.

Measures

Each participant was given two types of questionnaires –Athlete Engagement Questionnaire (AEQ) and Athletic Identity Measurement Scale (AIMS).

The Athlete Engagement Questionnaire (AEQ) comprised sixteen items distributed in four dimensions, namely dedication, self-esteem, enthusiasm and energy. Respondents were asked through a 5-point Likert-type scale ranging from 1 (almost never) to 5 (almost always) to indicate how often in the past two months did they feel in a certain way. Sample items included statements such as: 'I am determined to achieve my goals in sport' (dedication); 'I believe I am capable of accomplishing my goals in sport' (self-esteem); 'I feel excited about sports' (enthusiasm); 'I am full of energy when engaging in sports.' (energy).

The Athletic Identity Measurement Scale (AIMS) consisted of nine items distributed in three dimensions: social identity/exclusivity, negative affectivity and self-identity. For each item subject responded on a 7-point scale with 7 anchored by strongly agree and 1 anchored by strongly disagree. Sample items included statements such as: 'Most of my friends are athletes' (social identity/exclusivity), 'I feel bad about myself when I do poorly in sports.' (negative affectivity), 'I consider myself an athlete' (self-identity).

Procedures

Athletes received a letter or a phone call describing the purpose of the study after which they filled out the consent forms. Both questionnaires were self-administered and completion took approximately 10 minutes.

Data analysis

Standard descriptive statistic was applied. Kaiser-Meyer-Olkin Measure of Sampling Adequacy and Bartlett's Test of Sphericity were used to indicate if the correlation matrix is adequate for factorization and Cronbach alpha coefficient was calculated for specifying the internal reliability of the dimensions within each questionnaire. Principal Axis Factoring (PAF) with Varimax rotation was used to determine the latent structure (con-

TABLE 1

ATHLETIC ENGAGEMENT: DESCRIPTIVE CHARACTERISTICS AND RESULTS OF PRINCIPAL AXIS FACTORING WITH VARIMAX ROTATION, WITH BELONGING RELIABILITY, APPLIED ON THE SAMPLE OF ATHLETES-SPRINTERS

Items – males	f1	f2	f3	f4	h²	Mean	St.Dev.
I am dedicated to achieving my goals in sports.	.833				.809	4.143	0.843
I want to work hard to achieve my goals in sports.	.805				.750	4.357	0.932
I am determined to achieve my goals in sports.	.771				.746	4.238	0.790
I believe I am capable of accomplishing my goals in swimming.	.608	.582			.751	3.952	0.661
I am devoted to sports.	.568				.451	4.286	0.636
I am enthusiastic about sports.	.517		.381		.544	4.405	0.734
I believe I have the skills/technique to be successful in sports.		.772			.646	4.095	0.790
I am confident in my abilities.		.761			.620	4.286	0.636
I feel capable of success in sports.	.530	.720			.809	4.262	0.665
I feel excited about sports.			.806		.789	4.690	0.517
I have fun doing sports.			.698		.507	4.214	0.782
I enjoy sports.			.683		.482	4.667	0.523
I feel really alive when I participate in sports.			.544		.519	4.333	0.902
I feel mentally alert when I participate in sports.			.406		.279	4.476	0.594
I feel energetic when I participate in sports.				.778	.692	4.595	0.497
I feel energized when I participate in sports.				.744	.718	4.452	0.593
Kaiser-Meyer-Olkin Measure / Bartlett's Test of Sphericity	.744			705.214** (df=120)			
Eigenvalue	3.54	2.51	2.43	1.63	10.11		
Variance Explained (%)	22.1	15.7	15.3	10.2	63.2		
Reliability (Cronbach's alpha)	.887	.848	.765	.828			

Legend: h²=communalities

Males: f1=dedication, f2=self-esteem, f3=enthusiasm, f4=energy

struct validity) of the instrument AEQ, while the Principal Component Analysis (PCA) with Varimax rotation was used to determine construct validity for AIMS. To determine the differences among the groups of athletes-sprinters (according to gender, education level and winning international medals), Mann-Whitney U test is applied. Spearman's rho correlations were calculated to obtain intercorrelations between specific variables in each set of characteristics. Data processing was done using statistical program SPSS 11.

Results

For the first measuring instrument (athletic engagement) applied on Croatian sample(s) of athletes-sprinters, Kaiser-Meyer-Olkin Measure of Sampling Adequacy and Bartlett's Test of Sphericity indicate that the correlation matrix is adequate for factorization. Application of Principal Axis Factoring, as well as the scree plot, indicate a steep drop of eigenvalues that revealed a four-component structure, with factors named: dedication, self-esteem, enthusiasm and energy. These four components together account for about 62% of the total variance explained. Basic descriptives and communalities are presented in Table 1, where we also see that the reliability type internal consistency (Cronbach's alpha) of all dimensions is very high and thus very satisfactory.

For the second measuring instrument (Athletic Identity Measurement Scale) applied on Croatian sample of athletes, Kaiser-Meyer-Olkin Measure of Sampling Adequacy and Bartlett's Test of Sphericity indicate that the

correlation matrix is adequate for factorization. Application of PCA, as well as the scree plot, indicate a steep drop of eigenvalues, which revealed a three-component structure, with factors named: social identity/exclusivity, negative affectivity and self-identity. Three principal components jointly account for about 54% of the total variance explained. Basic descriptives and communalities are presented in Table 2, where we also see that the reliability type internal consistency (Cronbach's alpha) of all dimensions is high and thus satisfactory.

Table 3 presents the differences in dimensions of sport engagement (dedication, self-esteem, enthusiasm and energy) and sport identity (social identity/exclusivity, negative affectivity and self-identity) in male and female athletes-sprinters. According to our results, statistically significant differences are found in the dimension of sport identity (variables social identity/exclusivity and self-identity), while no significant differences have been observed in the dimension of sport engagement. In the dimension social identity/exclusivity, higher means are found in females, as compared with males. In the dimension self-identity, higher means are found in males, as compared with females.

Table 4 presents the differences in dimensions of sport engagement (dedication, self-esteem, enthusiasm and energy) and sport identity (social identity/exclusivity, negative affectivity and self-identity), with regards to the level of education. The results suggest no statistically significant differences in the analyzed dimensions.

Table 5 presents differences in dimensions of sport engagement (dedication, self-esteem, enthusiasm and ener-

TABLE 2

ATHLETIC IDENTITY: DESCRIPTIVE CHARACTERISTICS AND RESULTS OF PRINCIPAL COMPONENT ANALYSIS (PCA) WITH VARIMAX ROTATION, WITH BELONGING RELIABILITY, APPLIED ON THE SAMPLE OF ATHLETES-SPRINTERS

Items – males	f1	f2	f3	h²	Mean	SD
Other people see me mainly as an athlete.	.839			.734	6.556	0.974
I consider myself an athlete.	.719			.513	6.690	0.715
Most of my friends are athletes.	.683			.539	4.786	1.554
I spend more time thinking about sport than anything else.	.522	.428	.383	.602	4.524	1.612
To feel good. I have to be engaged in sport.	.463	.451		.535	5.866	1.140
Sport is the only important thing in my life.		.778		.634	2.268	1.397
I feel bad about myself when I do poorly in sport.		.764		.610	2.929	1.892
I would be very depressed if I were injured and could not compete in sport.		.686		.562	4.690	1.893
Sport is the most important part of my life.			.816	.717	6.500	0.944
I have many goals related to sports.	.406		.728	.733	5.881	1.347
Kaiser-Meyer-Olkin Measure / Bartlett's Test of Sphericity	.712			187.033 (df=45)		
Eigenvalue	2.438	2.137	1.605			
Variance Explained	24.38	21.37	16.05	61.79%		
Reliability (Cronbach's alpha)	.675	.848	.828			

Legend: f1= social identity/exclusivity. f2= negative affectivity. f3= self-identity. h²= communalities. Mean=mean value. SD= standard deviation

TABLE 3

DIFFERENCES IN THE DIMENSIONS OF SPORT ENGAGEMENT AND SPORT IDENTITY IN MALE AND FEMALE ATHLETES-SPRINTERS

Variables	Gender	Mean	Std. Deviation	Mann-Whitney U test (p)
social identity/exclusivity	males	−0.133	0.995	0.032*
	females	0.210	0.987	
negative affectivity	males	−0.032	0.856	0.969
	females	0.051	0.957	
self-identity	males	0.097	1.031	0.046*
	females	−0.153	0.838	
dedication	males	0.011	0.890	0.849
	females	−0.018	1.037	
self-esteem	males	−0.046	0.985	0.671
	females	0.071	0.825	
enthusiasm	males	−0.042	0.888	0.627
	females	0.066	0.990	
energy	males	−0.002	0.817	0.735
	females	0.003	0.983	

* test is significant at the 0.05 level (2-tailed); ** test is significant at the 0.01 level (2-tailed)

TABLE 4

DIFFERENCES IN THE DIMENSIONS OF SPORT ENGAGEMENT AND SPORT IDENTITY IN ATHLETES-SPRINTERS WITH REGARDS TO EDUCATION

Variables	Education level	Mean	Std. Deviation	Mann-Whitney U test (p)
social identity/exclusivity	high school. college	0.181	0.814	0.126
	university degree. MA. PhD	−0.286	1.198	
negative affectivity	high school. college	0.046	0.960	0.787
	university degree. MA. PhD	−0.073	0.780	
self-identity	high school. college	−0.009	1.024	0.847
	university degree. MA. PhD	0.014	0.874	
dedication	high school. college	0.177	0.744	0.092
	university degree. MA. PhD	−0.260	1.140	
self-esteem	high school. college	−0.102	1.015	0.651
	university degree. MA. PhD	0.149	0.755	
enthusiasm	high school. college	0.098	0.984	0.340
	university degree. MA. PhD	−0.144	0.824	
energy	high school. college	0.075	0.950	0.256
	university degree. MA. PhD	−0.110	0.765	

* test is significant at the 0.05 level (2-tailed); ** test is significant at the 0.01 level (2-tailed)

gy) and sport identity (social identity/exclusivity, negative affectivity and self-identity) with regards to the ownership of international medals. Presented results show that only statistical significant difference according to the ownership of international medals is found in the dimension of sport engagement (enthusiasm), in the direction of higher means at these athletes who have achieved international medals. No significant differences have been observed in the dimension of sport identity.

Out of 21 correlations in male athletes-sprinters, presented in Table 6, only four have been found as statistically significant. Three correlations (among dedication

TABLE 5
DIFFERENCES IN THE DIMENSIONS OF SPORT ENGAGEMENT AND SPORT IDENTITY IN ATHLETES-SPRINTERS WITH REGARDS
TO THE OWNERSHIP OF INTERNATIONAL MEDALS

Variables	International medals	Mean	Std. Deviation	Mann-Whitney U test
Social identity/exclusivity	yes	0.088	0.982	0.255
	no	−0.059	1.018	
Negative affectivity	yes	0.039	0.849	0.683
	no	−0.026	0.927	
Self-identity	yes	0.119	0.717	0.939
	no	−0.080	1.098	
Dedication	yes	0.220	0.534	0.424
	no	−0.141	1.114	
Self-esteem	yes	−0.009	0.886	0.703
	no	0.006	0.953	
Enthusiasm	yes	0.294	0.729	0.035*
	no	−0.189	0.992	
Energy	yes	0.072	0.738	0.703
	no	−0.046	0.963	

* test is significant at the 0.05 level (2-tailed); ** test is significant at the 0.01 level (2-tailed)

TABLE 6
CORRELATIONS AMONG THE VARIABLES OF SPORT ENGAGEMENT AND SPORT IDENTITY. APPLIED ON THE SAMPLE OF MALE
ATHLETES-SPRINTERS

Males	social identity/exclusivity	negative affectivity	self-identity	dedication	self-esteem	enthusiasm	energy
Social identity/exclusivity	1	−0.009	−0.458**	0.297	−0.020	0.376*	0.127
Negative affectivity		1	−0.086	0.339*	−0.208	−0.218	0.092
Self-identity			1	−0.077	0.348*	−0.122	−0.105
Dedication				1	−0.099	0.087	0.187
Self-esteem					1	0.020	−0.039
Enthusiasm						1	−0.130
Energy							1

Females	social identity/exclusivity	negative affectivity	self-identity	dedication	self-esteem	enthusiasm	energy
Social identity/exclusivity	1	0.426*	−0.337	0.070	0.092	0.220	0.210
Negative affectivity		1	−0.257	0.002	0.360	−0.089	0.179
Self-identity			1	0.355	0.358	0.102	0.100
Dedication				1	0.231	−0.037	−0.224
Self-esteem					1	−0.207	0.162
Enthusiasm						1	0.067
Energy							1

* correlation is significant at the 0.05 level (2-tailed); ** correlation is significant at the 0.01 level (2-tailed)

and negative affectivity, self-esteem and self-identity, enthusiasm and social identity/exclusivity) show positive and low statistical significance, while the correlation between social identity/exclusivity and self-identity is negative and moderately significant. The variable energy does not show a statistically significant association with none of the

other six variables. Out of 21 correlations in female athletes-sprinters, presented in Table 6, the only one statistically significant correlation has been found between negative affectivity and social identity/exclusivity. Their correlation is positive and moderately significant. None of the other variable pairs have shown a statistically significant correlation.

Discussion and Conclusions

Construct validity and reliability were examined in both questionnaires (AEQ and AIMS), revealing the dimensions very similar as in the original instruments, named: social identity/ exclusivity, negative affectivity, self-identity (from AIMS), dedication, self-esteem, enthusiasm and energy (from AEQ). All the dimensions in both questionnaires showed very satisfactory reliabilities (in range from moderate to high). These findings suggest that AEQ and AIMS could be successfully applied on Croatian sprint runners in the future.

The results revealed no statistically significant differences in the dimensions of sport engagement and sport identity, according to education level of the sprint runners. The only statistically significant difference according to the ownership of international medals is found in the aspect of sport engagement (enthusiasm), with higher means for the athletes who have achieved international medals. Two gender differences are reflected in the dimension social identity /exclusivity (higher scores in females), while in the dimension of self-identity, higher means are found in male sprinter runners. Small number of differences according to all three independent variables could be explained in terms of very similar characteristics of elite athletes-sprinters on the same level of sport excellence[24].

A small number of statistically significant correlations have been found between the dimensions of sport engagement and sport identity. Only three are statistically significant and positive (low sized) correlations are found in male athletes-sprinters, between: dedication and negative affectivity, self-esteem and self-identity, enthusiasm and social identity/exclusivity. None statistically significant correlations are found between the dimensions of sport engagement and sport identity in females. These correlations could be explained in the terms of different motivations for sport engagement in general, in male and female athletes-sprinters. On the other hand, the expected strong positive link between athlete's sport identity and his/her sport engagement becomes significantly lower, when aspects of both constructs are divided in their specific aspects. Namely, the nature of sprint running, as individual sport, is very complex. The most important psychological characteristics of elite sprinters are related to the successful stress control and strong achievement motivation[24]. Most successful sprinters are able to cope and control their anxiety more effectively and are more likely to reach an optimal arousal level for peak performance. A study of track and field athletes showed that elite athletes are highly driven by personal goals, that they are task and ego-orientated and believe in themselves, more than mod-

erate or average track and field athletes[25]. Gould et al. (2002) revealed that Olympic athletes have a higher ability to cope and control anxiety, confidence, mental toughness, and sport intelligence and that they also have a higher ability to focus and block out distractions, competitiveness, strong work ethic, ability to set and achieve goals, coachability, high levels of dispositional hope, optimism, and adaptive perfectionism[26]. Study results of Lawless (2013) affirm that psychological skills levels can distinguish between more and less-successful tertiary sprinters[24]. Thus, sport identity and sport engagement (which are not basic psychological skills) are probably not the most important characteristics which can differentiate high-level and other sprinters, according to any relevant independent variable. Anyway, these characteristics are very important for sport success in sprint runners and average values for their dimensions could be used as standards which offer useful information for coaches or sport psychologists in defining successful individualized training programs.

The advantage of this research is the application of the named questionnaires (AEQ and AIMS) for the first time in Croatia, according to our knowledge, with the preliminary insight in their construct validity and reliability. On the other hand, this is one of the few psychological researches where the subjects were almost all active and former elite sprint runners in Croatia, and the sample is thus very representative for this population. Additionally, these two constructs (sport engagement and sport identity) are particularly interesting when considering psychological characteristics of this small and very specific population of athletes, because sprint running is an especially demanding individual sport from the functional, motoric and psychological aspect.

The main shortcoming of the research is the fact that initial validation of the questionnaires was not stratified by gender or age group. In spite of the fact that almost all elite sprint runners in Croatia were examined, the number of participants is in general small, according to the statistical pre-assumptions for using more sophisticated statistical analyses. Thus, applying these questionnaires on the international level and comparing with similarly chosen samples of subjects from other countries could be the useful direction for future research. Practical implication of this study could be focused on using this orientation standards (average values, such as means and standard deviations), arising from this initial application of the questionnaires, to estimate levels of sport engagement and sport identity at individual sprint runners in Croatia. This could be a useful information to their sport coaches (or sport psychologists), for modifying or developing more successful individualized training programs to improve these characteristics, especially in elite training centers.

As a conclusion, the application of AEQ and AIMS revealed the dimensions very similar as in the original instruments, which showed moderate to high reliabilities: social identity/ exclusivity, negative affectivity, self-identity (all from AIMS), dedication, self-esteem, enthusiasm and energy (all from AEQ). Small number of statistically sig-

nificant differences in the dimensions of sport engagement and sport identity have been found among sprint runners, according to the gender, education level and winning medals on the international competitions. The most reasonable explanation of these differences could be given in terms of very similar characteristics of elite athletes on the same level of sport excellence. A small number of statistically significant correlations have been found between the dimensions of sport engagement and sport identity, mainly in male sprinter runners. These gender differences in the correlation matrices could be explained in terms of different motivations for sport engagement in general in male and female athletes-sprinters, as well as in terms of partitioning of the aspects of sport identity and sport engagement.

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SPORTSKI ANGAŽMAN I SPORTSKI IDENTITET KOD VRHUNSKIH HRVATSKIH TRKAČA SPRINTERA

SAŽETAK

Cilj istraživanja bio je utvrditi konstruktnu valjanost i pouzdanost za dva upitnika (Upitnik sportskog angažmana – AEQ i Skalu sportskog identiteta – AIMS), primijenjen na vrhunskim hrvatskim trkačima-sprinterima, kao i povezanosti između njihovih dimenzija. Zatim, utvrdili smo razlike u dimenzijama sportskog angažmana i sportskog identiteta, prema spolu, razini obrazovanja i osvajanju medalja na međunarodnim natjecanjima. Ispitano je ukupno 71 sprinter (bivši i još uvijek aktivni), od kojih je 27 (38%) bilo žena, a 44 (62%) muškaraca. Rezultati faktorskih analiza pokazali su postojanje dimenzija vrlo sličnih kao u izvornim instrumentima, koje su pokazale umjerene do visoke pouzdanosti. Mali broj statistički značajnih korelacija pronađen je između dimenzija sportskog angažmana i sportskog identiteta, uglavnom kod muških trkača sprintera. Mali broj statistički značajnih razlika u dimenzijama sportskog angažmana i sportskog identiteta su pronađeni prema spolu, razini obrazovanja i osvajanju medalja na međunarodnim natjecanjima. Najrazumnije objašnjenje ovih razlika može se dati u smislu vrlo sličnih karakteristika sportaša na istoj razini sportske izvrsnosti.