



The relationship between self-efficacy and stress-coping strategies among volleyball players

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ABSTRACT: The aim of this study was to determine the relationship between self-efficacy and stress-coping strategies among young male volleyball players in Karaj, Iran. This study used a descriptive - correlation approach. The statistical population of this study was 200 young male volleyball players, of which, 130 were randomly selected as statistical sample and their average age was 22.31. Research questionnaires included self-efficacy of Sherer and Maddux (1982) and stress-coping strategies of Endler and Parker (1990). Kolmogorov-Smirnov (KS) statistical test showed that data distribution is not normal. The Spearman correlation coefficient was used to determine the relationship between variables. The results showed that there is a significant positive correlation between self-efficacy and its three components with problem solving coping strategy of volleyball players. A significant negative correlation was obtained between the self-efficacy and its components with avoidance coping strategy, but between self-efficacy and its components with avoidance coping strategy no relationship was obtained. Linear regression also revealed that self-efficacy components of positive predictive coping strategy and negative predictor of emotional-focused coping strategy among volleyball players in the city of Karaj.

Keywords: Self-efficacy, coping strategies, Volleyball

INTRODUCTION

In addition to physical factors the progress of athletes also depends on psychological factors and achieving success will require sufficient time and physical and mental exercises [1]. Sometimes, athletic due to lack of coach's knowledge about his personal characteristics and psychological factors only with a sentence or action of coach, leaves sport scene or his performance gets impaired. Therefore, sport psychologists and researchers should pay attention to this important so that teachers and sports coaches through using these findings and proper practical psychological solutions train the body and spirit of athletes [2]. Bandura considers self-efficacy as a cognitive process through that we extend many social behaviors and personal characteristics. Whether individuals through testing or coping with difficult situations will solve them or not is a function of their confidence in their effectiveness. People are afraid of the threatening situations, that they believe they cannot cope with and therefore avoid them but when they are able to cope with them act decisively. Perceived self-efficacy, not only reduces expected fears

and inhibitions, but also through expectation for the eventual success affects in the amount of endeavor. Self-efficacy expectation determines to what extend people are trying and until when they resist against obstacles and problem making experiences. The more is the self-efficacy expectation, the more active they will be [3]. Self-efficacy is a structure related to a specific field and the performance of individuals in specific fields of duties and has relationship with their judgment about their ability in that field. Self-efficacy refers to the personal beliefs about their capabilities to learn and perform activities at certain levels. According to Bandura the way in which people behave is mostly determined through their beliefs about their capabilities in this field and the impact of these beliefs on their tendency to use their previous knowledge and skills in doing that action [4].

Stress can be found in the lives of all human beings and is an inevitable fact of life. Since stress caused emotional and physical pressures are undesirable and irritant, therefore, people are motivated to take actions to reduce their stress.

Stress reactions are very different and this is because of the different types of coping. Coping is cognitive and behavioral efforts that is done to manage internal and external requirements that are considered as stressful and supra-personal resources and aims to eliminate, minimize or tolerate stress. These efforts are in the form of performing an activity or work, or in the form of mental activity [5]. Coping is not a stable attribute, but in mutual processes is changed by the experience. On the other hand, a person may choose an inappropriate strategy which increases his vulnerability to stress [6]. Stress coping strategies of each person are the unique ways of dealing with issues and problems in his life and cause his compatibility or incompatibility which depends on his coping strategy. These methods are divided into three methods of problem-focused coping strategy; emotion focused coping strategy and avoidance coping strategy. Problem-focused coping strategies describe ways based on which the actions that must be done to reduce or eliminate the stress are calculated. Problem-focused behaviors include searching for more information about the problem, changing the structure of problem from cognitive point and prioritizing some steps to address the issue, conversely, emotion-focused coping strategies, describes ways whereby a person concentrates on himself and all his effort is to reduce his own uncomplimentary feelings. Emotion-focused coping strategies include crying, being nervous and upset, addressing cynical behaviors, mental preoccupation and fantasy. The avoidance coping strategies requires activity and cognitive changes that their aim is to avoid the situation of tension. Avoidance coping behaviors may be in the form of the involvement in a new activity or resort to community and other individuals [7]. Kerry Memri (2013) concluded that there is a significant relationship between the ways to deal with stress, social support and self-efficacy. Also at the height of the pressure through self-efficacy one can deal with stress [8]. Azadi et al (2014) found a significant relationship between self-efficacy and job stress coping. Self-efficacy is a good predictor for coping with stress [9]. In this regard, Farid and Salibi (2014) concluded that there is a significant relationship between the different levels self-efficacy and stress coping strategies (problem solving) [10].

Mammery (2010) swimmers with high self-efficacy had higher score than other groups in coping with stress and peak pressure of champion skills [11]. Masoudnia (2007) found that people with high self-efficacy use problem-focused coping strategies, individuals with low self-efficacy use emotion-focused coping strategies and avoidance coping strategies [12]. In this regard, Reicy *et al* (2006) concluded that self-efficient people use of problem-focused coping strategy [13]. Through

studying the review of literature it can be concluded that the present study was conducted due to the different method in using questionnaire, different statistical population and lack of studies in the field of sport psychology inside Iran. Also sporting success is largely influenced by common sport stressors and stress causing events are inevitable parts of championship sports. Inability to effectively cope with athletic stress is detrimental for performance and personal satisfaction of athletics. This research will help educators to pay attention to the characteristic problems of athletes and provide necessary programs within the scope of their responsibility to guide athletes. Therefore, this study aims to find a relationship between self-efficacy and stress coping strategies among young male volleyball players in Karaj, Iran and to see whether the self-efficacy can be predicted through stress coping strategies or not

MATERIALS AND METHODS

This study was a descriptive - correlation research and based on its objective was an applied research and according to the data gathering was a field study. The statistical population of this study was young male volleyball players of Karaj with average age of 22.31 who were sent to the Alborz province tournament by the general department of physical education and sports bureau in 2013. Testees (n = 200) had at least 3 years of regular exercise and play. Simple random sampling was performed and several teams were selected randomly from among the participating teams and sample size was determined as 130 subjects according to Morgan sampling table. In this study the self-efficacy variable was used as predictor variable and stress coping strategies' variable was used as the criterion variable. In order to conduct this study two questionnaires of general self- efficacy Sherer and Maddux (1982) consists of 17 questions and stress-coping strategies of Endler and Parker (1990) consists of 48 questions were used which were designed in the form of 5-point Likert scale. To analyze the data the method of descriptive statistics (Mean, frequency, percentage and standard deviations for the study of mean score and the distribution of scores from the mean) were used. First of all Kolmogorov Smirnov test was used to determine the normality or abnormality of data, through considering the abnormality of data inferential statistical method (spearman correlation coefficient to assess the simple relationship among variables and linear regression to examine the prediction between variables by the use of criterion variable). In addition for all the assumptions the significance level = 0.05 was considered and also the software SPSS version 19 was used for data analysis.

RESULTS

Table 1 shows the descriptive findings of the research about personal information of players. Table (2) shows the results of descriptive statistics for the research variables among players. According to these results, the average of the desire to initiate behavior 13.57, desire to expand efforts to complete the task 15.86, being

different in facing obstacles 14.41 and the mean of total score in self-efficacy variable was obtained 43.85 among volleyball players. Also the average of problem-focused coping strategy was obtained 53.55, avoidant coping strategy 48.56 and emotion-focused coping strategy 53.30 among volleyball players (Table 2).

Table 1: Distribution of participants in terms of demographic characteristics.

Feature		Indices	
		Abundance	Frequency
Level of Education	Under Diploma	13	10.0
	Diploma	46	35.4
	Associate Degree	39	30.0
	Bachelor	32	24.6
The highest title	City	52	40.0
	Province	43	33.1
	Country	22	16.9
	International Tournaments	2	1.5
	Asia	11	8.5

Table 2: Describing the variables of research among players.

	Number	Minimum	Maximum	Average	Standard Deviation
Desire to initiate behavior	130	5	21	13.75	4.18
Desire to expand efforts to complete the task	130	9	24	15.86	5.36
Being different in facing obstacles	130	7	26	14.41	7.34
Self-efficacy	130	21	66	43.85	15.76
Problem-focused coping strategy	130	42	64	53.55	7.40
Emotion-focused coping strategy	130	32	63	48.56	9.16
Avoidant coping strategy	130	40	67	53.30	6.59

Spearman correlation results showed positive and significant relationship between self-efficacy and problem-focused coping strategy among volleyball players; also there was a negative and significant relationship between self-efficacy and emotion-focused coping strategy of volleyball players, but there was no significant relationship between self-efficacy and avoidant coping strategy of volleyball players (Table 3). Spearman correlation results showed positive and significant relationship between self-efficacy

components (desire to initiate behavior, desire to expand efforts, being different in facing obstacles) and problem-focused coping strategy among volleyball players; also there was a negative and significant relationship between self-efficacy components and emotion-focused coping strategy of volleyball players, but there was no significant relationship between self-efficacy components and avoidant coping strategy of volleyball players (Table 4).

Table 3: The results of spearman correlation coefficient between self-efficacy and stress- coping strategies among volleyball players.

Self-efficacy		Problem-focused coping strategy	Emotion-focused coping strategy	Avoidant coping strategy
	correlation coefficient	0.937**	-0.514**	0.062
	Significant level	0.000	0.000	0.485
	Number	130	130	130

Table 4: The results of spearman correlation coefficient between stress- coping strategies and self-efficacy components of volleyball players.

		Desire to initiate behavior.	to Desire to extend the	to Being different in facing obstacles
Problem-Focused Coping Strategy	Correlation Coefficient	0.748**	0.920**	0.925**
	Significant Level.	0.000	0.000	0.000
Emotion-Focused Coping Strategy	Correlation Coefficient	-0.507**	-0.541**	-0.377**
	Significant Level.	0.000	0.000	0.000
Avoidant Coping Strategy	Correlation Coefficient	-0.052	0.004	0.098
	Significant Level.	0.553	0.962	0.265
Number		130	130	130

Linear regression results show the components of self- efficacy are good predictor for problem-focused coping strategy of players (F =241.3, p 0.01) (Table 5).

Table 5: The results of regression analysis between problem-focused coping strategies of players based on their self-efficacy components.

Stress-coping strategy		Sum of squares	Degrees of freedom	Mean square	f	Significant level.
Problem-focused coping strategy	Regression	5597.463	2	2789.731	241.3	0.000 ^c
	Remaining	1472.660	127	11.596		
	Total	7070.123	129			

Self-efficacy components are suitable predictors for emotion-focused coping strategy of players (0P 0.01, F=31.451) (Table 6).

Table 6: The results of regression analysis between emotion-focused coping strategies of players based on their self-efficacy components.

Stress-coping strategy		Sum of squares	Degrees of freedom	Mean square	f	Significant level.
Emotion-focused coping strategy	Regression	4642.453	3	1547.484	31.451	0.000 ^d
	Remaining	6199.555	126	49.203		
	Total	10842.008	129			

Self-efficacy components are not suitable predictors for avoidance coping strategy of players (P 0.05, F=1.323) (Table 7).

Table 7: The results of regression analysis between avoidant coping strategies of players based on their self-efficacy components.

Stress-coping strategy		Sum of squares	Degrees of freedom	Mean square	f	Significant level.
avoidant coping strategy	Regression	13.220	3	43.407	1.323	0.364
	Remaining	2435.080	126	21.524		
	Total	2565.300	129			

DISCUSSION AND CONCLUSION

The results showed that there is a significant positive relationship between self- efficacy and all of its three components (desire to initiate behavior, desire to expand efforts, being different in facing obstacles) with problem-focused coping strategy of volleyball players.

These results are consistent with the results of Mammary (2010), Reicy et al (2006) and Farid and Salibi (2013) which showed that people with high self-efficacy use Problem-focused coping strategy [10,11,13].

It is also consistent with the results of Azadi *et al* (2014) which demonstrated that there is a significant positive correlation between coping strategies and self-efficacy in job stress [9]. People with higher self-efficacy can effectively deal with the events and circumstances, since in overcoming the problems they expect success, persist in doing their task and often perform at high level. They see problems as challenges rather than threats and actively search for new success.

The results also showed that there is a significant negative correlation between self- efficiency and all of its three components (desire to initiate behavior, desire to expand efforts, being different in facing obstacles) with emotion-focused coping strategy of volleyball players. Also the results are consistent with Bahadori (2013) which showed that there is a significant negative relationship between self-efficacy and emotion-focused coping strategy. The higher the degree of efficacy is in tastes they less concentrate on self-criticism and self-incriminate and vice versa in coping with stress[14]. Individuals with low self-efficacy in dealing with the problem, through self-doubt and self-criticism about their ability will try to debilitate themselves which will harm them and will result in poor performance in sporting situations and hinder new learning. The results showed that there is no significant relationship between self-efficacy and all of its three components (desire to initiate behavior, desire to expand efforts, being different in facing obstacles) with avoidant coping strategy among volleyball players. As a result, the null hypothesis is confirmed.

The results of this study are inconsistent with Bahadori (2013) showed that there is a significant negative correlation between self- efficiency and avoidant coping strategy and the less people have self-efficacy the more they use avoidant coping strategy they use [14]. Individuals with low self-efficacy expectations are more likely to avoid threatening situations which they believe are beyond their capabilities and in the case of facing with such situations because of low expected efficacy will refuse to do it. Consequently, they will have poor performance in sporting events since it seems unlikely that they achieve real and accurate expectations and their sense of self-efficacy goes high[15]. The results showed that the components of self-efficacy are good predictors for problem-focused coping strategy of players, in a way that can positively predicate problem-focused coping strategy. These results are consistent with the results of Azadi *et al* (2014), Farid and Salibi (2013), Mammary (2010) and Reicy *et al* (2006) which showed that self-efficacy and its components are positive predictors of problem-focused coping strategy[9,10,11,13].

Bandura (1996) suggested that high self-efficacy can reduce turmoil against stress causing evidences and therefore self-efficient people through relying on their abilities can correctly solve the problem [3]. Also the results showed that the components of self-efficacy are good predictors for emotion-focused coping strategy and negatively predicate emotion-focused coping strategy. The results are consistent with results of Bahadori (2013) which showed that self-efficacy and its components coping strategy negatively predicate emotion-focused coping strategy. In order to explain these findings it can be stated that the higher the degree of efficacy is in tastes they less concentrate on self-criticism and self-incriminate and vice versa so self-efficacy should be reinforced in people [14]. The results showed that the components of self-efficacy are not good predictors for avoidance coping strategy of players. These results are inconsistent with the results of Bahadori (2013) which showed that self-efficacy and its components negatively predicate avoidant coping strategy [14].

Individuals with low self-efficacy expectations are more likely to avoid threatening situations which they believe are beyond their capabilities and in the case of facing with such situations because of low expected efficacy will refuse to do it [9]. Thus, according to the results coaches and executives through training programs and appropriate coping strategies for players and holding training workshop in this field should enhance self-efficacy in volleyball players. Because, as the results of this study and other research indicated, individuals who have high self-efficacy at the time of facing with adverse and stressful events show more stability and do not accept negative thoughts about their abilities. Based on this the sense of self- efficiency will help them to solve the problems. Also instructing appropriate stress-coping strategies to players can improve problem solving strategies and reduce their stress and therefore they can better identify the source of stress and problem and solve it [16].

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