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The Relationship Between Mental Health with Sports Participation Motivation in Female Students of Islamic Azad University, Karaj Branch

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ABSTRACT

Objective: The purpose of this study was to examine the relationship between mental health and sports participation motivation in female students of Islamic Azad University Karaj Branch.

Method: This study was a descriptive research that its method was correlation and it was conducted through cross-sectional and survey. Sixty female students ($M_{age}=23/5 \pm$) were selected as a convenience sample from Islamic Azad University Karaj Branch in all academic levels and in the second semester 2015-2016. The instrument of this study was included a demographic questionnaire, Goldberg's General Health Questionnaire (GHQ), and Gill's Participation Motivation Questionnaire (PMQ). The collected data were analyzed by Pearson's Correlation Coefficient.

Results: The results showed that there was a there was a significant relationship between mental health ($P=0.05$) and social dysfunction ($P=0.021$) with sports participation motivation in students and students' sports participation motivation increased significantly with the reduction of mental problems and the social dysfunction subscale. Also, there was no significant relationship between depression ($P=0.388$), anxiety ($P=0.425$), and somatic symptoms ($P=0.199$) with sports participation motivation in students and mental health subscales were not a significant predictor for students' sports participation motivation ($P=0.198$).

Conclusions: It is suggested that we can provide a positive effect on students' mental and physical health in the campus and dormitories through the creation of a good atmosphere, desirable learning and training environment, the training place of different sports, counseling centers for the provision of counseling services due to the improvement of mental health, and the holding of workshops.

INTRODUCTION

The issue of continuing education, the growth, and promotion of science, is one of the needs of today's growing communities that have attracted young and talented young people. Entering a

university in every person's life is an important event, as it affects jobs, income, social relationships and the future. It must be accepted that student life is accompanied by stressful and new challenges (Buboltz, Brown and Soper, 2001). Students from each country are considered to be the intellectual and Spiritual capital of that country. Studying specific student issues, successful education and providing their physical and mental health is one of the most important goals of educational planners in the Governments (Mirkamali, Khagra, Mazari and Farhadi Amjad, 2015). Some studies have found the incidence of physical and psychological harm to students more than the general population and claim that common mental disorders such as anxiety, depression, tension and physical impairment are more common in students (Gilbert and Weaver, 2010). Student life, while offering new opportunities for the individual, also brings with it specific challenges and stress. Some studies on mental health have shown that psychiatric disorders in students ranged from 12.75% to 30.4% (Yousefi and Mohammad Khani, 2013). Students are considered as the spiritual resources of the society and the country's future prospects in terms of talent, creativity, and perseverance of the selected forces. It is essential for their academic achievement and their successful life to enjoy peace and security in all aspects and as well as paying attention to other interventions in the learning environment. Attention to students' educational status is a step towards sustainable development, which has been growing in recent years in different countries (Yousefi and Mohammad Khani, 2013). Being in such a situation has often been coupled with the pressures, concerns and excitements of this period, which affects the performance and efficiency of individuals and ultimately their mental health and given the intensification of stress levels in academic course, it can be expected that percentage of students, especially female students with higher levels of vulnerability, are at risk for certain mental illnesses

(Choand Haslam, 2010; Kaplan, Sadock and Grebb, 2003). Increasing students' referrals to student counseling centers, especially female students have confirmed in recent years that there are increasing problems and requires the intervention and the provision of services (Yousefi and Mohammad Khani, 2013). According to the World Health Organization (WHO), in 2008, 14% of the world's population is prone to one of the mental disorders, with about half of them having mild mental disorders such as depression and anxiety. It is anticipated that by 2020, the level of mental and nervous disorders increases by about 50% and will account for about 15% of the total global burden of diseases, which will increase the relative share, even more than the increase in cardiovascular disease. Studies in the country have reported the prevalence of mental disorders between 9.11% and 2.30% (Noorbala, Bagheri, Asadi and Vaez, 2011).

Mental health is one of the important dimensions of health and, according to the World Health Organization, mental health is within the overall concept of health, which is the full ability to play a social mental and physical role and there is no illness or backwardness (Johnson, 2002). Psychologists believe that personal characteristics, psychological and environmental pressures, economic, social and family status, lack of achievement of life goals and lack of motivation affect the mental health of individuals (Johnson, 2002). The concept of mental health, in fact, is an aspect of the general concept of health and refers to all methods and measures used to prevent mental illness, treatment, and rehabilitation (Johnson, 2002). Based on what is said, mental health is an important and influential concept in the performance of individuals, which is also a remarkable issue among students. Mental health, with its broad and effective nature, is related to concepts such as motivation for progress and academic performance and changes the status of each of these concepts. Based on this, considering the mental health of

students and the impact on their educational achievement and academic performance, Worthy of attention.

One of the principles of good health or health promotion behaviors is regular exercise and exercise which has a positive effect on the physical and mental health of man and his quality of life, which reduces the field of psychological and physical disorders and increases mental health (Casasola, 2010). Individuals use different coping methods to deal with stressful situations. The effectiveness and inefficiency of these coping methods play a major role in the physical, psychological and social well-being of individuals. In this regard, one of the strategies repeatedly recommended by researchers to maintain and promote mental health is regular exercise at normal level (Blanchard, Rodgers, Spence and Courneya, 2001). Exercise and physical activity can lead to biological and biochemical changes and improve mental health (Dua, Cooper, Fox and Stuart, 2010). In the last two decades, psychological and psychotherapy issues with physical activity have received great attention. As regular exercises are associated with a decrease in depression (Weinberg and Gould, 2007).

The important point among, it is important to motivate people to participate in physical activity. One of the important issues in sports psychology is the attitude and motivation of sport, which consists of three subscales of competition, the tendency to victory and goal-oriented (Sadat Emami, Heidarinejad and Shafi Nia, 2013). One of the main points in explaining people's behaviors in order to participate in recreational sports is identifying and identifying their motivations and assumptions (Enchel, 1993). Determining why people are not involved in such activities or identifying Participatory deterrent factors contributes to managers and planners in planning the principles for the development of recreational sports. One of the most difficult and at the same time the most basic issue in sports participation in the improvement and development of

motivational tools. Coaches and sports executives do some of the motivational programs with the goal of continuing participation and improving the performance of the sport but the development of an applied model of motivation for sports participation and its continuity needs to recognize the motivations and assumptions of individuals for sports participation. The motivation of people to participate in sports programs is related to important factors such as economic status, socio-economic status, cultural origins and family attitudes, personal needs, education and advertising (Fooladian, Sohrabi, Attarzadeh Hosseini and Farsi, 2009). Of course, the impact of each of these factors varies on how or how to increase participation. In adolescents, internal motivation is very strong for participation in sports. Awruk and Janowski (2016) in the study of the relationship between the types of motivation for physical activity and the selected indicators of mental health of men concluded that there was a significant negative correlation between internal motivation (improvement of individual physical function) and symptoms of depression, also there was a significant positive correlation between the training period, the scores of social function disorder and the subscale of physical symptoms. In addition, there was no significant difference between men with low and high levels of mental health symptoms in exercise incentives. Health and well-being can be an important motive for participation in sports; three aspects of the psychosocial benefit of sports participation motivation have been extensively studied. First, intense and regular exercise is associated with less stress and anxiety. Second, people who participate in fitness programs and sports, show better performance at work and living. Third, regular engagement in physical activity makes people more self-confident because individuals who have physical activity can better control their weight, have a better appearance, and successfully carry out physical activity and exercise (Atlantis and Chin-Mio, 2004). Determining why

individuals do not participate in physical activity or exercise or identifying Participatory deterrent factors, helps managers and planners to plan principles for the development of health in society. Based on the above, as well as previous studies, it seems that most research on mental health and the motivation for participation in sports is explored individually or with different factors or empirically, as well as the importance of increasing the spread of mental disorders at the community level in the field, especially among female students of the corps who are tomorrow's mothers and future prospects of the country, it is essential to conduct research that can coherently examine these two variables and can provide complete, better and more accurate information.

MATERIALS AND METHODS

Research plan and participants

The method of this study was a descriptive-correlational study that was cross-sectional and surveyed to determine the relationship between mental health and the motivation of sports participation among female students. The research conducted with purposeful and fieldwork and information collected through a questionnaire. The statistical population of this research includes all female students with an average age of 23.4 years who studied in all levels of education at Islamic Azad University of Karaj (Iran-City of Karaj) in 2017. A sample of 60 students selected and reviewed. The criteria for entering the study were students, physical and mental health, including exit criteria, reluctance to continue to participate in research, and lack of participation and cooperation in the process of conducting research.

Tool

This research was from personal information sheet, company satisfaction form in research, mental health questionnaire (Goldberg and Hiller, 1979) and Gill, Gross & Huddleston (1983) participatory motivation checklist as a tool. Mental health questionnaire consisted of 28 questions in 4

subscales: physical symptoms, anxiety symptoms and sleep disturbance, social function scale, depression scale, and each scale have 7 questions. The overall score of each person is derived from the sum of the scores of the four subscales. In order to evaluate the participation of sports participants in the study, Gil's sports participation motivation (PMQ) checklist was also used with 30 questions. This tool is based on a five-value Likert scale (very high, high, medium, low, and very low). This tool was used in the present study with a reliability of 0.86.

Method of implementation

The beginning of the research was carried out by collecting the basics and background research. Then a report was received from the university's research deputy and coordinated with the Department of Physical Education of the University, as well as the College of Physical Education and Sports Sciences. In the following, coordination was made with the professors of General Physical Education. Participants were selected from as students who received General Physical Education courses 1 and 2 in the first and second semesters of 2015, 2016 and 2017. Then on a specific date, all the participants attended the test. The purpose of the research and the instructions for conducting research was explained by the researchers to the participants, and they were assured that all information obtained from this research was kept confidential. They were also given the discretion to discontinue their participation at any stage of the research for any reason not willing to continue to cooperate. The researchers provided the best environmental conditions possible for the research process to the extent possible. After performing the test process, the information was extracted for analysis. For data analysis and statistical analysis, raw data was obtained from descriptive and inferential statistics. Descriptive statistics were used to calculate abundances, determine central indicators, disperse, draw tables and graphs. In inferential statistics, Pearson correlation coefficient was used to

examine the relationship between athletic participation motivation and mental health of students at 95% confidence level. All calculations were analyzed by SPSS software version 22.

RESULTS

The mean and standard deviation of the age of the participants in this study were

23.4 and 2. 2 respectively. The lowest, highest scores were reported as 27 and 19, respectively. shows the mean and standard deviation of sports motivation motive scores, mental health and subscales of depression, social dysfunction, anxiety, and physical symptoms among the participants in the study in (Table 1).

Table 1. Description of the motivating variables of sports participation, mental health and their subscales including depression, social function disorder, anxiety, physical symptoms

Variable	Average	The standard deviation
mental health	17.33	9.9
The motivation to participate in sports	121.3	16.6
Depression	2.55	2.7
Disruption of social function	6.13	2.6
Anxiety	4.86	3.4
Physical symptoms	3.77	2.9

Regarding the data normalization of the participants in this study, based on the central limit theory, we can say that the appropriate number of sample sizes and the assumption of the normal distribution of data are observed. However, using bootstrap confidence intervals, the statistical test is protected against a presumption of the

normal distribution. shows the results of the test of the correlation coefficient of the results of sports participation motivation, mental health and subscales of depression, social dysfunction, anxiety, and physical symptoms among the participants in the research in (Table 2).

Table 2. Results of the correlation coefficient of sports participation motive, mental health, and subscales of them including depression, social function disorder, anxiety, physical symptoms

Variable	The motivation to participate in sports			
	N	R	Sig.	Bca 95% CI
Mental health	59	-0.20	0.05	[-0.42 , -0.002]*
Depression	59	-0.11	0.388	[-0.34 , 0.09]*
Disruption of social function	59	-0.30	0.021	[-0.51 , -0.08]*
Anxiety	59	-0.10	0.425	[-0.37 , 0.15]*
Physical symptoms	59	-0.16	0.199	[-0.39 , 0.05]*

The results showed:

*There was a significant relationship between mental health and the motivation of sports participation among the participants ($P = 0.05$); that is, with the reduction of psychological problems, the motivation for sports participation among participants was significantly increased.

* There is a significant negative correlation between the impaired social motivation of sport among the participants ($P = 0.021$); in other words, by reducing the disruption of social function, the incentive for the participation of sports among participants in the research significantly increases.

* Between depression with the motivation of sports participation ($P = 0.388$); anxiety and motivation of sports participation ($P = 0.425$); physical symptoms and motivation of sports participation ($P = 0.199$), there was no significant relationship between the participants in the research.

shows the results of multivariate regression analysis of sports motivation scores, mental health and subscales of depression, social disturbance, anxiety, and physical symptoms in order to predict the motivation of sports participation among the participants in the study in (Table 3).

Table 3 shows the results of regression analysis

Source	SS	df	MS	F	Sig.
Regression	1656.09	4	414.01	1.55	0.198
Remaining	14339.9	57	265.5		
Total	15996.03	58			

*The results of multivariate regression analysis showed that mental health subscales are not a significant predictor of sports participation motivation among research participants ($198/0 = P$).

* Also, the results showed that all values of VIF are below 10, and all of the tolerance statistics are higher than 0.2; therefore, we can safely say that there is no linear relationship between predicate variables.

DISCUSSION

The purpose of this study was to investigate the relationship between mental health and the motivation of sports participation among female students of the Islamic Azad University of Karaj. The results showed that there is a significant relationship between mental health and sports participation motivation ($P = 0.05$), and there is a significant relationship between social disruption and exercise participation motivation ($P = 0.021$) in female students of Islamic Azad University of Karaj. In fact, by decreasing psychological problems and subscale of Disruption of social function, the motivation to participate in the sport among female students of the Islamic Azad University of

Karaj increases significantly. Since many studies, both inside and outside the country, have not been developed directly on the mental health and motivation variable, therefore, similar results or studies are considered in this regard. The results in this regard were consistent with the findings of Akbarpour Zanglani, Khodayari Shooti, Malekzadeh (2016) on the relationship between mental health and the motivation of student progress; Salman (2014), relationship between sport and mental health of employed women; Raisei, Shokhohandeh (2014), in the study of the relationship between mental health of nurses and their motivation in performing nursing duties; Elahi, Ashtiani and Bigdeli (2012), relationship between physical fitness and mental health; Eid, Schwalter and Galaddaber (2010), the relationship between the physical and mental health of children in education; Hamer, Stamatakis and Steptoe (2009), the relationship between physical activity and health, and was inconsistent with Awruk & Janowski (2016) research on the relationship between types of motivation for physical activity and selected male mental health indicators.

The result can be justified by the psychological model of Sandstorm (1978). This model assumes that participation in physical activity positively affects one's self-belief and ultimately increases self-esteem. Obviously, increasing self-esteem creates positive changes in individual interpersonal and social relationships, and such changes are in the interest of individual mental health (Quoted from Amir Nejad, Razavi, and Manani, 1392). Since the participants in this study were selected from general education classes, the effect of the physical activity of these classes according to the "Sandstorm" model is likely to improve their mental health and their relationship.

Within the framework of the theory of sports participation (Crawford, Jackson & Godbey, 1993) or the pyramidal model, barriers to participation in sports activities are identified as three factors: interpersonal barriers, and structural barriers. Intrinsic barriers point to Traits and psychological deterrent characteristics that derive from individual negative experiences. Interpersonal barriers point to a lack of positive interaction between people and the inability to find support and belonging to the group and the structural barriers to the lack of material facilities for exercising. Having mental health and its high level from the first factor, that is, intrapersonal cases could have significantly contributed to this factor among the participants in the study. It can also be said that the motivation and human motivation path of the human being affect his mental health and affect his performance. This logical pathway is itself a platform for defining effective and efficient policies and approaches in dealing with students, their needs, and their conditions (Mirkamali, Khabare, Mazari, Farhadi Amjad, 2015). Concerning the discrepancy with the results of Awruk & Janowski (2016), one can mention the gender differences (the current study of female students and the above-mentioned research, men) and the wide-ranging age range of participants in the

Awruk & Janowski studies of men aged 18-60.

The results of the data analysis showed that there was no significant relationship between depression and the motivation for sports participation ($P = 0.388$); the anxiety and motivation of sports participation ($P = 0.425$); physical symptoms with the participation of sport ($P = 0.199$) among the participants in the research. As well as mental health subscales is not a significant predictor of the motivation for sports participation among the participants in the research ($P = 0.198$). The results were consistent with the findings of Awruk & Janowski (2016) in assessing the relationship between the types of motivation for physical activity and selected indicators of mental health of men, Akbarpour Zangalani, Khodayari Shooti, Malekzadeh (2016) on the relationship between mental health and the motivation of students' progress in depression. Also, with the results of the research, Mir Kamali, Khabare, Mazari, Farhadi Amjad (2015), Salman (2014), Rayesi, Rayesi, Sukhohandeh (2014), Mulazadeh, Hameili Mehrabani, Gholami, Mortazavi, Dolatkah, Ghodsi (2014), Elahi, Ashtiani and Bigdli (2012), Eide, Showalter and Goldhaber (2010), Hamer, Stamatakis and Steptoe (2009) are disagreeable.

According to self-determination theory as inclusive theory, the important assumption is that motivation has a multidimensional structure and different types of motivation will have different effects on cognitive, emotional and behavioral outcomes; that is, while contemporary theories mainly focus on motivation as a single concept and focus on the amount of motivation of individuals for a particular activity or behavior, self-determination theory begins by differentiating between types of motivation (Deci and Ryan, 2000). In this theory, there are three types of intrinsic motivation, extrinsic motivation, and motivation, separated from one another, and set along a continuum. On the one hand, there is a continuum of intrinsic motivation, when a

person acts in a sense of freedom, and his attachment and pleasure go up, this indicates a high degree of self-determination (Deci and Ryan, 2000). Intrinsic motivation refers to the motive that moves individuals in a spontaneous and inward manner to perform a specific task, and besides the external rewards, doing the self-assignment is valuable and satisfactory to the individual (Lee, McInerney, Liem and Ortiga, 2010). According to self-determination theory, given the volunteers and spontaneous participants in the Pilates exercise activity, the subjects of the study participated in it, feel free to act, therefore, the intrinsic motivation that has been created in them may have increased the incentive for progress. Therefore, it can be said that according to self-determination theory, which believes motivation is a multi-dimensional structure, possibly the participants' motivations in this research are not significant in relation to the subscales of depression, anxiety, and physical symptoms.

Probable causes of inconsistency The results of this study were compared with the results of the research by Mir Kamali, Khabare, Mazari, Farhadi Amjad (2015), Salman (2014), Rayesi, Raisei, Shokhohandeh (1393), Mulazadeh, Hameili Mehrabani, Gholami, Mortazavi, Dolatkah, Ghodsi (2014), Elahi, Ashtiani and Bigdeli (2012), Eide, Showalter and Goldhaber (2010), Hamer, Stamatakis and Steptoe (2009); it can be noted that, the differences in the type of society and statistical samples, the difference in the measurement tool. Therefore, it can be said that by creating a suitable space, learning and desirable training space, different sports practice space, setting up counseling centers for mental health improvement counseling services and holding workshops will have a positive effect on students' physical and mental health in campus and dormitories. Among the limitations of this research, it can be noted that the unavailability of more participants, the lack of control of the participants' mental states during the test, the lack of control over the issues affecting the

personal life of the participants, and the lack of control of the focus and attention of the participants to the environmental factors. It is suggested that considering the limitations of this research, and also due to the lack of internal and external backgrounds, a research titled this research on other sections of the society with the comparison of students and boys should be considered.

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