

## Regional League Level in Terms of a Comparison of the Sexes Cope with Stress Improved Levels of Volleyball Players

Canan Ertoğan<sup>1</sup>, Serdar Kocaekşi<sup>1</sup>

<sup>1</sup> School of Physical Education and Sport, Anatolia University, Eskisehir/Turkey

### Abstract

The objective of the current study is specify the ways of coping with stress for male and female volleyball players who at the level of regional league in Turkey. Participants is who plays at the team of regional league in cities of Eskisehir, Karabük, Istanbul, Kocaeli, Kütahya, Konya, Çankırı, participated in the study voluntarily in total 142 female and male volleyball players 77 male volleyball players (Age, Mean: 24, 12±6,36), 65 female volleyball players (Age Mean:20,70±4,36). Inventory to Cope with Stress in Sport (SSBÇSE) which developed by Gaudreau and Blondin (2002) developed by, adapted to Turkish by Arsan (2007) used for specify the strategy of cope with stress. Descriptive statistics and MANOVA analysis were conducted on the collected data. The results of analysis show that at the level of regional league level used to cope with stress between the volleyball players; There is no significant difference in the sub-dimensions; coping with cognitive and physical ( $p>0,05$ ), avoidance ( $p>0,05$ ), social withdrawal ( $p>0,05$ ), disagreeable expression of emotions ( $p>0,05$ ). On the other hand a significant difference was found sub-dimensions of relaxation ( $p<0,05$ ) and seek support ( $p<0,05$ ).

**Keywords:** Gender, Stress, Stress with coping, Regional volleyball league.

### INTRODUCTION

When we study on literature, generally we see that team players and individual players are taken in the consideration on overcoming stress issue. We limited our study with team players in regional league level and studied on genders. According to the results of Park's<sup>1</sup> studies on Korean athletes, it's seen that individual players use coping strategies more than team players do. Ceylan<sup>2</sup> (2005) has compared coping strategies in individual sports branches and team sports but could not find any reasonable results.

The main reason that strategies for coping with stress are developed not in team sports but in individual sports branches is because both failure and

success are in responsibility of one player in individual sports, but in team sports it is rather shared between all team players.

An athlete who does not want to become a target for strictures can avoid some negativities such as stress and anxiety that effect performance.

Vanek and Cratty<sup>3</sup> (1970) state out that individual sports players are less anxious, more self-confident and free in comparison to team sports players.

Johnson- Norem- Hebesien<sup>4</sup>(1977) and James and Johnson (1983) indicate that individual sports players like training alone, prefer to develop her/his skills alone and they are more nervous, anxious,

spontaneous, self-confident, egocentric and reactional.<sup>5</sup>

Şenduran (2006)<sup>6</sup> determines that coping with stress strategies of athletic students are more developed than of other students.

Cresswell and Hodge<sup>7</sup> (2004) point out that athletes check the condition, focus on components and can overcome the stress more effectively when they face with noncontrollable environmental stress sources. The aim of this study is to measure the situation in terms of overcoming the stress in regional league volleyball competitions in Turkey. According to these results, we agreed to study on such a matter as the gender difference hasn't been taken into consideration before.

Volleyball helps an individual to develop physically, affectively, mentally and socially.<sup>8</sup> When<sup>9</sup> we look at the athletic skills that volleyball includes, we see some significant factors such as physical coordination, agility, endurance, explosive force. It's normal that individuals who engaged in volleyball and who perform these training factors during the training process develop physically. Besides<sup>10</sup>, these physical features, psychological processes also take an active role in this sports branch. It's obvious that volleyball helps individuals to get social as it's a team play. It's stated in some researches, which are done to specify volleyball player's personal characteristics, that female volleyball players are ambitious, neat, zealous, energetic, optimist; self-respecting and dominant individuals according to Gravell, Searle and Jean (1983)<sup>11</sup>. According to Koruç and Bayar<sup>12</sup>, it's observed that female volleyball players are extraverted, adventurous, risk bearer, dutiful, peaceful, normative, obedient, talented, emotionally stable, self – confident and fond of communal living. Stress is one of the important terms that are evaluated together with these features.

**Stress;** affects people and their relations with other people. It does not come up spontaneously. The changes in social environment affect people and causes stress. Every individual is affected by the changes in their environments; however some of these people are affected less and slowly. Stress is related with the effects of environmental changes. It is the influence of individual's personal features on the degree of effect by stress. It is necessary for stress to appear that individual's body system activates after bio-chemical changes in body with the environmental changes<sup>13</sup>. When we examine some studies about stress we see that the word "stress" is used for both describing arousal, concern and reaction or describing them altogether. Stressful situation, is described as a situation that an individual comprehend as danger. Asterite, indicates that stress makers are detected as physiologic, psychological or psychosocial. Physiological stress is based on environmental factors. Which are: extreme changes in temperature, long term exercises and injuries. Psychological stress is based on internal factors including detecting fear emotionally. Psychosocial stress is a product of social interaction and they are generally related with roles. Psychosocial stress situation derives from intensive social interactions or social isolation. Stress response is a kind of unified or nonspecific reaction that body give against demands or stress situation. The term 'stress' is sometimes used for 'stressful stimuli' or 'stress situation'. It is also used for "effect" or "stress response" sometimes. The term 'stress' is used as substitute for such terms as concern, conflict and trauma<sup>14</sup>. Selye defines stress as a response against some objective and compelling situations which happen beyond individuals. Stress is defined in different ways<sup>15</sup>.

Martens, Vealey and Burton<sup>16</sup>; define the stress process as an objective demand that reveals threat anxiety and

result in state anxiety reaction on athlete. Folkman and Lazarus<sup>17</sup> consider the compulsive stimuli that individual come up with, the meaning of this stimuli to the individual and coping with the stimuli as the phases of stress process.

McGrant<sup>18</sup> regards stress as a process that includes four event that are needed to be taken into consideration: (1) physical or social environment that have some objective expectations from the individual (2) the person's becoming aware of this expectation and deciding on how to respond that (3) react of the individual to expectations that s/he perceived, (4) Results of this reaction.

Researchers define stress as imbalance between the expectations and the stress response capacity. Spielberger<sup>19</sup> describes stress as a stimulus in the anxiety process. Accordingly, a certain level of stress is regarded that it includes a certain danger level. This model limits stress according to a person's decision about a situation if it's dangerous or threatening or not. As a result of this condition, anxiety reaction occurs. One another point to be focused on about stress, which is defined in different ways, is stress management.

### ***Management***

Psychologists have described management in various ways for many years. In fact, it seems both as the individual's characteristics (I made more effort to manage stress) and a result (I coped with pressure and i did throw the free shut which made us win the game ). This is a complicated issue, because "anything or everything" may be a condition to beginning. This confusion is also seems in definitions There are a variety of approaches. These are: animal behavioral approaches; psychoanalytic-ego approach; trait/dispositional approach and transactional- process approach<sup>20</sup>.

According to Ntoumanis and Biddle; management is situational and varies according to the different stages of the same situation<sup>21</sup>. Also today the dominant model in stress management is transactional process model. According to this model, stress consists of the interaction of individual's physiologic, cognitive, and behavioral system and it occurs when individual realizes that the demands of the situation are above the dealing ways of individual.<sup>22</sup> Stress situation does not cause stress, unless the individual's dealing ways are insufficient. If demand is spiking and the individual can handle this demand, stress appears. However, if the individual thinks that s/he can manage the level of stress, s/he lives much less stress. If the individual thinks that s/he cannot cope with the demand, stress level arises. According to this opinion stress management is "a variable cognitive and behavioral effort process that is used for the management of internal and external demands which are above the individual's dealing ways".<sup>22</sup> One advantage of this model is being process-oriented.

This is important as all recent researchers see stress as a process. In addition, not only personal factors but also observing stress management situation and environment are taken in consideration. Finally, not only coping results are taken in consideration. It includes all efforts for stress management without considering coping results I mean, management is not limited with effort, is also includes intentional behaviors. Due to the advantages mentioned above, it's widely accepted in sport psychology.<sup>23</sup>

Folkman and Lazarus<sup>24</sup> has found out that individuals cope with the same situations in same manner, management is a process. Mind continuously works on situation and determines how to cope with this situation As long as stressful situation progresses, individual changes managing strategies. Lazarus and Folkman<sup>22</sup> think that stress

sources lead to different reactions in accordance with individual's experiences. Management process begins with individual's evaluation of the relationship between human and environment.

### ***Cope with Stress In Sport***

Another feature of athlete's stress reaction is stress management. Stress management strategies determine individual's reaction to stress and stress management style determines the situation that effects individual's stress management strategy which s/he will use after evaluating it. Stress management style assesses the stress management strategy that the individual uses<sup>25</sup>. Scientific literature includes numerous definitions about stress management. The approaches that draw more interest are trait and process approaches.

In trait approach, individuals are classified according to the static stress management and they are measured with interviews or surveys<sup>26</sup>. Carver, Scheier and Weintraub<sup>27</sup> defines trait approach as "Sportsman does not approach every environment that required stress management with new management strategies but prefers to use some of the same strategies as time and environment changes." Process or transactional approach indicates that stress management is a dynamic and repetitive process that includes interaction of individual's internal and external environment<sup>28</sup>.

## **METHODS**

### ***Participant***

77 male volleyball players (Age, Mean: 24, 12±6,36), 65 female volleyball players (Age Mean:20,70±4,36) and totally 142 female and male volleyball players in regional league category participated to the research from Eskisehir, Karabük, Kütahya, İstanbul, Ankara, Kocaeli, Konya, Çankırı and Afyon in Turkey. Scale factors were applied by the

researcher herself without any time limitation.

### ***Data Collection Tool***

Athlete Coping Strategies Questionnaire, which is developed by Gaudreau and Blondin<sup>29</sup> (2002) and adapted to Turkish by Arsan<sup>30</sup> (2007), was used as a data collecting tool for determining stress management strategies. In the factor analysis of Athlete Coping Strategies Questionnaire which is adapted by Arslan (2007), there exists 6 factors unlike the original form. As a result of factor analysis, sample certificate coefficient is found as 808. Barlett Sphericity is found reasonable at P=0,000 value.

To test reliability of scale, testing method was used again. Scale was applied to 142 athletes, again, after 21 days and subscale correlation value of the test was determined and consequently, Cognitive and Physical Effort (.590\*\*), Relaxation (.666\*\*), Seeking for Support (.591\*\*), Avoidance (.706\*\*), Social Withdrawal (.733\*\*) and Expression of Nonconforming Feelings (.733\*\*) are found.

### ***Data Analysis***

Descriptive statistics and MANOVA technique were used to analyse the data. Error margin of the investigation was accepted as 0.05.

## **RESULTS**

Descriptive statistical results of female and male volleyball players in regional league are given in the Table1.

As it is seen in Table 2, the results of analysis show that there is no significant difference in Cognitive and Physical Coping, Avoidance, Social Withdrawal and Dysphoric Mood which are sub dimensions of Stress Management Strategies between two genders ( $p>0,05$ ). On the other hand, a significant difference was found on two other sub-dimensions named Relaxation and Seeking support ( $p<0,05$ ).

**Table 1.** Cope With stress of getting to the bottom of the male and female Volleyball players dimension identifier statistics

<b>Gender</b>	<b>N</b>	<b>Mean</b>	<b>Sd</b>
<b>Coping with cognitive and physical</b>			
Male	76	55,06	10,31
Female	65	58,09	10,72
<b>Relaxation</b>			
Male	76	13,05	3,88
Female	65	14,47	4,33
<b>Seek Support</b>			
Male	76	13,07	4,17
Female	65	14,76	3,41
<b>Avoidance</b>			
Male	76	18,72	6,17
Female	65	17,49	5,44
<b>Social Withdrawal</b>			
Male	76	10,51	6,96
Female	65	8,78	2,91
<b>Disagreeable Expression of Emotions</b>			
Male	76	9,42	3,54
Female	65	9,58	2,77

**Table 2.** Male's and Female's volleyball players MANOVA Table

<b>Parametters</b>	<b>Male (n=76)</b>	<b>Female (n= 65)</b>	<b>ss</b>	<b>f</b>	<b>p</b>
	$\bar{X} \pm Sd$				
Coping with Cognitive and Physical	55,06±10.31	58.09±10.72	1-141	2.90	.09
Relaxation	13.05±3.88	14.47±4.33	1-141	4.23	.04
Seek Support	13,07±4.17	14.76±3.41	1-141	6.76	.01
Avoidance	18.72±6.17	17.49±5.44	1-141	1.55	.21
Social Withdrawal	10.51±6.96	8.78±2.91	1-141	3.48	.06
Disagreeable Expression of Emotions	9.42±3.54	9.58±2.77	1-141	.09	.76

**DISCUSSION**

In this study, which includes comparative stress management behavior of volleyball players from both genders, the results are discussed in the light of literature. Men approach to the situation in a more active, problem-focused and effective way.<sup>31</sup> The

gender difference in dealing with stress may also be explained with social roles of men and women. The role constrain theory points out that gender difference in coping strategies disappears when individuals have the same social roles<sup>32</sup>. Crocker and Graham<sup>33</sup> found out that female athletes choose to take social

support more than male athletes with emotional reasons. This results supports the difference in the Seeking Support as the difference in the Seeking Support is also in favor of female athletes. Anshel and Delany<sup>34</sup> found out that there is no difference between men and women in social support and loss of desire issue. While women mostly use stress management strategies as an approach, men prefer avoidance strategies.

Anshel and Delany<sup>34</sup> found out that men use avoidance more than women do as a coping strategy and in contrast, women prefer to use avoidance when they come up with positive treatment. Both in positive and negative evaluations it's found out that women use managing stress much more than men do as an approach. This finding does not support the findings of the present study. The reason that there is no difference in our study is men are considered as more important and stronger in this culture and in consequence men cope with problems in a more approximate manner.

It's found that female<sup>35</sup> athletes prefer to use coping as an approach when they come up with a stressful situation however, they prefer to use it as an avoidance when they come up with a stress maker such as pain or injury. They ignore the pain and injury and go on playing. Male athletes prefer to use coping with not for avoiding injuries but prefer to use it as an approach.

Ptacek et al<sup>36</sup> indicated that men and women are apt to use different strategies. The researchers found out that men use problem –focused strategies and women are apt to search for social support and mostly use emotion- focused coping strategies. Researchers do not support the idea that this findings are related with genders. They think that these results support socializing hypothesis. It means that men have to cope with stress, but women socialize more emotionally and seek for support from the others<sup>37</sup>. Hammermeister, and Burton<sup>38</sup>

found that men and women evaluate stressful situations in a similar way. Similarly in our study show no change between two genders in terms of Cognitive – Physical Coping, Avoidance, Social Withdrawal and Dysphoric Mood. Nevertheless, female athletes use seeking social support, expressing disagreeable feelings, positive revaluation and leaving much more than men do. Yoo, and the Park<sup>39</sup> found out that female athletes prefer problem -focused coping strategies more than female athletes in various sports disciplines. Avoidance is seems to be more popular among female athletes. There are some findings which supports that there is no difference in coping with stress in terms of genders. Findings support only two strategy difference. Anshel et al.<sup>40</sup> have investigated whether gender difference is related with coping strategies which have been used during a competition and after 7 acute stress maker. Approach, as a coping strategy, is used by men more than women and especially in certain stressful situations it is used much more.

According to the results of the research, elite women athletes have similar psychological features with elite male athletes. Both female and male athletes emphatically shows similarities rather than difference. Unlike the previous researches, Lopez et al.<sup>41</sup> has found that there is no gender difference in coping. Ntoumanis and Biddle<sup>21</sup> indicated that it is not obvious whether the changes derive from gender difference or other variables (ability level and culture). Gender difference is still a weighty matter. In some studies that Meyers and others<sup>42</sup> practiced with some bull riders, there found no difference in their coping strategies among 130 male and 55 female athletes. Hammermeister and Burton<sup>38</sup> emphasize that most of the questions about gender difference in coping with stress in sport are remained unanswered. Hammermeister and Burton<sup>38</sup> have evaluated whether male and female endurance athletes have different strategies

for evaluation and coping in their studies. According to the results of the researches there found gender difference between competitive state anxiety and perceived threats. Despite this, there were found no gender difference in the secondary evaluation process. Bebetos<sup>43</sup> and Antoniou Pensgaard et al. has found no gender -based difference in coping in sports<sup>44</sup>.

## **CONCLUSION**

The results of analysis show that, there hasn't been found any significant difference in Cognitive and Physical Coping ( $p > 0,05$ ), Avoidance ( $p > 0,05$ ), Social Withdrawal ( $p > 0,05$ ) and Expression of Non comforting Feelings ( $p > 0,05$ ) in terms of genders. On the other hand a significant difference was found in seeking for support ( $p < 0,05$ ) and relaxation ( $p < 0,05$ ).

In conclusion, some sub dimensions of overcoming the stress are differ according to genders in Turkish athletes. That is to say, they use different coping strategies to overcome stress.

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