



INVESTIGATION OF STRESS MANAGEMENT STYLES OF PROFESSIONAL VOLLEYBALL PLAYERSⁱ

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Abstract:

Depending on the stress the organism encounters, reactions of people may vary. Stress leads to positive and negative effects on the person. The person starts to act and struggle against the stress they face. The aim of this research is to reveal the ways professional volleyball players cope with the pre-match stress. The universe of the research is volleyball players in Turkey's 3rd league, and the sample of it consist of randomly selected 100 (69 female, 31 male) athletes who played in the 3rd league during the 2016-2017 season. The scale was applied to the athletes 30 minutes before the match. The research has employed a 30-item Stress Coping Strategies (Styles) Scale developed by Folkman and Lazarus (1980) and adapted to Turkish by Sahin and Durak (1995). Cronbach Alpha internal consistency coefficient was found to be 77. Independent Samples T-test and one-way analysis of variance (One Way ANOVA) for cases with more than two groups test were used in the analysis of the obtained data. Values in the self-confident approach of lower dimensions are above the average. By contrast, a statistically significant difference was not reached in the research with regard to gender and age. It can be said that the athletes were not very stressed before the match and accordingly they did not set a strategy to cope with the stress. This condition may be related to the importance of the match or the league it is played in. In other studies conducted, it is suggested to increase the number of samples and to apply the scale to the upper leagues in order to clarify the styles of coping with stress more clearly.

Keywords: volleyball, coping with stress, athlete

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1. Introduction

In the era we live in, we witness many changes taking place under the influence of rapid developments in technology. With each passing day, a novelty is emerging, the existing ones are rapidly wearing off, the desires and needs of the people are becoming different and the subjects on the agenda are constantly changing. In this environment of change, people put in an effort to adapt to changes and come face to face with certain difficulties from time to time. Since people tend to follow change, they often face a contradiction between submissiveness and resistance to the difficulty faced (Akgemci, 2001). This contradiction makes us encounter the concept of "stress" which is one of today's most popular concepts. The use of the word stress in the disciplines of behavioral science and psychology, as we are familiar today, has evolved from the words "estricia" and "stringere" in Latin, according to Okutan and Tengilimoglu (2002). Stress is a condition that disturbs the individual or creates tension in the individual, both psychologically and physically (Ünsal, 2012). In another definition, stress is "a bodily and psycho-social tension arising from the imbalance between the requests coming from one's environment and one's own values, attitudes, needs, capabilities, and abilities". Therefore, stress is a mood that emerges as a reaction to an act, situation, or psychological strain in one's person and is a negative condition for the organism which may disrupt the health (Aytaç, 2009). As it can be understood from the definitions, stress arises from disharmony between the individual and the environment. Therefore, it calls forth results which compel and disturb a person's own individual integrity (Deniz and Yılmaz, 2005).

Sports activities that take place with difficulties and in an intensely pressured environment are considered to be effective in shaping the personality of the individual, making them more pain tolerant and more resistant, with more ambitious traits (Selçuk, 1997). Parallel to the developments in sports science, studies on sport-specific personality research have increased. The purpose of the research on personality is to identify the individual in terms of one's own typical tendencies and to describe them in a predictable way (İkizler and Karagözoğlu, 1997). For an athlete and a team, it is aimed to demonstrate the highest performance level in an exhibition and to keep it sustainable. High performance, along with being a physical process, involves a correct orientation and appropriate psychological preparation. It is an undeniable fact that these duties are largely responsibilities of the coaches. The modern notion of sports, whether it is team sports or individual sports, is built on playing and doing things the way coach wants in all branches (Abakay, 2010). In this respect, coaches need to find ways to reduce pressure on the athlete. Individuals who participate in sporting events wish and aim for coming to a certain level or increasing their performance to a level above their previous performances. In this process, individuals demonstrate different behaviors to reach their goals. These behaviors manifest themselves in physical and psychological characteristics. The individual can develop his or her physical condition through appropriate work schedules in line with his innate abilities and later learned behaviors. On the other hand, it is important to remember that their psychological conditions are

effective in maximizing their current physical performance. Foremost among these is to keep the athlete away from stress-inducing factors (Abakay, 2010).

In this work we have done, the following questions have been sought in order to examine the ways professional volleyball players cope with stress. In stress coping strategies of volleyball players,

1. Is there a difference in terms of gender variable?
2. Is there a difference in terms of age variable?

2. Method

This research is a descriptive study in which the athletic stress coping strategies are addressed. The sample of the research is 100 (69 female, 31 male) athletes who played in the 3rd league during the 2016-2017 season, selected with random sampling method. The sample size was calculated by accepting 95% reliability and ± 5 deviations in this study. The number of athletes to be sampled (sample size) was determined using the following formula (Erkuş, 2005). The scale of the research, which was developed by Folkman and Lazarus and originally called "Ways of Coping Inventory", was adapted to Turkish community by Şahin and Durak (1995). A Likert type "Stress Coping Strategies Scale (SCSS) grades between 0-3 and obtains separate scores from lower scales (0=%0, 1=%30, 2=%70, 3=%100). Items 1 and 9 are scored inversely in the scoring of the scale. Şahin and Durak determined that there are the five factors in the reliability studies of the "SCSS" scale (Confident Approach, Unconfident Approach, Optimistic Approach, Submissive/Desperate Approach, Social Support Seeking Approach), and Cronbach Alpha coefficients of these factors vary between 47 and 80. The scale and the information collection form used in the research were applied to the athletes within the research sample by the researcher before/after the training session or during the meetings of the clubs with the permission of the management and coach of the related club. Before beginning the implementation, the objective and the significance of the research was explained to the athletes, and information was given on the scale. Forms were observed to be filled in about 30 minutes. Independent Samples T-test and one-way analysis of variance (One Way ANOVA) for cases with more than two groups test were used in the analysis of the obtained data. Small values were evaluated according to 0.05 significance level in the evaluation of the tables.

3. Findings

Table 1: Distribution of participation/stress coping values of athletes according to gender

	Gender	N	Avg.	SS	t	P
Confident Approach	Male	31	3.3188	.54846	1.270	.207
	Female	69	3.1659	.57510		
Desperate Approach	Male	31	2.1467	.52771	-1.090	.278
	Female	69	2.2782	.62058		
Optimistic Approach	Male	31	2.9826	.52551	.506	.614
	Female	69	2.9226	.59928		

Submissive Approach	Male	31	2.2512	.51261	.517	.607
	Female	69	2.1935	.51657		
Social Support Seeking Approach	Male	31	2.8587	.54651	.503	.616
	Female	69	2.7984	.57162		

Table 2: Distribution of stress coping values of athletes according to age

	Age	N	Avg.	SS	F	P
Confident Approach	age 18-20	24	3.2679	.69004	.059	.981
	age 21-23	57	3.2581	.53550		
	age 24-26	15	3.3048	.50901		
	age 27 and over	4	3.3571	.24744		
Desperate Approach	age 18-20	24	2.3594	.52816	1.937	.129
	age 21-23	57	2.1798	.56102		
	age 24-26	15	1.9250	.48366		
	age 27 and over	4	2.2500	.77055		
Optimistic Approach	age 18-20	24	2.8833	.60982	.367	.777
	age 21-23	57	2.9895	.55087		
	age 24-26	15	2.9467	.50408		
	age 27 and over	4	3.1500	.25166		
Submissive Approach	age 18-20	24	2.2083	.52762	2.235	.089
	age 21-23	57	2.3246	.51023		
	age 24-26	15	1.9556	.40565		
	age 27 and over	4	2.1250	.56724		
Social Support Seeking Approach	age 18-20	24	2.8125	.61348	1.878	.139
	age 21-23	57	2.8596	.56303		
	age 24-26	15	2.9667	.36433		
	age 27 and over	4	2.2500	.28868		

4. Discussion and Conclusion

The aim of this research is to reveal the ways professional volleyball players cope with the pre-match stress. Stress coping styles of professional volleyball players were explored according to gender and age variables in the research. 69% of the athletes participating in the survey are female and 31% are male.

High levels of physical and psychological endurance are required in sports branches played under intense pressure such as football, basketball, and volleyball (Sözen et al., 2012). It has been suggested in the studies that stress sources may be both related and not related to competition (Dugdale et al., 2002). Studies in the field of sports psychology show that the sports environment has a very complex structure. There are arrangements to be made with the purposes of opening a door within the intense training and competition lives of individuals engaged in sports, clarifying behaviors they exhibit within their sports environment or facilitating their coping with the problems they encounter in this area (Alincak and Abakay 2015; Ceylan, 2005; Özdevecioğlu and Yalçın, 2010). Therefore, the statistical indifference that was obtained according to gender and age as a result of our research suggests that factors such as the capacity and the size of a gymnasium, the number of spectators etc. are effective.

There was no significant difference in gender variable according to our research. Although there is no statistically significant difference, it is observed that the average of the self-confident approach sub-dimension is higher in male and female athletes. This can be regarded as a sign of confidence in stress coping mechanisms of the athletes. In addition, it also can be explained as all athletes having low levels of stress before the match. Crocker and Graham (1995) found that there was no significant difference in stress coping between male and female athletes in their study. Sözen et al. (2012) did not find any significant difference between stress levels of volleyball players in their study. Bebetos and Antoniou (2003) and Pensgaard et al. (1999) found no significant differences according to gender in coping with stressful situations in sports. These results support our research. However, different results also stand out in the studies. In some pieces of research, it was determined that women use strategies more often than men to cope with stress (Patterson and McCubin, 1987; Wilson et al., 2005). In studies conducted on athletes, it has been observed that strategies for coping with stress differ according to gender (Bebetos and Antoniou, 2003; Crocker and Graham, 1995; Goyen and Anshel, 1998). For success in sports, top athletes need to be able to cope successfully with sources of stress (Alincak and Abakay, 2015; Gould et al., 1993). In their research on athletes, Arsan and Koruç (2009) reached different results according to the sub-dimensions on coping with stress according to gender. All these results show that the ways of coping with stress according to gender may differ from case to case. The importance of the match and the degree of difficulty can be considered as a decisive factor for stress.

No statistically significant differences according to age were found in our study. Although there was no statistical difference, the average of the lower dimension of self-confident approach was seen to be higher. As the age increases, the average of self-confident approach increases too. This result can be interpreted as older volleyball players coping with stress better. Stress has positive effects on people as well as negative effects in terms of physiology, psychology, and behaviors (Güney, 2011). According to this, it can be said that the athletes are very calm before the game and their perception is that they will win the match. It is also thought that this situation is related to the experience and match ambience. Age is considered to have positive effects on coping with stress here. Arsan and Koruç (2009) did not reach a meaningful difference in coping with stress according to the age category that they classified as young and old in their research on athletes. This supports our results. As a different result, Bebetos and Antoniou (2003) found that older athletes are better prepared to deal with stress in adverse situations. Following can be said as a positive result to be extracted from here: Sports may be reducing stress level by creating positive effects in coping with stress.

In conclusion, no significant difference was found according to age and sex. It has been seen that athletes prefer self-confident approach in coping with stress. It also comes to mind that this result is also related to experience. The difficulty level of the matches played by the volleyball players during the research may also have affected the outcome. It was considered that the small number of samples has affected the results.

Repeating this research by increasing the number of samples will provide support for a stronger interpretation.

References

1. Abakay, U. (2010). Relation of Footballer-Coach Communication to Motivation of Success of Footballers with Different Statuses. Doctoral Thesis Gazi University, Institute of Health Sciences.
2. Akgemci, T. (2001). Stress Management in Organizations. *Ataturk University Journal of Economics and Administrative Sciences*, 15, 301-309.
3. Alincak, F., Abakay, U. (2015). A Comparison Of Stress Management Levels Of Individuals Playing Team Sports And Doing Individual Sports, *The Journal of Academic Social Science*, 3(16): 333-345
4. Arsan, N., Koruç, Z. (2009). Determining Stress Coping Strategies of Athletes. *Journal of Sports Medicine*, 44(4): 131-138.
5. Aytaç, S. (2009). Job Stress Management Manual Job Stress: Formation, Causes, Coping Ways and Management, Türk-İş Publication.
6. Bebetos, E., Antoniou, P. (2003). Psychological skills of Greek badminton athletes. *Percept Mot Skills*. 97: 1289-1296.
7. Ceylan, M. (2005). "The Impact of Gender and Personality Variables on the Use of Cognitive Strategies in Coping with Stress" Postgraduate Thesis, Ege University Institute of Medical Sciences Psycho-Social Fields in Sports, İzmir.
8. Crocker, P.R.E., Graham, T.R. (1995). Coping by competitive athletes with performance stress: gender differences and relationships with affect. *The Sport Psychol* 9: 325-38.
9. Deniz, M.E., Yılmaz, E. (2005). The Examination of Relationship Between Emotional Intelligence and Stress Coping Styles in University Students. *Journal of Turkish Psychological Counseling and Guidance*, 25, 17-26.
10. Dugdale, J.R., Eklund, R.C., Gordon, S. (2002). "Expected and Unexpected Stressors in Major International Competition". *Appraisal, Coping and Performace*, 16: 20-33.
11. Gould, D., Eklund, R.C., Jackson, S.A. (1993). Coping strategies used by US Olympic wrestlers. *Res Q Exerc Sport* 64: 83-93.
12. Goyen, M.J., Anshel, M.H. (1998). Sources of acute competitive stress and use of coping strategies as a function of age and gender. *J Appl Dev Psychol*, 19: 469-486.
13. Güney, S. (2011). Behavioral Sciences, Nobel Publication Distribution, Ankara.
14. İvizler, C., Karagözoğlu, C. (1997). Psychology of Success in Sports. 3rd Edition, Alfa Press, Istanbul.
15. Okutan, M., Tengilimoğlu, D. (2002). Stress and Methods of Coping with Stress in the Business Environment. *Gazi University Journal of Economics and Administrative Sciences*, 3/2002, 15-42.

16. Özdevecioğlu, M., Yalçın, Y. (2010). The Influence of Sports Satisfaction on the Stress and Aggression Levels of Sportsmen. *Niğde University Journal of Physical Education and Sports Sciences*, 4 (1): 63-76.
17. Patterson, J.M., Mc Cubin, H.I. (1987). Adolescent coping Style and Behaviors: Conceptualization and Measurement, *Journal of Adolescence*,10: 163-186.
18. Pensgaard, A.M., Roberts, G.C., Ursin, H. (1999). Motivational factors and coping strategies of Norwegian Paralympic and Olympic winter sport athletes. *Adapt Phys Activ Q*, 16: 238-250.
19. Selçuk, E. (1997). Some Personality and Behavioral Characteristics of Ankara Police Academy Students. Unpublished Postgraduate Thesis, Gazi University Institute of Health Sciences, Ankara.
20. Sözen, H., Doğan, E., Erdoğan, E. (2012). Comparison of Stress Levels and Problem Solving Skills of Athletes from Different Branches. *Journal of Social Sciences Institute*, 9: 97-110.
21. Şahin, N., Durak, A. (1995). Adaptation of the Stress Coping Styles Scale for University Students. *Turkish Journal of Psychology*, Ankara, 10 (34): 56-73.
22. Ünsal, P. (2012). The Role of Individual Differences in Work Stress Perception and Coping: Behavior in Work Life: Current Approaches, Inside (Ed). Aşkın Keser, Gözde Yılmaz, Senay Yürür, Umuttepe Publications, 2nd Edition, İzmit: 387-422.
23. Wilson, G.S., Pritchard, M.E., Revalee, B. (2005). Individual differences in adolescent health symptoms: the effects of gender and coping. *Journal of Adolescence*, 28(3): 369-379.

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