SPORT – Science & Practice, Vol. 8, №1, 2018, pp. 28-43

Original scientific paper

SELF-CONCEPT IN PREDICTING LONELINESS AMONG CADET FOOTBALL PLAYERS

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Abstract: The aim of this research was to examine the contribution of a predictor variable (self-concept) in predicting the criterion of loneliness as well as the gender differences among football players – cadets. This cross-sectional study included a pertinent sample of Serbian football players (N = 218), 111 of which were male, and 107 female. Two measuring instruments were used: the Self-liking/Self-competence Scale-Revised Version (SLCS-R; Tafarodi & Swann, 2001) and the adapted short version of The UCLA Loneliness Scale (UCLA; Lacković-Grgin, Penezić and Nekić, 2002). The internal consistency and reliability of the scales was defined by using the Cronbach alpha coefficient, which was satisfactory when applied on the given sample. The results of this two-way/multi-way analysis of variance (ANOVA) imply that there is no statistically significant gender difference in evaluating the perceived loneliness, while the significant difference was found with the dimension self-concept where female adolescents experience the lower level of negative self-image unlike their male peers. The findings of this hierarchical regression analysis indicate that there is a possibility that the negative partial predictor global self-concept is statistically significant and that it accounted for 33% of the variance of the criterion loneliness (β =-0.40, $p<0.01$). Also, the male and female football players who manifested lower scores on the global self-concept perceive loneliness to a higher degree. In accordance with the expectations, it can be concluded that the hypothesis has been confirmed, meaning that a statistically significant contribution of the subjective experience of self-concept in explaining the latent dimension of loneliness was determined. The results of the regression equation indicate that there is a match with the findings of previous

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international studies. The results of previous studies were commented upon in this research, as well as the methodological limitations of schools, recommendations for future empirical research in this area and the research implications on adolescent cadet football players.

Keywords: *self-acceptance, self-competence, loneliness, football, adolescence*.

INTRODUCTION

The latent dimension self-concept and its correlation with the construct of loneliness has increasingly been a subject of psychological research all over the world, as it is very important for social and emotional development during early adolescence. Still, there is a clear deficit of studies on this phenomenon among the sports population in Serbia.

Loneliness is as old as the human species, as human developed consciousness of their relationship with each other, and with the self. Despite the universal need for belonging and forming close, stable relationships, most people experience loneliness during their lifetime, regardless of age, gender, cultural of geographical boundaries. The perception of loneliness is very unpleasant and can have numerous negative consequences for an individual. Despite the fact that loneliness is a phenomenon that is often researched within many transversal and longitudinal studies, there is still no consensus regarding the definition of the term.

Most authors believe that loneliness is a subjective experience accompanied by unpleasant and painful emotional states which are the result of a lack of social interactions (Peplau & Perlman, 1982). Lacković-Grgin (2008) defines four types of loneliness (physical loneliness, loneliness, isolation and solitude). Physical loneliness assumes spatial and temporal separation form others and it most often implies an emotionally neutral state. Loneliness is generated by unpleasant emotions of the person who is rejected by the people with whom they want to spend time. The third type of loneliness includes isolation which the individual cannot transform since it is generated by unpleasant political, professional, religious, legal or other obstacles. The fourth type of loneliness implies a state of loneliness which is accepted, desired and appreciated.

Most authors point out that loneliness is most present during adolescence. The authors Abatkun and Mohan (2017) and Tod (2014) made attempts to contribute to the findings by naming and describing the most significant factors which contribute to the phenomenon of loneliness among athletes in the period of adolescence (Abatkun & Mohan, 2017; Tod, 2014). It is usually considered that the core cause of visible loneliness in adolescence is intense expectations that correlate with the establishment and keeping up of social relations, which

athletes occasionally cannot satisfy (Kerketta, 2015). Based on the great number of studies on loneliness, one can determine five areas of developing transformations which cause the risk of loneliness among athletes: puberty changes, cognitive changes, social relationships, establishment of autonomy, individualization and development of identity. The greatest number of transformations during adolescence occurs through the process of loneliness and individualization, which imply a successive acceptance of responsibility for emotional, behavioral and cognitive functioning. It should also be mentioned that the intensity of developing transformations of male and female athletes during adolescence is not equal in every period, and thus loneliness is not manifested to the same degree in each phase of adolescence. Elbe and Wikman (2017) and Mouloud and Elkader (2016) believe that younger adolescents are more lonely than older adolescents because they have higher standards and expectations which often cannot be achieved.

Adolescence implies the critical phase in development during which physiological and mental functions change occur, causing faster development of cognitive and social competences which can be relevant for developmental outcomes, including the key multi-dimensional construct of self-concept important for understanding personality and human behavior (Zhang et al., 2011). Self-concept (self-respect, self-perception, self-consciousness and self-image) marks the subjective view of one's own personality, and it was introduced into psychology by William James (Vasta, Haith and Miller, 1998). Even though self-concept (the set of beliefs about oneself) was much researched, there is no commonly accepted definition, and therefore different authors define it differently depending on the theoretical standpoint, the used measuring instruments, methods, participants, etc.

In his theory of personality, Gordon Allport attributes the central role to the self in the development of individual personality which possesses one sense of self that correlates with the self of others, emotional security and acceptance of one's own self (Hair & Graziano, 2003). In the psychology of self, this term refers to the self-perception of differentiating the aspects of one's own personality which includes body schema, views, self-value, self-esteem and self-competence (McLeod, 2008). Self-concept represents the stable core sign of the term which originated on the basis of a person's experience of their own physical, intellectual and social competences, and which has a great role in understanding the self, and is thus sensitive to internal and external influences during adolescence (Moksnes & Espnes, 2013). Van Maarseveen, Oudejans & Savelsbergh (2017) consider the self-concept to be a sense of one's own worth, the appreciation of the self and one's own affective reaction to that appreciation. Therefore, self-concept/self-respect is a significant component of the healthy development of an athlete and their transition into the world of adults. Middlemas and Harwood (2018) and Forsman, Blomqvist, Davids, Liukkonen and Konttinen (2016) postulate that this latent dimension includes two important components: self-acceptance (a socially dependent variable) and self-competence which is conditioned by a successful manipulation of the social

environment and achievement of the given goals. Gledhill and Harwood (2014) emphasize that the differences among football players in the perception of loneliness are partly caused by self-concept as well. They have determined that the low level of self-concept blocks adolescent ability to adjust and explain their own experiences, meaning that athletes with low self-concept use internal attributions for negative social relationships, and external attributions for social events. Therefore, a low score of self-concept can motivate athletes to use internal characteristics which can cause loneliness.

The research on self-concept is of a particular importance to the psychology of sport. Athletes with a positive self-attitude tend to explain negative social influences by situational latent dimensions in order to keep the matching self-image. That is why athletes who have a positive self-image possess a higher motivation to battle loneliness, while for athletes with a negative self-image it is harder to determine the state of loneliness, continuously and forever (Schorer, Wattie, Cobley & Baker, 2017). At the same time, self-respect will probably not shield athletes from loneliness, but rather, enable a transformation of the existing state. Baker, Cobley, Schorer and Wattie (2017) and Henriksen and Stambulova (2017) emphasize that a high level of self-concept among athletes correlates with the total sensual experience of well-being during adolescence, while a low level correlates with their risky behavior and negative developmental outcomes. Athletes with a high level self-concept achieve better school success and are more successful in dealing with difficulties, while those who have a negative self-image are more susceptible to the danger of developing emotional (anxiety and depression) behavioral difficulties (eating disorders, delinquency, drugs). The findings on the construct self-concept are relatively consistent in the phase of middle and late childhood, and start to decline with puberty (Feichtinger & Höner, 2015). Research by Ivarsson and associates (2015), Miller, Cronin and Baker (2015), Prpa (2017), and Stambulova (2017) point to the fact that the individual dimension (low level of self-concept) is a significant predictor of loneliness among athletes, especially during adolescence.

Keeping in mind the indisputable significance of the problem discussed in this research, and that these kinds of studies have not been conducted on the Serbian adolescent sport population, the aim of this research was to examine to which degree the latent dimension of the self-concept of both male and female football players explains their loneliness. In accordance with the aim of this research, the hypothesis was postulated that the construct of self-concept will significantly contribute to explaining loneliness on the sample of male and female football players in the period of mid adolescence.

METHOD

Participants and procedure

The research was conducted on a pertinent sample of 218 football players of both genders from six male clubs in the Kolubara-Mačva league: FC "Budućnost-Krušik 2014" (Valjevo), FC "Jedinstvo" (Ub), FC "Železnicar" (Lajkovac), FC "Mačva" (Šabac), FC "Drina" (Ljubovija) and FC "Jedinstvo" (Mali Zvornik), and six female clubs from the Super league and the Serbian first league: FC "Sloga" (Zemun), FC "Kalemegdan" (Beograd), FC "Napredak" (Kruševac), FC "LASK Crvena zvezda" (Beograd), FC "Trijumf" (Kragujevac) and FC "Mačva" (Šabac). Statistical analyses were conducted by analyzing the answers (N = 111 male football players, i.e. 50.91%) and (N = 107 female football players, i.e. 49.08%). Three participants were excluded from the research because they had over 5% of missing data, while six participants, with significant Mahalanobis distance on the level of $p<0.01$ were excluded as multivariate outliers (Tabachnik & Fidell, 2001). The average age of participants was AM = 17.58 (SD = 1,26). The chi-square test did not determine statistically significant demographic differences (χ (1/628) = 0.395; $p > 0.05$), and therefore it is assumed that the causes belong to demographically identical population. All participants had at least two years of systematic and organized football training, at least three times a week.

The research was conducted in collaboration with professional associates – psychologists, in January 2018. Before beginning the research, the participants were given detailed instructions about answering the questions on the given measuring instruments (example of an answered question), as well as information in written form regarding the aim of the research. In addition, they were told that the data would be analyzed solely on a group level. The whole process was completely voluntary and anonymous, and was conducted using the pen-and-paper method in groups of 30 participants. Before the research, the participants signed a consent to participate, and gave answers by circling the number which represented their level of agreement with each item on the scale. It was also emphasized that they could quit the research at any point. The answering process lasted approximately 30 minutes, and afterwards the participants put the answers in envelopes and handed them to the main researcher.

Measuring instruments

Self-liking/Self-competence Scale-Revised Version (SLCS-R, Tafarodi & Swann, 2001). SLCS-R examines the global self-concept which includes two important dimensions: self-acceptance (for example, *I feel good about who I am*) and self-competence (for example, *I am talented*). The scale consists of 16 items, eight on each subscale, where four have positive and four have a negative direction. After decoding the negatively worded items, a higher score means a

higher self-acceptance and self-competence. The participant evaluated each item on a five-point scale (1 – strongly agree, 5 – strongly disagree), deciding to which degree individual items are true for him/her. The total score on the subscales was calculated as the mean value. The theoretical range on each subscale was from 1 to 5.

The reliability of the scale (Cronbach's alpha) in this research for the subscale self-acceptance ranged from $\alpha = 0.82$ to $\alpha = 0.86$, and for the subscale self-competence from $\alpha = 0.79$ to $\alpha = 0.83$, while the reliability of the entire scale ranged from $\alpha = 0.90$ to $\alpha = 0.94$. That indicated that the values of the internal consistency coefficient are satisfactory.

The UCLA Loneliness Scale: invariance of social structural characteristics (UCLA, Allen and Oshagan 1995, translated and adapted to Croatian by Lacković-Grgin, Penezić and Nekić, 2002). UCLA is the one-dimensional construct which measures total loneliness, defined as an unpleasant emotional and motivational state generated by the inability to satisfy the need for intimacy, love and acceptance. The scale includes seven items (for example, *My social relationships are superficial*, *Nobody knows me well*, *I miss company*), and the answers are given on a Likert scale from 1 (does not apply to me at all) to 5 (fully applies to me). The total score is formed as a linear combination of evaluations of each item and ranges from 7 to 35 (high level of loneliness), whereupon the theoretical range of scores is from 1 and 5. A higher score on the scale indicates a higher level of loneliness.

The reliability coefficient, meaning Cronbach's alpha internal consistency coefficient on the examined sample is 0.85, which is quite satisfactory considering the small number of items.

Statistical analysis

After applying the methods of descriptive statistics in data processing and statistical data interpretation, a two-way/multi-way analysis of variance (ANOVA) was used to determine the significance of the score difference between the variables. In addition, hierarchical regression analysis was conducted in order to determine to which degree self-concept influences the construct loneliness. The initial degree of statistical significance was on the level $p < 0.05$. Statistical analysis was conducted using the software package SPSS for Windows Microsoft (version 18.0).

RESULTS

Basic descriptive parameters of the examined variables

Table 1 shows the descriptive parameters for individual items of the scales SLCS-R and UCLA, as well as the indicators of normal distribution (skewness and kurtosis) of the measuring instruments.

Table 1. *Descriptive statistics of the used scales*

Variables	*AS*	*SD*	*TUR*	*Sk*	*Ku*
Male football players					
Loneliness	2,92	0,47	1-5	0,12	-0,54
Self-concept					
Self-competence	2,77	0,35	1-5	-0,26	-0,33
Self-acceptance	2.96	0,16	1-5	0,63	0,57
Global self-concept	3.04	0,42	1-5	-0,35	0,79
Female football players					
Loneliness	3.01	0,49	1-5	-0,35	0,26
Self-concept					
Self-competence	2.69	0,42	1-5	-0,34	0,65
Self-acceptance	2.88	0,36	1-5	0,27	0,44
Global self-concept	2.95	0,27	1-5	-0,16	0,36

Legend. AM – Arithmetic mean; SD – Standard deviation; UR – Uncut range; Sk – Skewness = Coefficient of skewness distribution (standard error of skewness = 0.10); Ku – Kurtosis = Coefficient of kurtosis distribution (standard error of kurtosis = 0.08).

The obtained positive and negative values of the shape of distribution do not deviate significantly from normal (Gaussian) distribution because they range within the acceptable limits of conducting parametric analyses: skewness < 1, kurtosis < 3 (Kline, 2016).

Having an insight into the obtained descriptive indicators, one can notice that the mean values with male participants range from 1-5, with a standard deviation ($0.16 \leq SD \geq 0.47$). Maximum mean value of the evaluations was found with the variable Loneliness (AM = 3.01), and minimum with the variable Global self-concept (AM = 3.04). On the other hand, mean values with female participants range from 1-5, with a standard deviation ($0.27 \leq SD \geq 0.49$). Maximum mean value of the evaluations was found with the variable Loneliness (AM = 2.92), and minimum with the variable Self-competence (AM = 3.04).

A visual representation of the results shows a satisfactory discrimination of the analyzed variables which in their range have at least six standard deviations, which indicates data reliability and sensitivity of the applied scales. However, seeing how the used scales measured different constructs, it is not suitable to compare descriptive parameters used on the measuring instruments.

Gender differences between loneliness and self-respect

The differences between the examined independent variable self-concept and dependent variable loneliness in regards to gender were tested using a two-way/multi-way analysis of variance (ANOVA). The results are presented in Table 2.

Table 2. *The results of a two-way analysis of variance of the examined variables*

Variables	*Effects*	*F*	*df*	*P*
Loneliness	gender	0,49	2	0,14
Self-concept				
Self-competence	gender	9.22**	2	0,05
Self-acceptance	gender	4.16**	2	0,01
Global self-concept	gender	7.94*		0,03

Legend: F – Fisher's test; df – degree of freedom; p – significance level F statistics; ** $p < 0.01$; * $p < 0.05$.

The obtained sum of squared deviation from the total arithmetic mean shows that there is no statistically significant interaction between male and female football players in evaluating loneliness ($F = 0.49$; $p = 0.14$). On the other hand, as predicted, the obtained Fisher's variance ratio revealed a significant difference between male and female participants on both subscales of self-concept: self-competence ($F = 9.22$; $p < 0.05$) and self-acceptance ($F = 4.16$; $p < 0.01$).

Loneliness as a predictor of self-respect

Hierarchical regression analysis was conducted with the aim of examining to which extent the construct of self-concept contributes to the prediction of loneliness among football players.

Table 3. *Contribution of predictors to the egression function*

Predictor	**Step 1**		**Step 2**	
Gender	β	*SE*	β	*SE*
Global self-concept	0.09	1.78	0.09	1.78
R				
R^2				
ΔR^2				

Predictor	**Step 1**		**Step 2**	
	β	*SE*	B	*SE*
Gender	0.09	1.78	0.10	1.43
Global self-concept			0.-40	1.78
R	0.05		0.72	
R^2	0.01		0.66	
ΔR^2			65	

*Annotation: β = Standardized partial regression coefficient; SE = standard error of regression; R = Multiple correlation coefficient; R = coefficient of determination or squared multiple correlation; ΔR = contribution of individual group of predictors to the percentage of the explained variance; *p < 0.05; **p < 0.01*

In the first step of the analysis, the control variable of footballers *gender* ($\beta = 0.10$, $p > 0.01$) was introduced into the regression equation as the predictor, and it explained a very small and marginally significant part of the criterion variance, thus it did not contribute to the prediction of participant loneliness.

In the second step of the linear regression model, the additional variable *global self-concept* made up from two components, was introduced as the predictor: self-acceptance and self-competence, and it explained 33% of the criterion variance proportion. That points to the fact that 1/3 of the points lie on the regression line, which means that the chosen measuring instruments are reliable and representative. On the other hand, 67% of the proportion of the residual variability, which is the deviation of empirical data from regression line, was not identified because it is the consequence of accidental error and cannot be explained by the chosen variables. Besides, the insight into the relatively small values of standard error of regression, meaning the variance around the regression line, showed a satisfactory representativeness of the regression model.

Analyzing the data matrix, the variable global self-concept ($\beta = -0.40$, $p < 0.01$) proved to be a significant predictor of loneliness among participants. The calculated negative value of the standardized partial regression coefficient indicates the possibility that the lower level of footballers' global self-concept manifests his/her loneliness probably to a higher degree.

DISCUSSION

The findings of this research indicate that there are no statistically significant gender differences in the perception of loneliness, meaning that the level of loneliness is somewhat lower regardless of gender, which is not in accordance with the results of similar studies (Decamps, 2012; Wood, Harrison & Kucharska, 2017). However, the findings from some studies (Jooste, Steyn & Van den Berg, 2014; Kurt, Çatikkas, Mürlü & Atala, 2012; Weinberg & Gould, 2015) point out that there are no significant gender differences in the perception of loneliness, and even if there were, the athletes would likely be more lonely. The aforementioned authors regard distinct loneliness among adolescents in terms of their less developed social competences, unsuitable strategies for dealing with loneliness or weak competences in manifesting emotions.

It was determined in the conducted research that adolescents manifest a marginally weaker sense of their own worth, meaning a lower self-concept. Despite the fact that statistically significant differences in self-resect in regards to gender were obtained, maybe one should be careful with taking this difference into account because the mean values range from AM = 2.77 for male adolescents and from AM = 3.01 for female adolescents. Still, even with this uncertainty, the findings of earlier studies show that female participants in mid-adolescence, unlike their male peers, have a less positive self-image and lesser

sense of their own worth (Cabrita, Rosado, Leite & Sousa, 2014; Eime, Young, Harvey, Charity, & Payne, 2013; Mills, Butt, Maynard & Harwod, 2012; Nesti, 2013). The obtained differences can be explained with factors such as social competences at which female athletes are better to the different socialization of males and females.

Analyzing the connection between the used constructs, as well as the role of self-concept in explaining the loneliness of football players in this research, the predictor variable self-respect, as presumed, gave a significant contribution to predicting loneliness among adolescents. In addition, Barış and Kocaeksi (2013), as well as Healy, Ntoumanis, Veldhuijzen and Paine (2014) emphasize that the relations between these variables are stable, and therefore the construct self-concept, with gender control, is a statistically significant determinant of athlete loneliness in adolescence.

A positive self-image is important for athletes because it implies self-respect and self-worth, the right attitude towards positive traits and belief in own competences. With this in mind, the athletes who have a high level of self-concept experience life management more successfully, meaning they are better in dealing with loneliness or better at preventing loneliness (Zagórska & Guszkowska, 2014; Ntoumanis, Healy, Sedikides, Smith & Duda, 2014). On the other hand, Stambulova (2017) determined that athletes with a negative self-image often act in a way that repels their peers, which can cause an unpleasant experience of communication with them and loneliness. Therefore, one can assume that the athlete failed to fulfill the main developmental tasks (Najah & Rejeb, 2015; Weinberg, 2013).

From a theoretical point of view, Fletcher and Sarkar (2013) believe that the relations between the constructs of loneliness and self-concept have a positive and negative direction. Namely, just like the feeling of being of less worth influences athlete loneliness, constant loneliness can also cause a fall in a positive self-attitude. To a small degree and in the long run, self-concept is the latent dimension which can cause certain behaviors and cognitive processes that disable the creation of suitable social relations and that intensify the feeling of loneliness (Brown, Webb, Robinson & Cotgreave, 2018).

The conducted research, despite its many advantages, is characterized by certain methodological limitations. The first limitation is the pertinent and regionally homogenous sample which diminishes the possibility to generalize results. The second limitation of this research is the method of self-evaluation which, due to the individual differences in the ability of introspection, can probably lead participants to give socially desirable answers. The third limitation is a relatively significant amount of the unexplained variance and correlational draft of the research which enables the defining of cause-effect relationship between variables.

With the aim of improving the methodology of this transversal research, future studies should focus on a more heterogeneous and representative sample

of football players in other districts of Serbia as well. In addition, instead of using the method of self-evaluation, independent evaluators should be employed. That could increase the reliability of the obtained data. To add, the obtained parameters should be checked using additional longitudinal and experimental research, based on which general conclusions about causal aspect of variables could be reached. Such upgraded research methodology could have significant implications in regards to identifying significant predictors which can additionally explain loneliness among adolescent athletes.

CONCLUSION

The results of the research conducted on the pertinent sample of karate practitioners confirm the theoretical and statistical reliability criteria of SLCS-R and UCLA ($\alpha > 0.70$), which points to their validity and the need to be used in everyday practice in Serbia on the sample of adolescent athletes.

The findings of two-way/multi-way analysis of variance (ANOVA) indicate that significant gender differences in subjective experience of loneliness were not determined. However, a statistically significant gender difference was determined in the latent variable self-concept (self-competence and self-acceptance), showing that female adolescents self-perceive a lower level of self-concept when compared to their male peers. The results of the hierarchical regression analysis point to the fact that, based on the latent dimension of self-concept, it is possible to perceive its relative contribution in explaining criterion variable loneliness. It was also determined that a statistically significant negative partial predictor global self-concept explained 33% of the criterion variance of loneliness (β =-40, p =0.01). That means that both males and females who realize lower results of global self-concept are at a greater risk of demonstrating loneliness in the period of mid-adolescence. After discussing the obtained results, one can conclude that the postulated hypothesis is confirmed, based on which the construct self-concept contributes significantly to the explanation of loneliness. On the other hand, the control variable gender failed to show a statistical significance in predicting a subjective sense of loneliness among adolescents.

Summing up the correlational findings of the sample, one can conclude that the obtained empirical results enable the more exact insight into the complex and up until now insufficiently explored relations between the examined latent dimensions, their relative interpretation, as well as the important implications for neutralizing and eliminating the contemporary model of loneliness among football players cadets of both genders.

REFERENCES

1. Abatkun, Y., & Mohan, N. V. (2017). Comparison of anxiety and self-confidence variables among Ethiopian sports academy male soccer players of different playing positions. *International Journal of Physical Education, Sports and Health, 4*(2), 240–243.
2. Allen, R. L., & Oshagan, H. (1995). The UCLA Loneliness Scale: invariance of social structural characteristics. *Personality Individ Differ, 19*,185–195. doi: 10.1016/0191-8869(95)00025-2.
3. Baker, J., Cobley, S., Schorer, J., & Wattie, N. (2017). Talent identification and development in sport. In: J. Baker, S. Cobley, J. Schorer, N. Wattie, (Eds.), *Routledge handbook of talent identification and development in sport* (pp. 1–8). London: Routledge. doi:10.4324/9781315668017.ch3
4. Barış, O., & Kocaeksi, S. (2013). Soccer players' efficacy belief, CSAI-2C, SCAT perception and success comparison. *Turkish Journal of Sport and Exercise*, *15*(2), 88–93.
5. Brown, C. J., Webb, T. L., Robinson, M. A., & Cotgreave, R. (2018). Athletes' experiences of social support during their transition out of elite sport: An interpretive phenomenological analysis. *Psychology of Sport and Exercise*, *36*, 71–80. doi: 10.1016/j.psychsport.2018.01.003
6. Cabrita, T., Rosado, A. F. B., Leite, T. 0., & Sousa, P. (2014). Adaptation of the Athletic Identity Measurement Scale (AIMS-Pl us) for the Portuguese Population. *Psicologia Retlexiio e Critica, 27* (I), 29-37. doi: 10.1 590/S0102-79722014000100004
7. Decamps, G. (2012). *Sport psychology and performance* (1st Ed). Brussels: Boeck Group S.A.
8. Elbe, A., & Wikman, J. (2017). Psychological factors in developing high performance athletes. In: J. Baker, S. Cobley, J. Schorer, N. Wattie (Eds.), *Routledge handbook of talent identification and development in sport* (pp. 169–801). London: Routledge.
9. Eime, R., Young, J., Harvey, J., Charity, M., & Payne, W. (2013). A systematic review of the psychological and social benefits of participation in sport for adults: informing development of a conceptual model of health through sport. *International Journal of Behavioural Nutrition and Physical Activity, J O* (135), 1-14. doi: 10.1 186/1479-5868-10-135
10. Feichtinger, P., & Höner, O. (2015). Talented football players' development of achievement motives, volitional components, and self-referential cognitions: A longitudinal study. European Journal of Sport Science, 15(8), 748–756. doi:10.1080/17461391.2017.1051134

11. Fletcher, D., & Sarkar, M. (2013). Psychological Resilience: A Review and Critique of Definitions, Concepts, and Theory. *European Psychologist*, *18*(1), 12–23.
12. Forsman, H., Blomqvist, M., Davids, K., Liukkonen, J., & Konttinen, N. (2016). Identifying technical, physiological, tactical and psychological characteristics that contribute to career progression in soccer. *International Journal of Sports Science & Coaching, 11*(4), 505–13.
13. Gledhill, A., & Harwood, C. (2014). Developmental experiences of elite female youth soccer players. *International Journal of Sport and Exercise Psychology*, *12*(2), 150–165. doi: 10.1080/1612197X.2017.880259
14. Hair, E. C., Graziano, W. G. (2003). Self-Esteem, Personality and Achievement in High School: A Prospective Longitudinal Study in Texas. *Journal of Personality*, 71(6), 971–994. doi: 14633055
15. Healy, L. C., Ntoumanis, N., Veldhuijzen, V. Z., & Paine, N. (2014). Goal striving and well-being in sport: the role of contextual and personal motivation. *J. Sport Exerc. Psychol. 36*, 446–459. doi: 10.1123/jsep.2013-0261
16. Henriksen, K., & Stambulova, N. (2017). Creating optimal environments for talent development. In: J. Baker, S. Cobley, J. Schorer, N. Wattie (Eds.), *Routledge handbook of talent identification and development in sport* (pp. 269–284). London: Routledge.
17. Ivanović, M. (2009). Dimenzije ličnosti karatista kao prediktori zadovoljstva životom. [Dimensions of the personalities of karate players (male and female juniors) as predictors of life satisfaction*]*. *Facta universitatis, Series philosophy, sociology, psychology and history, 8*(1), 115–124.
18. Ivanović, M., & Ivanović, U. (2010). Relacije dimenzija ličnosti karatista seniora i faktora optimalne organizacione kulture. [Relations between karate seniors players personality dimensions and optimal organizational culture factors]. U: S. Stojiljković (Ur.), *Međunarodna naučna konferencija. „Fizička aktivnost za svakoga"* (str. 36–44). Beograd: Univerzitet u Beogradu, Fakultet sporta i fizičkog vaspitanja.
19. Ивановић, М., & Ивановић, У. (2015). Социјална анксиозност, скривање правог ја и доживљавање пријатних емоција – предиктори квалитета пријатељства у адолесценцији. [Social anxiety, hiding one's true self, and experiencing pleasant emotions – predictors of friendship qualityin adolescence]. *Теме, 39*(1), 123–142**.**
20. Ivanović, M., Mačvanin, Đ. Mačvanin, N., i Ivanović, U. (2017). Korelacija samopoštovanja i kompetencije u sportskim aktivnostima kod predadolescenata [Correlation between self-esteem and competence in sports activities of preadolescents]. U: V. Šiljak, I. Parčina i M. Nikolić (Ur.), *Sport u tranziciji* (str. 28–29). Beograd: Alfa BK Univerzitet - Fakultet za menadžment u sportu.

21. Ivanović, M., Milosavljević, S., & Ivanović, U. (2015). Faktorska struktura relacija agresivnosti i dimenzija ličnosti karatista juniora. [Factorial structure of the relationship between aggressiveness personality dimesions in junior karatekas]. *Facta universitatis, Series: physical education and sport, 13*(3), 371–381.
22. Ivanović, M., Milosavljević, S., & Ivanović, U. (2017). Self-concept as the determinant of physical activity of preadolescents in physical education classes. *FACTA UNIVERSITATIS Series: Physical Education and Sport*, 15(2), 407 – 420.
23. Ivanović, M., Milosavljević, & S., Ivanović, U. (2015). Perfekcionizam, tjeskoba u sportu i sportska postignuća u adolescenciji. [Perfectionism, anxiety in sport, and sport achievement in adolescence]. *Sport Science 8*(1), 35–42.
24. Ivanović, M., Samardžić, B., i Ivanović, U. (2012). Agresija – kriterijum privrženosti i samopoštovanja odbojkaša juniora. [Aggression – criteria of junior volleyball players' attachment and self-esteem]. *VIII međunarodna naučna konferencija. „Menadžment u sportu", Zbornik sažetaka* (str. 144–155). Beograd: Alfa Univerzitet, Fakultet za menadžment u sportu.
25. Ivarsson, A., Stenling, A., Fallby, J., Johnson, U., Borg, E., & Johansson, G. (2015). The predictive ability of the talent development environment on youth elite football players' well-being: a person-centered approach. *Psychology of Sport and Exercise, 16*, 15–23.
26. Jooste, J., Steyn, B. J. M., & Van den Berg, L. (2014). Psychological skills, playing positions and performance of African youth soccer teams. *South African Journal for Research in Sport, Physical Education and Recreation, 36*(1), 85–100.
27. Kerketta, I. (2015). A comparative study of sports competition anxiety between district levels male volleyball and soccer players. International Journal of Physical Education, *Sports and Health, 1*(3), 53–55.
28. Kline, R. B. (2016). *Principles and Practice of Structural Equation Modeling*. New York: Guilford Press.
29. Kurt, C., Çatikkas, F., Mürlü, İ. K., & Atalag Ö, O. (2012). Comparison of Loneliness, Trait Anger-Anger Expression Style, Self-esteem Attributes with Different Playing Position in Soccer. *Journal of Physical Education & Sport*, 1*2*(1), 3943. doi:10.7752/jpes.2012.01007.
30. McLeod, S. A. (2008). *Social Identity Theory.* Retrieved from: http://www.simplypsychology.org/social-identity-theory.html
31. Middlemas, S., & Harwood, C. (2018). No Place to Hide: Football Players' and Coaches' Perceptions of the Psychological Factors Influencing Video Feedback. *Journal of Applied Sport Psychology, 30*(1), 23–44. doi:10.1080/10413200.2017.1302020
32. Miller, P. K., Cronin, C., & Baker, G. (2015). Nurture, nature and some very dubious social skills: an interpretative phenomenological analysis of

talent identification practices in elite English youth soccer. *Journal of Sport and Health Science*, *7*(5), 642–662. doi:10.1080/2159676X.2017.1012544

33. Mills, A., Butt, J., Maynard, I., & Harwod, C. (2012). Identifying factors perceived to influence the development of elite youth football academy players. *Journal of Sport Sciences, 30,* 1593–1604.
34. Moksnes, U. K., & Espnes, G.A. (2013). Self-esteem and life satisfaction in adolescents - gender and age as potential moderators. *Qual Life Res, 22*(10), 2921–2928. .doi: 1007/ s11136-013-0427-4.
35. Mouloud, K., & Elkader, B. A. (2016). Self-efficacy and achievement motivation among football player. The Swedish Journal of Scientific Research, 3(11), 13–19.
36. Najah, A., & Rejeb, R. B. (2015). The Psychological Profile of Youth Male Soccer Players in Different Playing Positions. *Advances in Physical Education, 5,* 161–169. doi:10.4236/ape.2015.53020
37. Nesti, M. S. (2013). Mental Preparation of Elite Players. In A. M. Williams (Ed) *Science and Soccer: Developing Elite Performers.* London: Routledge.
38. Ntoumanis, N., Healy, L. C., Sedikides, C., Smith, A. L., & Duda, J. L. (2014). Self-regulatory responses to unattainable goals: the role of goal motives. *Self Identity, 13,* 594–612. doi: 10.1080/15298868.2014.889033
39. Peplau, L. A. & Perlman, D. (1982). *Loneliness: A Sourcebook of Current mTheory, Research and Therapy*. New York: John Wiley and Sons.
40. Prpa, N. (2017). Personality traits and gender effect on athletes and non-athletes selfhandicapping strategies over time. *EQOL Journal 9*(1), 5–14.
41. Schorer, J., Wattie, N., Cobley, S., & Baker, J. (2017). Concluding, but definitely not conclusive, remarks on talent identification and development. In: J. Baker, S. Cobley, J. Schorer, N. Wattie (Eds.), *Routledge Handbook of Talent Identification and Development in Sport* (pp. 466–476). London: Routledge.
42. Stambulova, N. B. (2017). Crisis-transitions in athletes: current emphases on cognitive and contextual factors. *Current Opinion in Psychology*, *16*, 62–66. doi:10.1016/j.copsyc
43. Tabachnick, B. G., & Fidell, L. S. (2001). *Using multivariate statistics*. Allyn and Bacon.
44. Tafarodi, R. W., & Swann, W. B. (2001). Two-dimensional self-esteem: Theoryand measurement. *Personality and Individual Differences, 31*, 653–673. doi:10.1016/S0191-8869(00)00169-0
45. Tod, D. (2014). *Sport psychology,the basics.* London: Routledge.
46. van Maarseveen, M. J. J., Oudejans, R. R. D., & Savelsbergh, G. J. P. (2018). Self-controlled video feedback on tactical skills for soccer teams

results in more active involvement of players, *Human Movement Science*, *57*, 194–204. doi:10.1016/j.humov.2017.12.005

47. Vasta, R., Haith, M.M., i Miller, A. (1998). *Dječja psihologija*. Jastrebarsko:Naklada Slap.
48. Zagórska, A., & Guszkowska, M. (2014). A program to support selfefficacy among athletes. *Scandinavian Journal of Medicine & Science in Sports, 24*(3), 121–128. doi: 10.1111/sms.12125
49. Weinberg, R. S. (2013). Goal setting in sport and exercise: research and practical applications. *Rev. Educ. Fís*. *24*, 171–179. doi: 10.4025/reveducfis.v24.2.17524
50. Weinberg, R. S., & Gould, D. (2015). *Foundations of sport and exercise psychology* (5th Ed.). Champaign, IL: Human Kinetics.
51. Wood, S., & Harrison, L. K., & Kucharska, J. (2017). Male professional footballers' experiences of mental health difficulties and help-seeking. *The Physician and Sportsmedicine*, *45*(2), 120–128. doi: 10.1080/00913847.2017.
52. Zhang, B., Wang, M., Li, J., Yu, G., Bi, Y. (2011). The Effects of Concealing Academic Achievement Information on Adolescent` Self-Concept. *The Psychological Record, 61,* 21–40. doi: 10.1007/BF03395744