



Examination of Psychological Ability Levels of Middle School Students Towards Sports (Sample of Konya City)

Abdullah Sencer TEMEL^{1A}, Yalçın TÜKEL^{2B}, Davut ATILGAN^{3C}

¹ Konya Şeker Industry Trade Inc., Konya, Turkey

² Necmettin Erbakan University Tourism Faculty Recreation Management, Konya, Turkey

³ Kahramanmaraş Sütçü İmam University Faculty of Sports Sciences, Konya, Turkey

Address Correspondence to A S Temel : e-mail: sencer_temel@yahoo.com

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A:Orcid ID: 0000-0003-0382-9466 B:Orcid ID: 0000-0003-3843-5889 C:Orcid ID: 0000-0002-8475-4488

Abstract

The main purpose of this study, to find out the ability of athlete students who study at the secondary school level to cope with psychological difficulties. The research was carried out in a descriptive screening model. The sample of the study consists of 237 participants, who are athlete student studying in secondary schools within Konya Provincial Directorate of National Education in Konya. Research data were collected on September, October and November in 2019. The statistical software program was used to analyse the research data. For the study, the arithmetic mean and standard deviation values were determined. Moreover, T-test and one-way variance analysis (ANOVA) test were applied to determine the differentiation status of the scores related to variables. To determinate, the difference between the selected groups, Scheffe and LSD tested were applied. As a result of the research, according to "athletic coping skills inventory" the ability of athlete student to deal with sports problems was found in moderate level furthermore the levels of psychological attitude for sports differed significantly in terms of gender and grade variables. Lastly, in terms of the parent's educational status and family monthly income variables, there are no significant differences detected.

Keywords: Middle School, Student, Psychology, Skill

Ortaokul Öğrencilerinin Spora Yönelik Psikolojik Yetenek Düzeyleri (Konya İli Örnekleme)

Özet

Bu araştırmada ortaokul düzeyinde öğrenim gören sporcu öğrencilerin psikolojik yetenek düzeylerini incelemek amaçlanmıştır. Araştırma betimsel tarama modelinde gerçekleştirilmiştir. Araştırmanın örneklemini Konya İl Milli Eğitim Müdürlüğü'nün merkez ilçeleri bünyesinde bulunan ortaokullarda öğrenim gören sporcu öğrencilerden oluşan 237 katılımcı oluşturmaktadır. Veriler 2019 yılı eylül, ekim, kasım aylarında toplanmıştır. Araştırmanın verileri istatistik yazılım programı kullanılarak analiz edilmiştir. Veri analizi için aritmetik ortalama ve standart sapma değerleri belirlenmiş, değişkenlere ilişkin alınan puanların farklılaşma durumlarını belirlemede t-Testi ve Tek Yönlü Varyans Analizi (ANOVA) testinden yararlanılmıştır. Farkın hangi gruplar arasından kaynaklandığını belirlemek için ise Scheffe ve LSD testi yapılmıştır. Araştırma sonucunda; sportif sorunlarla başa çıkma becerileri envanterine göre sporcu öğrencilerin sportif sorunlarla başa çıkma becerilerinin orta düzeyde olduğu; spora yönelik psikolojik yetenek düzeylerinin cinsiyet ve sınıf değişkenleri bakımından anlamlı bir biçimde farklılaştığı belirlenmiştir. Baba eğitim durumu, anne eğitim durumu ve aile aylık geliri değişkenleri bakımından ise anlamlı farklılıklar tespit edilmemiştir.

Anahtar Kelimeler: Ortaokul, Öğrenci, Psikolojik, Yetenek

INTRODUCTION

Sports have a comprehensive effect on many aspects of people life and society. It is a fact that in sportive activities as part of individual or group will bring many positive contributions, such as improving the physical health of the individual, mental endurance and increases the sense of well-being. (15). Activities that students participate during education can improve their social ability in the community and help them avoid criminal and anti-social behaviours of their students' life (3).

Talent is important for people to obtain gains and being successful in life. Talent provides many benefits to individuals in every field of life, not only in sports. The ability, which is a complex characteristic, is determined heritably, has a complex structure and also affected by environmental conditions (18). Harsányi (1997) considers sports ability to be a trait of the individual whose hereditary such as physical, psychological, anthropometric, motor and social and he sees these abilities as a characteristic of individuals who can achieve a high level of success in the future at the appropriate stage of development processes. (17)

Athletes are a bio-psycho-social entity (8). They may face many positive and negative situation on their way to success so that athletes should know how to get rid of these situations when they come across and try to cope with these issues (23). Skills are key to solve such a problem. Physical skills are trainable and developable, psychological skills are also trainable and developable. (25). Sports psychology, is scientific and professional assistance that provides to the athlete better communication in sports, Especially, in recent years, psychology in sports has become an important speciality that increases productivity and maintains optimal levels for athletes who tend to show significant developments. (6). Sports psychologists constantly examine the factors that distinguish top performers from those who are average or below average. (16). Most researchers emphasize that psychological traits are important determinants of the athlete's success (2). Moreover; many researchers found that the psychological conditions greatly impact competitive performance which is occurred as anxiety and stress-related issues during the competition (10). Therefore; sports psychologists make psychological skills training program to improve athletes 'sporting performance. For many years, sports psychologists have been studying what psychological

characteristics elite athletes should possess to be more successful in competition level (5, 12). Individuals who are actively doing sports in a sports club, school or a private company should know how to deal with any sporting problems they may encounter during their sports life. The concept of coping has been described by Lazarus and Folkman (21) as "ever-changing cognitive and behavioural efforts to manage certain external and/or internal demands that are considered to be taxing or exceeding one's resources (20). Problem-oriented strategies refer to cognitive and behavioural efforts such as problem solving, knowledge acquisition, planning, learning new skills, trying to cope with stress (9). However, research on coping with sports problems is limited due to the problem of measurement. In this study, it is aimed to measure the ability to cope with the psychological difficulties of athlete students who study at the secondary school level and valuating those coping skills according to gender, income and family education level variables.

MATERIALS AND METHODS

The research is a quantitative study and carried out in a descriptive screening model. In this study, it was aimed to determine whether secondary school students' psychological ability levels for sports differ in some demographic variables.

Population and Sample

Students who study in secondary schools in the central districts of Konya Provincial Directorate of National Education constitute is the universe of this research. In the research, athlete students randomly selected from secondary schools are the sample of the research. 237 available data were evaluated from the scales filled by the students, with the help of physical education teachers. 48.5% (n=115) participants included in the research sample were female and 51.5% (n=122) of were male respondents.

From the participants; 5. grade 24, % 24.1'i (n=57) ,6. grade 27.8% (n=66) 7.grade 24.5% (n=58) is 8th in grade. Father education status participants 37.6% (n=89) are elementary-middle school graduates, 33.8% (n=80) are high school graduates, 4.6% (N=11) are associate degree graduates, 24.1% (N = 57) are graduates-post graduates. In terms of mother education status; 45.6% (N=108) are elementary-middle school graduates, 29.5% (N=70) are high school graduates, 5.9% (N=14) are associate

graduates, 19% (N=45) are graduate post-graduates. Participants' family monthly income status; 30.4% (n=72) have income of TRY 0-2500, 30% (N=71) have income of TRY 2501-4000, 16% (n=38) have income of TRY 4001-5000, and 23.6% (n = 56) have income of TRY 5000 and above.

Data Collection Tools

Athletic Coping Skills Inventory (ACSI)

The scale developed by Smith et al.,(26) aimed at measuring athletes 'ability to cope with difficulty psychologically. The ACSI-28 inventory is a personal evaluation form that has been developed by performing explanatory and confirmatory factor analysis. The DFA was applied to assess whether the 28-item structure of the scale had been verified. Substances with a statistically significant non-t value were studied in the first DFA (detrended fluctuation analysis) applied. According to the examination, it has a non-meaningful t value of 9. and 12. matter removed from the scale. The remaining 26 items were re-analysed. On the scale developed in the Likert-type form of 4, participants were asked to specify how often they experienced their experiences (almost never= 0, sometimes= 1, often=

2, almost always= 3). The alpha reliability coefficient specified for the overall scale was designated 86. In this study, the Cronbach Alpha coefficient for the overall scale was found to be 89.

Statistical Analysis of Data

All the data were analyzed using the Statistical Package of Social Sciences (SPSS) program software version. To determine the tests to be used in the research, the skew coefficient method (2) examined whether the scores obtained showed normal distribution. Skewness values obtained from the analysis are for the overall scale of the Athletic Coping Skills Inventory''calculated as 212. It is assumed that the value is in the range of +1 to -1 and that the distribution is normal. After this stage, the arithmetic mean and standard deviation values determined for data analysis, the views of the participant to determine the status differentiation in terms of demographic variables t-test and one-way analysis of variance (ANOVA) test for significant F values Scheffe and LSD test was used in determining the difference in group works

FINDINGS

Table 1. The arithmetic mean of the inventory of participants ' ability to deal with Athletic Coping Skills Inventory and their differentiation according to demographic variables are given below tables

Scale	Factor	N	Min-Max	\bar{X}	SS
ACSI Athletic Coping Skill	ACSI General	237	1-4	2.81	.53

Above table shows that the arithmetic average of the participants Athletic Coping Skills Inventory is moderate level.

Findings comparing participants "athletic coping skills inventory" according to demographic variables

Table 2. Gender Variable T-Test Findings of participants Athletic Coping Skills Inventory

Scale	Factors/Variable	N	\bar{X}	SS	sd	t	p
ACSI Athletic Coping Skill	Gender Female	115	2,71	0,46	235	-2,89	0,004*
	Male	122	2,90	0,57			

*(p<0,05)

According to table 2, there was a statistically significant difference in the gender of the participants in terms of the variable t (235)=-2.89; p<0.05. In comparison, female participants ability to cope with sportive problems (Xfemale = 2.71, Ssfemale=.46) found to be significantly lowered than

the male participants' level of ability to deal with sportive problems(Xmale=2.90,SSmale=.57).

Table 3. According to ANOVA test findings, grade, paternal educational status and maternal educational status and income levels of family variables of participants.

Scale	Factors/Variable	N	\bar{X}	SS	F	p	Grpups in differ (Scheffe test)	
ACSI Athletic Coping Skill	Grade	5. Grade (a)	57	2,71	0,50	4,29	0,006*	c -a, b, d
		6. Grade (b)	56	2,80	0,46			
		7. Grade (c)	66	2,99	0,62			
		8. Grade (d)	58	2,70	0,43			
	Paternal educational status	Primary-Middle sc (a)	89	2,77	0,45	,508	0,677	-
		High school (b)	80	2,87	0,55			
		Associate degree (b)	11	2,81	0,44			
		Graduated-Post (b)	57	2,80	0,61			
	Maternal educational status	Primary-Middle sc (a)	108	2,76	0,46	0,569	0,636	-
		High school (b)	70	2,84	0,59			
		Associate degree (b)	14	2,80	0,60			
		Graduated-Post Gr(b)	45	2,87	0,55			
	Income level of family	0-2500 TRY (a)	72	2,71	0,48	2,37	0,72	-
		2501-4000 TRY (b)	71	2,89	0,49			
		4001-5000 TRY (c)	38	2,72	0,57			
		5000 TRY and above (d)	56	2,90	0,56			

*p<.05

DISCUSSION AND RESULT

The concept of talent is a decisive factor in minimizing the negative impact that may occur due to internal and external factors in sports. Theorists often describe sportive abilities based on sporting achievements and results. Major approaches focus on talent in sports is a prerequisite for achieving future sports achievements. (7,24). Our research concluded that the arithmetic mean of the inventory of participants' ability to deal with sportive problems was moderate. This indicated that students have a clear idea in solving problems but are not well equipped to handle such sportive problems, properly.

In terms of gender variables, it was revealed that female participants levels of coping skills with sportive problems were lower than male participants levels of coping skills with sportive problems. It can be interpreted as the fact that female students' interest in sports is less than male students and female students who are tend to keen on more daily life and feminine activities than men's during that age period. For example, aesthetic and beauty may become more important and first priority for female students. Similar to Peter and et al., (22) found that males could use higher levels of problem-focused compared to female in his study on athletes performance related to stress. Furthermore; Geczi et al., (13) found significant differences between gender and coping skills among hockey, soccer, water polo, and soccer athletes.

When we evaluated the grade; there was a significant difference between the grades of students. It was concluded that the athletes' students who study at the 7th-grade level had higher skills to deal with sports problems than the athletes at the 5th, 6th and 8th grades. According to these results; students at 5. and 6. grade are unfamiliar with the school because they are new students at the school and they're still in the orientation phase. The students in the 8. class will take the entrance exam to high school therefore, exam anxiety may be the dominant factor here. However, athlete students studying at class level 7 are psychologically more comfortable than other classes for instance 5 and 6. class level students to deal with sportive problems so their ASCI scores can be expected to be higher.

In the final findings; there were no statistically significant differences in paternal educational status, maternal educational variables. There are some studies in the literature that have similar to our findings. Gökalp (14) Firat et al.(11), Duman (7), Kale (19) in their study, found no significant difference between the education status of the mothers and fathers of the students in the general score of ASCI as well as their sub-scale mean scores. In terms of family income level; there is no statistically significant found in our findings. Similar to the studies performed by Cengiz et al. (4), Altundağ'ın (1) did not find a significant difference between the students 'families' monthly income status and their coping styles scale. In literature; a few studies indicate the significant difference

between ASCI and family income in particular subscales of ASCI. Generally, it is accepted that the average scores of the candidates with moderate and good family income levels were significantly higher than the candidates with family low-income levels because students feel the support of families on their back and the economic situation is an always strong motivating and driving force.

In summary; secondary school is a period in which systematic education stands. For this reason, it is an important period in determining the talent choices of the students, realizing their strengths and skills that direct them to the right sports branch. During this period; middle-class college student-athletes may face a various physiological or stress-related problem if not well managed, could become a source of personality issues such as lack of self-confidence, discouragement and may prevent them from using their abilities effectively in achieving sportive success. Overall, the ACSI instrument provided us with the ability of athlete student to deal with sports problems at a moderate level. Furthermore, there is a significant difference in participants' ability to cope with sports problems with gender and grade variables. Lastly, parental educational status and income levels have not impact on middle school students dealing with sportive problems. The small sample size is the main limitation of this study, in the future, such studies can be applied to more group of students not only from middle school but also high school or college level students to make a better comparison and deeper analysis. In addition, psychological education should be an integral part of an athlete's holistic training process, which is carried out with other educational elements and this can only be achieved through coordinated work between a good coach, sports psychologist and athlete; In this context, conducting scientific workshops and seminars on talent determination and coping with sportive problems will contribute significantly to this process.

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REFERENCES

1. Altundağ G. Üniversite öğrencilerinde bağlanma stilleri, stresle başa çıkma tutumları ve stresi algılama düzeyinin incelenmesi, Yüksek Lisans Tezi Haliç Üniversitesi, Sosyal Bilimler Enstitüsü, İstanbul, 2011
2. Bali, A. Psychological factors affecting sports performance. International Journal of Physical Education, Sports, and Health, 2015. 1(6), 92-95.
3. Büyüköztürk, Ş. (2018). Sosyal bilimler için veri analizi el kitabı. Ankara, Pegem Akademi.
4. Cengiz, R. Gökçelik, E. Öztürk, M. Badminton ve hentbol sporcularının stresle başa çıkma yöntemlerinin incelenmesi, Uluslararası Spor Bilimleri Turizm ve Rekreasyon Öğrenci Kongresi, 27-29 Mayıs, Gaziantep, 2016.
5. Christensen, D. S., & Smith, R. E. Psychological coping skills as predictors of collegiate golf performance: Social desirability as a suppressor variable. Sport, Exercise, and Performance Psychology, 2016. 5(1), 67-80. doi:10.1037/spy000004.
6. Coalter, F. The social benefits of sport. An overview to inform the community planning process. Sport Scotland Research Report. University of Stirling, 2005.
7. Duman, G. K. İlköğretim 8. sınıf öğrencilerinin durumluk sürekli kaygı 43 düzeyleri ile sınav kaygısı düzeyleri ve ana-baba tutumları arasındaki ilişkinin incelenmesi, Yüksek Lisans Tezi, Dokuz Eylül Üniversitesi, Eğitim Bilimleri Enstitüsü Eğitim Bilimleri Anabilim Dalı, İzmir, 2008.
8. Durand-Bush N, Salmela JH. The development and maintenance of expert athletic performance: Perceptions of world and Olympic champions. Journal of Applied Sport Psychology JASP 2002; 14(3):154-71
9. Durand-Bush, N., & Salmela, J. H. The development of talent in sport. In: Singer, R. and Hausenblas, C. and Janelle, C. J. (Eds.): A Handbook of Research on Sports Psychology. New York: Macmillan. 2001; 268-289.
10. Erdoğan, N., & Kocaekki, S. Elit sporcuların sahip olması gereken psikolojik özellikler. Türkiye Klinikleri Spor Bilimleri Dergisi, 2015; 7(2), 57-64.
11. Fırat, N. and Kaya, F. Yurtta veya ailesinin yanında kalan öğrencilerin sosyal destek düzeyleri ve stresle başa çıkma stillerinin incelenmesi, Turkish Studies, International Periodical For The Languages, Literature and History of Turkish or Turkic, 2015; 10/7: 407-426, Spring
12. Gaudreau, P., El Ali, M., and Marivain, T. Factor structure of the Coping Inventory for Competitive Sport with a sample of participants at the 2001 New York marathon. Psychology of Sport and Exercise, 2005; 271-288.
13. Gecz, G., Toth, L., Sipos, K., Fugedi, B., Danes, H., & Bognar, J. Psychological profile of Hungarian national young ice hockey players. Kinesiology, 2009a; 41(1), 88-96.
14. Gökalp, S. Lisansüstü hemşirelik öğrencilerinin stresle başa çıkma tarzları, psikolojik güçlendirme ve çatışma yönetimi stilleri, Yüksek Lisans Tezi, Haliç Üniversitesi Sağlık Bilimleri Enstitüsü, İstanbul, 2013.
15. Greenleaf, C., Gould, D., Dieffenbach, K. Factors influencing Olympic performance: Interviews with Atlanta and Nagano US Olympians. Journal of Applied Sport Psychology, 2001; 13(2), 154-184. <https://doi.org/10.1080/104132001753149874>.
16. Gunarsa, S. D. Psikologi olahraga. Jakarta: BPK. Gunung Mulia, 2004.
17. Harsányi, L. Ability for Athletics: Identification and Improvement of Talent. European Journal of High Ability. 1992. 3; 75-83

18. Jooste, J., Steyn, B. J. M., & Van Den Berg, L. Psychological skills, playing positions and performance of African soccer teams. *South African Journal for Research in Sport, Physical Education and Recreation*, 2014; 36(1), 85-100.
19. Kale, U. Tıp fakültesi ve beden eğitimi ve spor yüksekokulu'ndaki öğrencilerde fiziksel aktivite düzeyinin stresle başa çıkma yöntemlerine etkisinin değerlendirilmesi, Uzmanlık Tezi, Yüzüncü Yıl Üniversitesi Tıp Fakültesi Halk Sağlığı Anabilim Dalı, Van; 2018.
20. Kozel, J. Talent identification and development in Germany. *Coaching Focus*, 1996; 31: 5-6
21. Lazarus, R.S. and Folkman, S. *Stress, appraisal and coping*. New York: Springer, 1984
22. Peter R.E. Crocker and Thomas R. Graham. Coping by competitive athletes with performance stress: gender differences and relationships with affect. *University of Saskatchewan. The Sport Psychologist*, 1995; 9,325-33.
23. Rejeski WJ, Brawley LR. Defining the boundaries of sport psychology. *Sport Psychologist* 1988; 2(3):231-42.
24. Sarıkabak, M., Eyüboğlu, E., & Ayrancı, M. Bocce (Petank) Sporcularının duygusal zekâ düzeylerinin, akademik erteleme davranışları üzerine etkisinin incelenmesi. *Uluslararası Kültürel ve Sosyal Araştırmalar Dergisi (UKSAD)*, 2018; 4(1), 163-177.
25. Salmela J.H. expert coaches' strategies for the development of expert athletes. In: Rogozkin V.A., Maughan R. (eds) *Current Research in Sports Sciences*. Springer, Boston, MA,1996.
26. Smith, R.E, Schutz, R.W., Smoll, F.L., and Ptacek, J.T. Development and validation of multidimensional measure of sport specific psychological skills: The Athletic Coping Skills Inventory- 28. *Journal of Sport and Exercise Psychology*, 1995; 17, 379-398.