

## Athletes and Non-Athletes' Life Satisfaction

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*It is expected athletes to be more satisfied with their life than non-athletes, because sport plays an important role for health, life satisfaction and well-being, as sports activities give satisfaction because being recreational. Life satisfaction was studied in Bulgarian athletes and non-athletes as overall life satisfaction by means of the Satisfaction with Life-Scale and as satisfaction with different life domains measured by several single items. The results indicated that there were not any significant differences in general life satisfaction between the participants practicing sport regularly and the participants who did not practice any sport. However, the athletes were more satisfied with their health status, their relationships with their friends, and their performance than the non-athletes. For all the participants, general life satisfaction correlated significantly and positively with satisfaction with different life domains – own financial situation, own achievements, personal growth, familial financial situation, own health status, own performance, relationships with friends, relationships with family, and relationships with colleagues. As some other authors have also found, the results on the Satisfaction with Life-Scale correlate positively with some other measures of life satisfaction.*

**Keywords:** Athletes, Domain-specific Satisfaction, Overall Life Satisfaction

### Introduction

The previous scientific findings that are presented in the theoretical part of this paper suppose the existence of some differences between athletes and non-athletes' life satisfaction – as overall life satisfaction or as satisfaction with different life domains, that is why the main research question is to study if there is a difference between athletes and non-athletes' life satisfaction. Another research question is to establish if satisfaction with different life domains is related to overall life satisfaction for both athletes and non-athletes. Some social-demographic differences in life satisfaction have also been reviewed and studied in this paper as they are related to different sub-categories of the athletes and non-athletes.

The theoretical part of this paper presents a definition of life satisfaction, its significance for health and well-being, and the rationale for stating the existence of some socio-demographic differences in athletes and non-athletes' life satisfaction. The research part presents the instruments that are used to study the different types of life satisfaction – overall and domain-specific life satisfaction, as well as the participants in the study are described – both the athletes and the non-athletes. The main research findings are compared with some previous studies on life

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satisfaction. It is important life satisfaction to be studied as a consequence of sports practice and daily routine.

Physical activity and sports practice can contribute to enhancement of self-esteem (Bondy 2009) that is related to psychological and social well-being (Mann et al. 2004, Pavot and Diener 1993, Pavot and Diener 2009, Pavot and Diener 2015). Well-being has its favourable effects on health (Diener 2013, Diener and Ryan 2009, Diener and Scollon 2014, Diener and Seligman 2004), social relationships (Diener 2009, Diener 2013, Diener and Scollon 2014), and productivity (Diener 2013). Life satisfaction also correlates positively with mental health (Pavot and Diener 1993, Pavot and Diener 2009, Pavot and Diener 2015).

Well-being concerns cognitive and affective estimation of own present life or life in long-term perspective (Diener and Scollon 2014, Diener and Seligman 2004, Kesebir and Diener 2008), i.e. cognitive estimation of life satisfaction and affective estimation of moods and emotions (Kesebir and Diener 2008). Well-being includes frequent positive affects (happiness, prevalence of positive mood), low levels of negative affect, overall life satisfaction (Diener et al. 1985, Diener and Seligman 2018, Emmons and Diener 1985, Kesebir and Diener 2008, Myers and Diener 1995), and satisfaction with important life spheres (work, health, family life, etc.) (Kesebir and Diener 2008). Overall life satisfaction is related to satisfaction with health status, and satisfaction with family status (Vinson and Ericson 2012). These findings give some reasons to expect the correlations between overall life satisfaction and domain-specific satisfaction in both athletes and non-athletes.

Life satisfaction follows from estimation of own life in long-term perspective (Ivanova 2014, Keyes et al. 2002). Life satisfaction is among the indicators of well-being (Prasoon and Chaturvedi 2016). Life satisfaction is the cognitive dimension of subjective well-being (Diener 2009), a cognitive component of subjective well-being (Garvanova 2013), a cognitive process of estimation of own life quality, according to some selected criteria (Diener et al. 1985), positive favourable estimation of own life conditions, of life quality, corresponding to some standards and expectations (Prasoon and Chaturvedi 2016). Social comparison with other people who are under more unfavourable conditions increases own life satisfaction, especially income comparison (Diener and Biswas-Diener 2009).

## **Literature Review**

Some socio-demographic differences have been found in life satisfaction, as revealed in the following sections of this paper. Concerning the income differences in life satisfaction, it has been found that low incomes are related to low life satisfaction, and high incomes are related to higher life satisfaction (Diener and Ryan 2009, Diener et al. 1993, Oishi and Diener 2014a, Myers and Diener 1995, Myers and Diener 2018, Oishi and Diener 2014b), including in Bulgarians (Garvanova 2011, Zankova 2015, Zografova and Stoyanova 2018), and in Turks living in Bulgaria (Zografova and Stoyanova 2018). In the countries with higher

incomes, well-being is less due to the income, but well-being is more due to the positive social relationships and work satisfaction (Diener and Seligman 2004).

It has been found that Bulgarian rangers-sportsmen considered their interpersonal relationships; relationships with their colleagues, and psycho-climate at workplace as very important for occupational attractiveness (Ivantchev and Stoyanova 2016), so athletes may be more satisfied with their relationships than non-athletes. Moreover, Bulgarian military staff had higher life satisfaction than administrative workers (Hristova 2015), and unemployed people had low subjective well-being (Diener and Ryan 2009). These facts give more reasons to expect higher life satisfaction in athletes compared with non-athletes.

It has been found that Bulgarians with shorter work experience were less satisfied with their life than Bulgarians with longer work experience – between 6 and 12 years (Hristova 2015) that suggests that longer sports practice may be related to higher life satisfaction.

The scientific findings regarding age differences in life satisfaction are controversial. One study reports that Bulgarian emerging adults are more satisfied with their life than Bulgarian adolescents (Abubakar et al. 2016). Another study considers Bulgarians below 20 years old to be the most satisfied with their life (Ivanova 2014). According to some other findings, Bulgarians from 30 to 39 years old are the most satisfied with their life (Hristova 2015). Bulgarian life satisfaction decreases with age advance (Eurostat Press Office 2015), as it is typical for poor countries (Diener and Ryan 2009). Some other authors consider that well-being (whose component is life satisfaction) increases with age advance (Keyes et al. 2002) or that subjective well-being is stable during human life (Lucas et al. 2004, Myers and Diener 1995, Myers and Diener 2018, Pavot and Diener 1993, Pavot and Diener 2009), but it diminishes before death (Myers and Diener 2018) or in cases of some negative life events such as unemployment (Lucas et al. 2004). In other cultures like Australia, it has been found that life satisfaction is not constant during human life, but it diminishes in middle-life and it increases in old people (Vinson and Ericson 2012).

The findings regarding gender differences in life satisfaction are also controversial. Several studies report gender similarities in life satisfaction (Diener and Ryan 2009, Myers and Diener 1995, Myers and Diener 2018, Vinson and Ericson 2012). The other findings reveal higher life satisfaction in women than in men, including in Bulgaria (Ivanova 2014, Stavrova et al. 2012), or higher life satisfaction in men than in women (Zuckerman et al. 2017), including in Bulgaria (Papazova 2010).

The positive trustful relationships with family members seem to increase life satisfaction compared to lonely people – single (Luhmann et al. 2013, Myers and Diener 1995, Vinson and Ericson 2012, Zankova 2015) or divorced/separated (Diener et al. 2000, Luhmann et al. 2013). Married people are more satisfied with their life than cohabitating people (Diener et al. 2000, Vinson and Ericson 2012), including in Bulgaria (Stavrova et al. 2012). People who are more satisfied with their life maintain more positive social relationships (Diener and Ryan 2009, Diener and Seligman 2004, Oishi et al. 2007) with their family (Diener and Seligman 2002, Diener and Seligman 2004, Diener et al. 2018), and friends

(Diener and Seligman 2002, Diener et al. 2018). People who are more satisfied with their life perform better in their work (Diener and Seligman 2004). These findings suggest the existence of correlations between overall life satisfaction and various types of domain-specific life satisfaction.

Bulgarian overall life satisfaction positively correlates with positive relationships, self-acceptance, personal growth, positive affect, and setting life goals (Silgidzhiyan et al. 2007). It has been found that athletes set mainly realistic goals for themselves (Stoyanova et al. 2016) that may implicate higher life satisfaction in athletes than in non-athletes.

The findings from the previous studies indicate low (Abubakar et al. 2016, Eurostat Press Office 2015, Garvanova 2015, Jang et al. 2017, Kööts-Ausmees and Realo 2016, Lischetzke et al. 2012, Minkov 2009, Novinite.com - Sofia News Agency 2015, Van de Vliert and Postmes 2014, White 2007) to medium (Kööts-Ausmees et al. 2013, Oishi et al. 1999, Sortheix and Lönnqvist 2014, van de Vliert and Janssen 2002) Bulgarian overall life satisfaction. Bulgarian domain-specific life satisfaction varies more than Bulgarian overall life satisfaction – Bulgarians have low satisfaction with their financial status (Novinite.com - Sofia News Agency 2015, Oishi et al. 1999), high work satisfaction (Novinite.com - Sofia News Agency 2015, Oishi et al. 1999, van de Vliert and Janssen 2002), high satisfaction with home life (Oishi et al. 1999), high satisfaction with own home (Novinite.com - Sofia News Agency 2015), and low satisfaction with personal relationships (Novinite.com - Sofia News Agency 2015).

Well-being increases when neuroticism decreases (Diener and Ryan 2009, Diener and Seligman 2002, Keyes et al. 2002). Life satisfaction negatively correlates with neuroticism (Pavot and Diener 1993, Pavot and Diener 2009). It has been found that athletes have a lower level of neuroticism (Allen and Laborde 2014, Dhesei and Bal 2012, Mackreth et al. 2010, Stoyanova et al. 2016, Velichovska et al. 2012) that is a reason for expecting higher life satisfaction in athletes compared with non-athletes.

Happier people more frequently practice sport (Diener et al. 2018). Practicing sport at least once a week is related to higher subjective well-being than practicing sport at least once a month or just several times a year (Marsh et al. 2010a). These findings give a reason to expect that athletes will be more satisfied with their life than non-athletes.

Volunteering activities and spending more hours in volunteering activities are related to higher well-being (Diener and Ryan 2009, Diener et al. 2018, Oishi et al. 2007, Vinson and Ericson 2012). Practicing sport voluntarily may also contribute to well-being and its component life satisfaction.

Happiness is related to success (Oishi et al. 2007) that is a reason to expect that successful athletes will have higher life satisfaction.

It is expected athletes to be more satisfied with their life than non-athletes, because sport plays an important role for health and well-being (Newman et al. 2010), subjective well-being increases with longer time of actual engagement in sport (Marsh et al. 2010b), practicing sport at least once a week is related to more subjective well-being than practicing sport more rarely (Marsh et al. 2010a), the probabilities of doing sport tend to increase for increasing levels of life satisfaction

(Marsh et al. 2010b), and sports activities give satisfaction because being recreational (Marsh et al. 2010b).

## Methodology

### Participants

The participants were selected purposefully on the basis of the criterion “practicing or non-practicing sport”. They participated voluntarily. The data were collected anonymously. A part of the participants were students in National Sports Academy “Vassil Levski” in Sofia, Bulgaria or in South-West University “Neofit Rilski” in Blagoevgrad, Bulgaria. The most participants ( $N = 122$ ) filled in a paper-and-pencil questionnaire and the other 20 participants filled in the same questionnaire online.

The sample consisted of 142 participants. The female participants were 111 (78.2%), the male participants were 28 (19.7%), and 3 participants (2.1%) did not indicate their gender belonging. Their age varied from 19 to 62 years old. The mean age was 29.75 years,  $SD = 9.22$  years.

Their monthly budget varied between 100 Leva (about 51 Euros) and 5000 Leva (about 2557 Euros). Their average monthly budget was 1127.71 Leva (about 577 Euros),  $SD = 855.52$  Leva (about 437 Euros). The average number of family members was 4,  $SD = 2$  family members.

The participants who practiced sport regularly were 62 (43.7%), and the participants who did not practice any sport were 49 (34.5%), while 31 participants (21.8%) did not answer if they practiced any sport. The athletes practiced different types of sport – aerobics, athletics, auto racing, basketball, boxing, cycling, dancing, fitness, football, gymnastics, handball, kangoo jumps, karate, kickboxing, orienteering, powerlifting, skiing, swimming, table tennis, Tae Bo, tennis, triathlon, volleyball, yoga, and zumba. See Table 1 for the frequency distribution of the athletes in the different types of sport that they practiced. The most frequently exercised types of sports by the studied athletes were fitness, dancing, and athletics.

The athletes practiced sport from 1 week to 1440 weeks (i.e. 30 years), and the mean time of sports practice was 375.9 weeks (7.8 years),  $SD = 343.7$  weeks (7.2 years).

The participants spent on volunteering work in their community from 0 to 40 hours per week. The average period of volunteering activity was 2.65 hours per week,  $SD = 4.99$  hours.

They lived mainly in urban areas – 126 of them (88.7%). The other 16 participants (11.3%) lived in rural areas.

**Table 1.** Frequency Distribution of the Studied Athletes in the Different Types of Sport

Types of sport	Frequency	Percentage of the athletes
aerobics	3	4.84
athletics	6	9.68
auto racing	1	1.61
basketball	1	1.61
boxing	1	1.61
cycling	3	4.84
dancing	9	14.52
fitness	10	16.13
football	4	6.45
gymnastics	1	1.61
handball	1	1.61
kangoo jumps	1	1.61
karate	3	4.84
kickboxing	1	1.61
orienteering	1	1.61
powerlifting	1	1.61
skiing	3	4.84
swimming	1	1.61
table tennis	1	1.61
Tae Bo	1	1.61
tennis	1	1.61
triathlon	1	1.61
volleyball	3	4.84
yoga	3	4.84
zoomba	1	1.61

Source: Authors.

### Instrument

Life satisfaction was studied in Bulgarian athletes and non-athletes as overall life satisfaction by means of the Satisfaction with Life-Scale (SWLS, Diener et al. 1985) and satisfaction with different life domains measured by several single items suggested by Kris (2018) - You are satisfied with your health; You are satisfied with your relationship with family; You are satisfied with your relationship with friends; You are satisfied with your relationships with other people around (e.g., at work/at school); You are satisfied with what you can do; You are satisfied with your personal growth; You are satisfied with what you achieved in your life; You are satisfied with your financial situation; You are satisfied with your family financial situation. All the answers were given on a 9-point scale from 1 - doesn't describe me at all to 9 - describes me exactly. The answers on a 5-point scale and on a 7-point scale are compatible, without changing the psychometric properties of the scale (Jang et al. 2017), and the same was the case with the 9-point scale of answering.

The Satisfaction with Life-Scale has only one dimension, one factor, without sub-scales (Diener et al. 1985, van Beuningen 2012, Vera-Villarroel et al. 2012). Cronbach's alpha of the Satisfaction with Life-Scale in this Bulgarian sample was .802 and the mean inter-item correlation was 0.461. The internal consistency of the Satisfaction with Life-Scale was also high enough in the other countries and samples (Diener et al. 1985, Emmons and Diener 1985, Lischetzke et al. 2012, Pavot and Diener 1993, Pavot and Diener 2009, Pavot and Diener 2015, van Beuningen 2012). A similar coefficient of Cronbach's alpha of the Satisfaction with Life-Scale in other Bulgarian samples was reported in some other studies –  $\alpha = .805$  (Ivanova 2014),  $\alpha = .81$  (Zografova and Stoyanova 2018),  $\alpha = .739$  (Zankova 2015),  $\alpha = .82$  in 1995 and  $\alpha = .78$  in 2005 (Garvanova 2013).

The low score means low life satisfaction (Diener et al. 1985). Life satisfaction measured through the Satisfaction with Life-Scale (SWLS; Diener et al. 1985) is not influenced by social desirability (Diener et al. 1985, Emmons and Diener 1985).

The socio-demographic data were also collected.

### *Data Analysis*

Data were analysed by means of the software SPSS 20 applying descriptive statistics, Pearson correlation coefficients, Mann-Whitney test, and Independent Samples T test.

## **Results**

The participants in the study were the most satisfied with their relationships with their family, then with their relationships with their friends, followed by satisfaction with what they could do, then satisfaction with their relationships with their colleagues, then satisfaction with their personal growth, then satisfaction with their achievements, then satisfaction with their health status, then satisfaction with their family financial situation, and lastly - satisfaction with their own financial situation – see Table 2.

**Table 2.** Means and Standard Deviations of the entire Participants' Domain – Specific Life Satisfaction

Type of domain-specific life satisfaction with	Means	Standard deviations
Relationships with family	7.50	1.93
Relationships with friends	7.44	1.78
Performance - what one could do	7.22	1.93
Relationships with colleagues	7.09	1.89
Personal growth	7.08	2.01
Achievements	6.82	1.97
Health	6.81	2.23
Family financial situation	5.93	2.21
Own financial situation	5.73	2.26

Source: Author.

The results regarding domain-specific life satisfaction revealed medium to high life satisfaction with all domains that were studied – see Table 2, where means were higher than the mid-scale value from one to nine.

The mean score on participants' overall life satisfaction was 29.51,  $SD = 7.76$  that means medium life satisfaction tending towards high life satisfaction. The mean score on the non-athletes' overall life satisfaction was 29.14,  $SD = 8.25$  that means medium life satisfaction tending towards high life satisfaction. The mean score on the athletes' overall life satisfaction was 30.45,  $SD = 7.20$  that means medium life satisfaction tending towards high life satisfaction. There were not any significant differences in general life satisfaction between the participants practicing sport regularly ( $N = 62$ ) and the participants who did not practice any sport –  $N = 49$  ( $t(109) = 0.891, p = .375$ ).

**Table 3.** Statistically Significant Differences between the Athletes and Non-Athletes' Domain – Specific Life Satisfaction

Type of domain-specific satisfaction with	Social group	<i>M</i>	<i>SD</i>	<i>t</i>	<i>df</i>	<i>p</i>
Health	Athletes	7.42	1.72	2.966	78 *	.004
	Non-athletes	6.15	2.56			
Relationships with friends	Athletes	7.92	1.45	2.308	108	.023
	Non-athletes	7.19	1.88			
Performance	Athletes	7.74	1.35	2.856	68 **	.006
	Non-athletes	6.64	2.37			

Note: \* Levene's test for equality of variances = 11.657,  $p_{Levene} = .001$ ;

\*\* Levene's test for equality of variances = 13.846,  $p_{Levene} < .001$ .

Source: Author.

The participants practicing sport differed significantly from the participants who did not practice any sport on whether they were satisfied with their health status, their relationships with their friends, and their performance – what they could do – see Table 3. The athletes were more satisfied with their health status, their relationships with their friends, and their performance than the non-athletes.

The participants practicing sport differed significantly from the participants who did not practice any sport on the number of hours they spent on volunteering activities ( $t(78) = 2.181, p = .032$ ). The athletes ( $M = 3.06, SD = 3.73$ ) spent more hours per week on volunteering activities than the non-athletes did ( $M = 1.38, SD = 2.79$ ).

There were not found any significant gender differences in life satisfaction (111 female participants and 28 male participants, Mann-Whitney  $U = 1535.000, p = .920$ ).

Life satisfaction did not correlate significantly with age for all the participants, neither for the athletes and the non-athletes separately ( $p > .05$ ).

Higher monthly budget correlated weakly, but positively and significantly with higher satisfaction with family financial situation ( $r(103) = 0.243, p = .013$ ) for all the participants.



**Table 4.** Statistically Significant Correlations between Overall Life-Satisfaction and Domain – Specific Life Satisfaction for All the Participants, the Athletes, and the Non-Athletes

Domain-specific life - satisfaction	Overall life-satisfaction of		
	all the participants	non-athletes	athletes
Own financial situation	$r(133) = 0.435$ , $p < .001$	<i>N. S.</i>	$r(60) = 0.504$ , $p < .001$
Achievements	$r(133) = 0.391$ , $p < .001$	<i>N. S.</i>	$r(60) = 0.442$ , $p < .001$
Personal growth	$r(131) = 0.381$ , $p < .001$	$r(45) = 0.320$ , $p = .028$	$r(60) = 0.410$ , $p = .001$
Familial financial situation	$r(132) = 0.329$ , $p < .001$	<i>N. S.</i>	$r(59) = 0.350$ , $p = .006$
Health	$r(133) = 0.312$ , $p < .001$	$r(46) = 0.291$ , $p = .045$	$r(60) = 0.261$ , $p = .041$
Performance	$r(132) = 0.279$ , $p = .001$	<i>N. S.</i>	<i>N. S.</i>
Relationships with friends	$r(133) = 0.248$ , $p = .004$	$r(46) = 0.373$ , $p = .009$	<i>N. S.</i>
Relationships with family	$r(133) = 0.247$ , $p = .004$	$r(46) = 0.386$ , $p = .007$	<i>N. S.</i>
Relationships with colleagues	$r(132) = 0.181$ , $p = .037$	<i>N. S.</i>	<i>N. S.</i>

Note: *N. S.* means a non-significant Pearson correlation coefficient ( $p > .05$ );

Source: Author.

For all the participants, general life satisfaction correlated significantly and positively with satisfaction with different domains – own financial situation, own achievements, personal growth, familial financial situation, health status, and weaker with own performance, relationships with friends, relationships with family, and relationships with colleagues – see Table 4.

For the non-athletes, general life satisfaction correlated significantly and positively with satisfaction with different domains – relationships with family, relationships with friends, personal growth, and health status – see Table 4.

For the athletes, general life satisfaction correlated significantly and positively with satisfaction with different domains – own financial situation, own achievements, personal growth, familial financial situation, and health status – see Table 4.

## **Discussion**

As some other authors (Pavot and Diener 1993, Pavot and Diener 2009) have also found, the results on the Satisfaction with Life-Scale (Diener et al. 1985) correlate positively with some other measures of life satisfaction – in this case with satisfaction with different life domains. Some other studies have also found that overall life satisfaction is related to satisfaction with health status, satisfaction with family status (Vinson and Ericson 2012), and personal growth (Silgidzhiyan et al. 2007).

This study reveals medium Bulgarian overall life satisfaction as the findings by some other authors indicate (Kööts-Ausmees et al. 2013, Oishi et al. 1999, Sortheix and Lönnqvist 2014, van de Vliert and Janssen 2002). This medium overall life satisfaction may be explained by higher satisfaction with relationships with family, friends and colleagues, because it has been found that people who are more satisfied with their life maintain more positive social relationships (Diener and Ryan 2009, Diener and Seligman 2004, Oishi et al. 2007, Silgidzhiyan et al. 2007) with their family (Diener and Seligman 2002, Diener and Seligman 2004, Diener et al. 2018), and friends (Diener and Seligman 2002, Diener et al. 2018). This medium overall life satisfaction may be also explained by higher satisfaction with what the participants can do, because it has been found that people who are more satisfied with their life perform better (Diener and Seligman 2004). The results from this study confirm the findings that Bulgarians have low satisfaction with their financial status (Novinite.com - Sofia News Agency 2015, Oishi et al. 1999), but high work satisfaction (Novinite.com - Sofia News Agency 2015, Oishi et al. 1999, van de Vliert and Janssen 2002).

It has been found that the athletes were more satisfied with their health status, their relationships with their friends, and their performance than the non-athletes, but overall life satisfaction was similar for the athletes and the non-athletes. Higher athletes' satisfaction with health status may be explained by the fact that the sport plays an important role for health and well-being (Newman et al. 2010). Higher athletes' satisfaction with relationships with their friends is supported by the finding that the rangers-sportsmen considered their interpersonal relationships as very important for their occupation (Ivantchev and Stoyanova 2016). Higher athletes' satisfaction with their performance may be explained with the success that they achieve in sports training and competitions.

The finding that the athletes spent more hours per week on volunteering activities than the non-athletes could partially explain higher satisfaction with several life domains in the athletes, as it has been stated that spending more hours in volunteering activities is related to higher well-being (Diener and Ryan 2009, Diener et al. 2018, Oishi et al. 2007, Vinson and Ericson 2012). Lower neuroticism in athletes (Allen and Laborde 2014, Dhési and Bal 2012, Mackreth et al. 2010, Stoyanova et al. 2016, Velichovska et al. 2012) may also explain their higher satisfaction with several life domains, because life satisfaction negatively correlates with neuroticism (Pavot and Diener 1993, Pavot and Diener 2009).

There were not any significant gender differences in life satisfaction as some other studies have also found (Diener and Ryan 2009, Myers and Diener 1995, Myers and Diener 2018, Vinson and Ericson 2012). The lack of age differences in life satisfaction was also established by some other studies (Lucas et al. 2004, Myers and Diener 1995, Myers and Diener 2018, Pavot and Diener 1993, Pavot and Diener 2009).

## Conclusions

This study revealed that the athletes did not differ from the non-athletes in their overall life satisfaction, but they differed significantly in their satisfaction with several life domains - health, relationships, and performance. General life satisfaction was related to satisfaction with health for all the participants, both the athletes and the non-athletes, that suggests the importance of health status for overall life satisfaction. Besides, physical activity and sport may contribute to higher athletes' satisfaction with their health status; because their real health conditions (both physical and mental health) improve with regular sports practice. There should be also some other factors that may explain higher athletes' satisfaction with their health such as awareness of the fact that own efforts contribute to improvement of health status.

General life satisfaction was related to satisfaction with relationships with friends for all the participants and for the non-athletes, but not for the athletes. The athletes maintain friendships with some other athletes who are also their competitors, and this fact may explain why the athletes' satisfaction with their relationships with friends did not contribute to athletes' overall life satisfaction.

General life satisfaction was related to satisfaction with own performance for all the participants, but not separately for the athletes or non-athletes. Successful performance in various activities (not only sport) may increase self-confidence and it seems to be an important factor contributing to overall life satisfaction.

These findings also suggest that some other factors should be studied to explain the differences in athletes and non-athletes' domain-specific life satisfaction, such as personality peculiarities, situational demands or socio-demographic diversity. Further studies may compare athletes and non-athletes' life satisfaction cross-culturally, including more participants from different social categories.

## References

- Abubakar A, Van De Vijver F, Alonso-Arbiol I, He J, Adams B, Aldhafri S, Aydinli-Karakulak A, Arasa J, Boer D, Celenk O, Dimitrova R, Ferreira MC, Fischer R, Mbebeb FE, Frías MT, Fresno A, Gillath O, Harb C, Handani P, Hapunda G, Kamble S, Kosic M, Looch JL, Mazrui L, Mendia RE, Murugami M, Mason-Li M, Pandia WS, Perdomo C, Schachner M, Sim S, Spencer R, Suryani A, Tair E (2016) Measurement invariance of the brief multidimensional student's life satisfaction scale

- among adolescents and emerging adults across 23 cultural contexts. *Journal of Psychoeducational Assessment* 34(1): 28-38. Doi=10.1177/0734282915611284.
- Allen MS, Laborde S (2014) The role of personality in sport and physical activity. *Current Directions in Psychological Science* 23(6): 460-465. Doi=10.1177/0963721414550705.
- Bondy C (2009) Aortni zaboliavania pri syndrom na Turner [Aortic diseases in Turner syndrome]. In Gravholt CH (ed) *Sindromat na Turner – opoznaite tialoto si! Kniga s informatsia za sindroma na Turner*, 108-115. Novo Nordisk. Retrieved from <https://bit.ly/2qOkkbD>.
- Dhesi SS, Bal BS (2012) Analysis of the personality traits of athletes in individual and team sports. *International Journal of Education and Applied Research* 2(2): 9-11.
- Diener E (2009) Subjective well-being. In Diener E (ed) *The science of well-being: The collected works of Ed Diener. Social Indicators Research Series* (37): 11-58. Dordrecht, The Netherlands: Springer Science & Business Media B.V.
- Diener E (2013) The remarkable changes in the science of subjective well-being. *Perspectives on Psychological Science* 8(6): 663–666. Doi= 10.1177/1745691613507583.
- Diener ED, Gohm CL, Suh E, Oishi S (2000) Similarity of the relations between marital status and subjective well-being across cultures. *Journal of Cross-Cultural Psychology* 31(4): 419-436.
- Diener E, Biswas-Diener R (2009) Will money increase subjective well-being?: A literature review and guide to needed research. In Diener E (ed) *The science of well-being: The collected works of Ed Diener. Social Indicators Research Series* (37): 155-174. Dordrecht, The Netherlands: Springer Science & Business Media B. V.
- Diener E, Ryan K (2009) Subjective well-being: A general overview. *South African Journal of Psychology* 39(4): 391–406. Doi= 10.1177/008124630903900402.
- Diener E, Scollon CN (2014) The what, why, when, and how of teaching the science of subjective well-being. *Teaching of Psychology* 41(2): 175–183. Doi= 10.1177/0098628314530346.
- Diener E, Seligman MEP (2002) Very happy people. *Psychological Science* 13(1): 81–84. Doi= 10.1111/1467-9280.00415.
- Diener E, Seligman MEP (2004) Beyond money: Toward an economy of well-being. *Psychological Science in the Public Interest* 5(1): 1–31. Doi=10.1111/j.0963-7214.2004.00501001.x.
- Diener E, Seligman MEP (2018) Beyond money: Progress on an economy of well-being. *Perspectives on Psychological Science* 13(2): 171–175. Doi= 10.1177/17456916161689467.
- Diener E, Emmons R, Larsen R, Griffin S (1985) The Satisfaction with Life Scale. *Journal of Personality Assessment* 49(1): 71-75.
- Diener E, Sandvik E, Seidlitz L, Diener M (1993) The relationship between income subjective well-being: Relative or absolute?. *Social Indicators Research* 28, 195-223.
- Diener E, Seligman MEP, Choi H, Oishi S (2018) Happiest people revisited. *Perspectives on Psychological Science* 13(2): 176–184. Doi= 10.1177/1745691617697077.
- Emmons RA, Diener E (1985) Personality correlates of subjective well-being. *Personality and Social Psychology Bulletin* 11(1): 89–97. Doi= 10.1177/0146167285111008.
- Eurostat Press Office (2015) *How satisfied are people with their lives in the European Union? A new multi-dimensional data collection*. Retrieved from <https://bit.ly/1CWqtd2>.
- Garvanova M (2011) Osnovni zhizneni celi, udovletvorenost ot zhivota i cennostna kriza pri balgarski studenti (sravnitelnen podhod) [Main life goals, life satisfaction and value

- crisis in Bulgarian students (Comparative approach)]. *Bulgarian Journal of Psychology* 3(4): 77-84.
- Garvanova M (2013) *Transformatsia v tsennostite na savremennia balgarin* [Transformation in the values of contemporary Bulgarian]. Sofia: Za bukвите – O pismenih.
- Garvanova M (2015) Izsledvane na udovletvorenostta ot zhivota pri savremennia balgarin v perspektivata na tsennostite [A study of satisfaction with life at contemporary Bulgarian in the perspective of values]. In *Nauchna sesia "Liderstvoto v demokratichna sreda: izuchavane, prepodavane, vazpitavane"*, Sofia, 30 ianuari 2015 g. [Scientific session "Leadership in democratic milieu: study, teaching, education", Sofia, 30 January 2015]. Sofia: Za bukвите - O pismenih. Retrieved from <https://goo.gl/D8uwZZ>
- Hristova E (2015) Savremenni izmereniya na profesionalen stress I burn-out [Current dimensions of professional stress and burnout]. In Vasilev V, Stamatov R, Gajdarov K, Janakiev Y, Slavcheva-Andonova G (eds) *Psihologiya i obshtestvo. Mezhdunarodna konferenciya [Psychology and society. International conference]*, 472-487. Plovdiv: PU "Paisii Hilendarski".
- Ivanova EA (2014) *Vzaimovrazki mezhdu internet zavisimost, kiberhondriya i blagopoluchie. Avtoreferat na disertatsiya za prisazhdane na obrazovatelna i nauchna stepen „Doktor” [Interconnections between Internet dependence, cyberhondria and well-being. PhD thesis abstract]*. Sofiya: SU "Sv. Kliment Ohridski".
- Ivantchev N, Stoyanova S (2016) Relationships in the workplace and occupational attractiveness among students, teachers and rangers-sportsmen. *Problems of Psychology in the 21st Century* 10(1): 22-30.
- Jang S, Kim ES, Cao C, Allen TD, Cooper CL, Lapierre LM, O'Driscoll MP, Sanchez JJ, Spector PE, Poelmans SAY, Abarca N, Alexandrova M, Antoniou AS, Beham B, Brough P, Carikci I, Ferreira P, Fraile G, Geurts S, Kinnunen U, Lu C-q, Lu L, Moreno-Velázquez IF, Pagon M, Pitariu H, Salamatov V, Siu O-I, Shima S, Schulmeyer MK, Tillemann K, Widerszal-Bazyl M, Woo JM (2017) Measurement invariance of the satisfaction with life scale across 26 countries. *Journal of Cross-Cultural Psychology* 48(4): 560–576. Doi= 10.1177/0022022117697844.
- Kesebir P, Diener E (2008) In pursuit of happiness: Empirical answers to philosophical questions. *Perspectives on Psychological Science* 3(2): 117–125. Doi= 10.1111/j.1745-6916.2008.00069.x.
- Keyes CLM, Shmotkin D, Ryff CD (2002) Optimizing well-being: the empirical encounter of two traditions. *Journal of Personality and Social Psychology* 82(6): 1007–1022. Doi= 10.1037//0022-3514.82.6.1007.
- Kööts-Ausmees L, Realo A (2016) Life satisfaction among ethnic minorities in Europe. *Journal of Cross-Cultural Psychology* 47(3): 457–478. Doi=10.1177/0022022116628671.
- Kööts-Ausmees L, Realo A, Allik J (2013) The relationship between life satisfaction and emotional experience in 21 European countries. *Journal of Cross-Cultural Psychology* 44(2): 223–244. Doi= 10.1177/0022022112451054.
- Kris K (2018) *Happiness meanders study: Manual for cooperating researchers*. Retrieved from <https://bit.ly/2A1TUqP>.
- Lischetzke T, Eid M, Diener E (2012) Perceiving one's own and others' feelings around the world: The relations of attention to and clarity of feelings with subjective well-being across nations. *Journal of Cross-Cultural Psychology* 43(8): 1249–1267. Doi=10.1177/0022022111429717.

- Lucas RE, Clark AE, Georgellis Y, Diener E (2004) Unemployment alters the set-point for life satisfaction. *Psychological Science* 15(1): 8–13. Doi= 10.1111/j.0963-7214.2004.01501002.x.
- Luhmann M, Lucas RE, Eid M, Diener E (2013) The prospective effect of life satisfaction on life events. *Social Psychological and Personality Science* 4(1): 39–45. Doi= 10.1177/1948550612440105.
- Mackreth K, van Wely S, Ireland J, Carnell D, Powell S (2010) Sports psychology. Chapter 8. Individual aspects of performance that influence young people's participation and aspirations. In K Mackreth, S van Wely, J Ireland, D Carnell, S Powell (eds) *OCR A2 PE Revision Guide (OCR A Level PE)*, 196-225. Portsmouth, NH: Heinemann.
- Mann MM, Hosman CM, Schaalma HP, De Vries NK (2004) Self-esteem in a broad-spectrum approach for mental health promotion. *Health Education Research* 19(4): 357-372. Doi= 10.1093/her/cyg041.
- Marsh K, MacKay S, Morton D, Parry W, Bertranou E, Lewsie J, Sarmah R, Dolan P (2010a) Understanding the value of engagement in culture and sport. Summary report. CASE: The Culture And Sport Evidence Programme. Retrieved from <https://bit.ly/2Q41Jqi>.
- Marsh K, MacKay S, Morton D, Parry W, Bertranou E, Lewsie J, Sarmah R, Dolan P (2010b) Understanding the value of engagement in culture and sport. Technical report. CASE: The Culture and Sport Evidence Programme. Retrieved from <https://bit.ly/2Q4yGCR>.
- Minkov M (2009) Predictors of differences in subjective well-being across 97 nations. *Cross-Cultural Research* 43(2): 152–179. Doi= 10.1177/1069397109332239.
- Myers DG, Diener E (1995) Who is happy? *Psychological Science* 6(1): 10–19. Doi= 10.1111/j.1467-9280.1995.tb00298.x.
- Myers DG, Diener E (2018) The scientific pursuit of happiness. *Perspectives on Psychological Science* 13(2): 218–225. Doi= 10.1177/1745691618765171.
- Newman M, Bird K, Tripney J, Kalra N, Kwan I, Bangpan M, Vigurs C (2010) Understanding the impact of engagement in culture and sport. A systematic review of the learning impacts for young people. CASE: The Culture and Sport Evidence Programme. Retrieved from <https://bit.ly/2zhRu7T>.
- Novinite.com - Sofia News Agency (2015) *Bulgarians have lowest levels of life satisfaction in EU – Eurostat*. Retrieved from <https://bit.ly/2FwZZSd>.
- Oishi S, Diener E (2014a) Can and should happiness be a policy goal? *Policy Insights from the Behavioral and Brain Sciences* 1(1): 195–203. Doi= 10.1177/2372732214548427.
- Oishi S, Diener E (2014b) Residents of poor nations have a greater sense of meaning in life than residents of wealthy nations. *Psychological Science* 25(2): 422–430. Doi= 10.1177/0956797613507286.
- Oishi S, Diener E, Lucas RE (2007) The optimum level of well-being: Can people be too happy? *Perspectives on Psychological Science* 2(4): 346–360. Doi= 10.1111/j.1745-6916.2007.00048.x.
- Oishi S, Diener E, Lucas RE, Suh EM (1999) Cross-cultural variations in predictors of life satisfaction: Perspectives from needs and values. *Personality and Social Psychology Bulletin* 25(8): 980–990. DOI=<https://doi.org/10.1177/01461672992511006>.
- Papazova E (2010) Determinants of gender-role attitudes, self-esteem and affective balance at adolescence. *Psychological Research*, 2: 101-106.
- Pavot W, Diener E (1993) Review of the satisfaction with life scale. *Psychological Assessment* 5(2): 164-172. Doi=10.1037/1040-3590.5.2.164.
- Pavot W, Diener E (2009) Review of the satisfaction with life scale. In Diener E (ed) *Assessing well-being: The collected works of Ed Diener*, 101-117. Social Indicators

- Research Series 39. Berlin: Springer Science & Business Media B.V. Doi=10.1007/978-90-481-2354-4\_5.
- Pavot W, Diener E (2015) The Satisfaction With Life Scale and the emerging construct of life satisfaction. *Journal of Positive Psychology* 3(2): 137-152. Doi=10.1080/17439760701756946.
- Prasoon R, Chaturvedi KR (2016) Life satisfaction: A literature review. *The Researcher - International Journal of Management Humanities and Social Sciences* 1(2): 25–32.
- Silgidzhiyan H, Karabeliova S, Zankova K (2007) Empirichna sreshta na dvete traditsii v izsledvaneto na psihichното zdrave [Empirical meeting of two traditions in study of mental health]. *Bulgarian Journal of Psychology* 3: 868-876.
- Sortheix FM, Lönnqvist J-E (2014) Personal value priorities and life satisfaction in Europe: The moderating role of socioeconomic development. *Journal of Cross-Cultural Psychology* 45(2): 282–299. Doi=10.1177/0022022113504621.
- Stavrova O, Fetchenhauer D, Schlösser T (2012) Cohabitation, gender, and happiness: A cross-cultural study in thirty countries. *Journal of Cross-Cultural Psychology* 43(7): 1063–1081. Doi=10.1177/0022022111419030.
- Stoyanova S, Ivantchev N, Petrova K (2016) Connectivity of athletes' personality traits and career period as their predictor. *Baltic Journal of Career Education and Management* 4(1): 41–50.
- Van Beuningen J (2012) *The satisfaction with life scale examining construct validity*. Discussion Paper (201209). The Hague: Statistics Netherlands.
- Van de Vliert E, Janssen O (2002) “Better than” performance motives as roots of satisfaction across more and less developed countries. *Journal of Cross-Cultural Psychology* 33(4): 380–397. Doi= 10.1177/00222102033004002.
- Van de Vliert E, Postmes T (2014) Democracy does not promote well-being except in rich countries with demanding climates. *Journal of Cross-Cultural Psychology* 45(8): 1179–1195. Doi=10.1177/0022022114534983.
- Velichovska LA, Naumovski M, Strezovski G, Markovski N, Meshkovska N (2012) Differences in some genuine personality traits between athletes from different sports disciplines and not athletes in R. Macedonia. *PESH* 1(2): 131-134.
- Vera-Villaruel P, Urzúa MA, Pavez P, Celis-Atenas K, Silva J (2012) Evaluation of subjective well-being: Analysis of the satisfaction with life scale in Chilean population. *Universitas Psychologica* 11(3): 719-727.
- Vinson T, Ericson M (2012) *Life Satisfaction and Happiness*. Richmond: Jesuit Social Services.
- White A (2007) A global projection of subjective well-being: A challenge to Positive Psychology?. *Psychtalk* 56, 17-20. Retrieved from <https://bit.ly/2FwyUPf>.
- Zankova KR (2015) *Interaktivni efekti na protektivnite lichnostni resursi i depresivnata simptomatika v"rhu psihichното zdrave. Avtoreferat na disertacija za pris"zhdane na obrazovatelna i nauchna stepen "doktor" [Interactive effects of protective personality factorsw and depressive symptomathology on mental health. PhD thesis abstract]*. Sofia: Sofia University “St. Kliment Ohridski”.
- Zografova Y, Stoyanova SY (2018) Ethnic attitudes and acceptance of others in Bulgaria. In Danailov TR (ed) *Bulgaria: Environmental, Social and Economic Challenges*, 87-116. New York: Nova Science publishers.
- Zuckerman M, Li C, Diener EF (2017) Societal conditions and the gender difference in well-being: Testing a three-stage model. *Personality and Social Psychology Bulletin* 43(3): 329-336. Doi= 10.1177/0146167216684133.

