

Double-edged Sword of Sport: “Do Sport Exercises Have Positive Effect on Mental Health”

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ABSTRACT

It appears that sport exercises have many positive benefits. However it can be argued contrary. If the aim of sport exercises is to fill the leisure time, so it will have positive aspects. But for professional athlete who sport is his/her profession, like other stressful jobs, sport might have negative aspects. The purpose of the present study was to compare professional and non-professional athletes' students regarding boredom proneness, loneliness, and depression. Participants were 100 professional and 100 non-professional Iranian athletes' students of Islamic Azad University from different sport areas who were completed boredom proneness, loneliness, and depression scales. Both multivariate analysis of variance and separated analyses of variance revealed that there were significant differences between professional and non-professional groups regarding boredom proneness and depression. In other words, the scores means of boredom proneness and depression were higher in professional than non-professional athletes' students. No difference between two groups regarding loneliness was found. Finally, results based on psychological theories and sport advantages were discussed.

KEY WORDS: Boredom Proneness, Loneliness, Depression.

1. INTRODUCTION

Physical education coaches should be aware of the psychological benefits of physical activity as well as its effect on the body and by proper strategies, prepare people for competition and sports championship. Sports psychology studies the factors affecting the sport performance. One of most important areas of sports psychology that is used especially in the Champions is mentally ready of athletes for the competition (Wuest & Bucher, 2002).

Some athletes are engaged in professional sports that have special problems. Identifying and resolving these problems, and fulfill the basic needs of these athletes can help to their success and productivity. Body and mind have an undeniable influence on each other and the experience of one of them can affect the whole organism. It is clear that mobility, activity, vitality and freshness of body can affect on mental vitality and lead to pleasant emotions. Sport activities cause emotional discharge; means that some negative emotions and internal conflicts person would be discharged and sense of confidence, self respect, and vitality will be appeared (Ghseminejad Dehkordi, 2009).

Based on the above mentioned it appears that exercise has many positive benefits. However it can be argued that not always this way. If you exercise to fill the leisure time it will have positive aspects. But as a professional sportsman in a way that it will consider their profession, like other stressful jobs have negative aspects.

One of the problems that occur during and after professional sports and heavy exercise is fatigue that can reduce the athlete's performance and ability to perform various functions (Mohebbi, 2007). Skilled exercise and fatigue problems associated with it caused a negative impact on mental health. Fatigue results are negative. Fatigue in the work are associated with workplace absenteeism, lack of satisfaction, reduce accidents and individual performance in hard work, changes in performance levels, and no way to escape from work (Rogelberg, 2006).

Some research in the field of physiology (Kekkonen. Vasankari, Vuorimaa, Haahtela, Julkunen, & Korpela, 2007, Gleeson & Pyne , 2000) indicated that severe and intensive training of athletes, will increase the chance of infection of upper respiratory tract. Various epidemiological studies have shown that athletes intense training, undermines the immune system so that it reduce efficiency and increase chronic fatigue (Donald, Gleeson & Flanagan, 2000, Reid, Gleeson & Williams, 2004).

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One of the main problems that elite and professional athletes are faced is excessive exercise which has unpleasant outcomes such as depression, fatigue, loneliness, low satisfaction and happiness, low self-esteem, alienation, feeling embarrassed, nostalgia, small gravity, avoid social contact, having few friends, cynicism, and helplessness (Mirzaei, 2006).

Besharat (2005) has stated that in sport competitions because of trading profits, economic value and the attempt to prove personal, national and international competence, players stress and pressure reach to climax. Therefore identifying and controlling psychological outcomes of behavior and success of athletes are essential.

Awareness of the positive and negative consequences of exercise will led to greater understanding of the nature of exercise. The purpose of the present research is answer to this question whether the opposite of what is thought, do exercise have negative consequences such as depression, fatigue, and loneliness?

This research included the following hypothesis:

Hypothesis 1: there are differences between professional athletes and non-professional in terms of fatigue.

Hypothesis 2: there are differences between professional athletes and other professionals in terms of loneliness.

Hypothesis 3: there are differences between professional athletes and other professionals in terms of depression.

2. MATERIALS AND METHODS

Participants

Population was all professional and non-professional athletes of Islamic Azad University of Ahvaz. Participants were 100 professional and 100 non-professional Iranian athletes' students of Islamic Azad University (Ahvaz Branch) randomly selected from different sport areas that were completed boredom proneness, loneliness, and depression scales. Numbers of participants separately for gender and profession level are presented at table 1.

Table 1. Frequency of professional and non-professional athletes

sample	male	female	total
professional	24	76	100
non-professional	29	71	100
total	53	147	200

Measures

The following scales were used to measure variables.

Boredom Proneness Scale (BPS): The 28-item boredom proneness scale developed by Farmer and Sundberg (1986) were used. As previous research reported this scale found as a valid and reliable scale (Zamiri, 2009). Cronbach alpha of this questionnaire in the present study was 0.71.

Loneliness Questionnaire: In this study the Farsi version of 20-item UCLA loneliness questionnaire developed by Russell, Peplau & Cutrona (1980, cited in Myrdrykvand, 2008) were used. In the different studies this questionnaire were found to be valid and reliable (Myrdrykvand, 2008). Cronbach alpha of this questionnaire in the present study was 0.91.

Beck Depression Inventory (BDI): In this study the Farsi version of 21-item BDI were used to measure depression. Reliability and validity of this instrument have been confirmed in previous studies (Rajabi, Atariy & Haghigi, 2001). Cronbach alpha of this questionnaire in the present study was 0.76.

3. RESULTS

Table 2 shows Means and Standard deviations of Variables.

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	professional		Non- professional	
	Mean	SD	Mean	SD
Boredom	12.24	4.20	10.64	4.28
Depression	12.37	4.93	9.51	3.87
Loneliness	40.07	8.92	38.27	10.26

As seen in table 2 scores means of boredom proneness, Loneliness, and depression were higher in professional athletes than non-professionals athletes.

In order to compare two groups of professional and non-professionals athletes regarding to three dependent variables, multivariate analysis of variance (MANOVA) was conducted. The results are presented in table 3.

Table 3. MANOVA results for difference between two groups regarding to 3 dependent variables

EFFECT	Value	F	Hypothesis df	Error df	Sig
Pilla's Trace	0.049	3.402	3	196	0.019
Wilk's Lambda	0.951	3.402	3	196	0.019
Hotelling's Trace	0.052	3.402	3	196	0.019
Roy's Largest Root	0.052	3.402	3	196	0.019

As seen, results in table 3 reveal that there were significant differences between professional and non-professional athletes regarding to dependent variables.

Results of MANOVA show that all F values are significant at $p < .0001$. This means that there is significant difference between two groups of study at least regarding to one of dependent variables. Separated ANOVAs was conducted and are presented at table 4.

Table 4. Separated ANOVAs

Source	Variable	SS	df	MS	F	Sig.
Group	Boredom	151.38	1	151.38	7.35	.007
	Depression	420.5	1	420.5	3.86	.005
	loneliness	162	1	162	1.75	.185

Table 4 shows that F values for the variables of boredom proneness, depression and loneliness were 7.347, 3.863, and 1.752, respectively. Table 4 shows that F-related boredom proneness and depression are significant, but F-related loneliness is not significant. Considering the means of non-professional and professional athletes on boredom proneness (12.24, 10.64, respectively) and depression in (12.37, 9.51, respectively) reveal that professional athletes have higher means on boredom proneness and depression than non-professional athletes.

4. DISCUSSION

The purpose of the present study was to compare professional and non-professional athletes' students regarding to boredom proneness, loneliness, and depression. Results showed that boredom and depression are higher in professional athletes than non-professional athlete, but no difference between two groups regarding loneliness was found. Morgan and his colleagues (cited in Kreyder, Fry & O'Toole, 1998) conducted a ten-year study on the University of Wisconsin athletes, researchers at this time profile of mood states (POMS), a non-clinical measure of mood states Is approximately 200 male and 200 female swimmers and other athlete on the academic programs of various types were used to some more questions about the practice respond. Major findings of this research effort 10 years are as follows:

The general mood disorder increased (total stress, depression, nervousness, fatigue, and strong turbulence minus score) with increasing exercise time significantly increased.

Following reduction exercise, the overall dysfunction of mood states is their main mode, so a lot of relationship - between exercise and mood states answer there.

Changes in the same mood among the general population of students is not found, the program may be attributed to training athlete.

According to research, Silver, and colleagues (cited in Kreyder, Fry & O'Toole, 1998). reported that intense exercise can increase anxiety, and fatigue, and increase the response to pain. Can be stated that the aim of this study is based on professional sports in the amateur sport (exercise for good health) can be damaged with that, is correct. As was observed in non-professional athletes professional athletes have reported more fatigue and depression have more experience. On the contrary, one of the results of this study was that there was no difference between professional and non-professional athletes regarding to loneliness. Most athletes who participated in this study were member of professional sport teams like volleyball, basketball, and soccer. Some researchers obtained the same results from the study that support these findings. For example Melamed and his colleagues (Melamed, Ben, Luz, & Green, 1995), the relationship between objective working conditions (heavy work, repetitive work, work variety)

and mental fatigue of work with job satisfaction, psychological disturbances, and absence from work were examined. This study determined the average mental fatigue with the objective conditions of work is related. The highest effect of repetitive work for short periods of work, which means continuous and repetitive as the interval was short, occurs (Melamed, Ben, Luz, & Green, 1995). Hosseini and his colleagues (2006) showed that moderate exercise reduces depression, anxiety, psychosomatic disorders, compulsive, psychosis is associated with psychological upset, but heavy exercise can disrupt a person's mental health (Hosseini, Kazemi, & Shahbaznezhad, 2006). Choi and his colleagues (1997), reported moderate-intensity aerobic exercise improved mood, reduced anxiety and depression and increase happiness, and decrease fatigue.

Koaly (2007), studied some of the elite athletes to achieve their goals such as getting a scholarship are practiced all year and the performance level of professional development is to reach their goal. Unfortunately, high hopes observed increased stress on the athletes directly related to anxiety, and fatigue has.

Overtraining reduced athletic performance, and physiological changes, biochemistry, and numerous immunological, and psychological (Coakley, 2007). Winsley & Matos (2011) have also stated that professional athletes due to heavy exercise, perceived effort suffered too much, sleep disturbances, decreased appetite, irritability, and ultimately are fatigue (Winsley & Matos, 2011).

Based on studies that seem to fit exercise is better than continuous exercise, and mild to moderate exercise is better than high intensity exercise. Considering that this study population, and non-professional athletes were professional students in addition to the sports school was doing and some of them lived in dormitories, and nutritional status were normal like other students, this Due to time pressure has been ineffective in practice. We study the data to some extent possible advantages and disadvantages of exercise, and increased exercise. However, as was seen in terms of loneliness among professional, and amateur athlete did not differ. Recommended further researches occur in different fields professional athletes in individual sports with a group of loneliness. Also, study the difference between professional athletes, and non-professional characteristics of the problem only is considered significant. Recommended further research the difference between these two groups of variables such as happiness, and positive psychological well-being are also studied.

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