

THE COMPARISON OF MENTAL HEALTH BETWEEN MALE ATHLETE AND NON-ATHLETE STUDENTS IN ISLAMIC AZAD UNIVERSITY BRANCHES OF GUILAN PROVINCE

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Abstract

Goals: Mental health is one of the most important aspects of evaluation of the health of different communities and it plays an important role in the assurance of the mobility and efficiency of every society. The purpose of this study was to compare mental health between male athlete and non-athlete students in Islamic Azad University Branches of Gilan Province. **Method:** this study is a descriptive and ex-post facto research. The statistic population was male students of Islamic Azad University Branches of Gilan Province. 480 students were randomly selected. The instrument of this study was General Health Questionnaire (GHQ-28). Data was analyzed by T-test and Chi-Square test. **Results:** anxiety subscale had the lowest score mean (3.51 ± 3.02) in athlete students and social dysfunction had the lowest score mean (3.11 ± 2.79) in non-athlete students. Depression subscale had the highest score mean in athlete (6.79 ± 4.01) and non-athlete students (7.01 ± 3.11). **Conclusion:** we can concluded that physical activities as an easy, inexpensive, and appropriate strategy and approach should be emphasized to increase mental health in students.

Keywords: Mental health, students, athlete and non-athlete, Gilan Province

INTRODUCTION

Health is known as one of the main preconditions for social welfare systems. Health and welfare systems promote their goals from the provision of health care to the creation of a healthy society in the world (1). Today, the World Health Organization (WHO) considers a multi-dimensional concept for the concept of health multi-dimension and knows it as a positive concept based on the interests of individual and social sources and physical abilities. The WHO expresses that health is the welfare state and mental, physical, and social well-being and it is not only the lack of disease or body defects (2). According to the definition of this organization, Health have physical, social, mental, emotional, and spiritual components. All five components have the interaction with each other for a healthy and strong person, so that if we give up one of them, we will be out of balance and our health will suffer in all domains (2). Therefore, dimensions of this definition (mental, physical, and social well-being and not merely the lack of disease) have the interaction with each other and these dimensions cannot be distinguished with a clear boundary. There are indicators for the physical health and social welfare in many countries that those are reviewed and revised every few years, but the complexity and difficulty of definition often leads to neglect and ignore this in mental health (3). The lack of mental health causes that a person suffers pains and physical and emotional symptoms such as isolation, headache, worry, anxiety, difficulty in

falling asleep, and daily dysfunction (4). Studies show that one of every two people will be prone to depression, so studies about improvement of mental health and its related factors are the most important studies in psychology (5). Mental disorders have destructive effects on individuals and society. In fact, a concept of mental health in the minds is a psychiatric concept that it considers a person as a sick or healthy person (6). The mental health is one of the most important fields of sustainable development of health in human communities that is directly related to human health (7). In other words, mental health is one of the most important aspects of the evaluation of health of different communities and it plays an important role in the assurance of mobility and efficiency of any society (8). Many life events and activities will have a profound effect on physical and mental health since the major part of individuals' life passes at work or academic environment and in different conditions from home (9). The other hand also, the university environment that is an environment for social interactions can affect students' physical and mental health (10). Mental health is very importance for students in every community, because they are the future of any society. Mental disorders can lead to academic failure or the dropout. Students due to the specific conditions of students such as far away from family, getting into large and stressful collections, Economic problems and Lack of sufficient income, high volume courses, and intense competitions are prone to lose their mental health. They need an appropriate intervention for coping with such stressful

situations. Regular physical activity at a moderate level course is one of strategies that scholars and researchers recommend to maintain and promote mental health (11, 12). The results of many studies have noted on the effect of factors such as physical fitness and physical activities on mental health (9, 12, 13, 14). However, it seems that further research is need in this field. According to mentioned discussion and with regard to the effect of physical exercise on mental health and the importance of students' mental health, the purpose of this study was to compare mental health between male athlete and non-athlete students in Islamic Azad University Branches of Guilan Province.

Materials and Methods

This study is a descriptive and ex-post facto research.

Participants

The statistical population was male students of Islamic Azad University Branches of Guilan Province in 2016. 480 students were randomly selected. 240 subjects were athlete students and 240 subjects were non-athlete students. 500 questionnaires were distributed among the students to ensure the reversibility of the questionnaires.

Instruments and Tasks

The instrument of this study was a demographic questionnaire and General Health Questionnaire (GHQ-28) and a demographic questionnaire. GHQ-28 had four subscales (physical dysfunction, anxiety, social dysfunction, and depression) that it was scored the basis of 4-point Likert scale from 0 to 3 points. The validity and reliability of this

questionnaire has been approved in more than 70 countries around the world.

Procedure

The athlete individuals are students who participate in sports programs at least three times during and non-athlete individuals are students who do not have any physical activity or their activity is limited to the daily work, education, and life is in this study. The purpose and the process of study were explained to subjects. The participants were assured that their data will be kept confidential and those will not be available to anyone. Then all subjects completed a consent form to participant in this study and they attended with the complete satisfaction in this study. Researchers distributed questionnaires among subjects. The subjects completed questionnaires without name due to the subjects' security sense.

Data Analysis

The collected data were classified by descriptive statistical methods and was analyzed by T-test and Chi-Square test ($\alpha \leq 0.05$). SPSS software (version 21) was used to analyze the collected data.

Results

72% of subjects were single and 28% of them were married from questionnaires that were received from male students in Islamic Azad University Branches of Guilan Province. 64% of subjects were studying in the bachelor's degree and 36% of them were studying in the associate's degree.

Table1. The mean and standard deviation of general health in male athlete and non-athlete students

| Variable | Athlete | Non-athlete | T | Sig |
|----------------------|---------------|---------------|--------|-------|
| | SD ± Mean | SD ± Mean | | |
| General Health | 18.80 ± 11.19 | 23.82 ± 14.21 | -3.887 | 0.002 |
| Physical dysfunction | 6.21 ± 3.29 | 6.89 ± 4.87 | -3.408 | 0.01 |
| Social dysfunction | 5.59 ± 3.82 | 3.11 ± 2.79 | -1.692 | 0.11 |
| Depression | 6.79 ± 4.01 | 7.01 ± 3.11 | -2.249 | 0.03 |
| Anxiety | 3.51±3.02 | 7.11 ± 5.37 | -1.852 | 0.03 |

The results in table (1) showed that there was a significant difference between male athlete and non-athlete students in general health score ($P < 0.05$). The anxiety subscale had the lowest score mean (3.51 ± 3.02) in athlete students and

social dysfunction had the lowest score mean (3.11 ± 2.79) in non-athlete students. Depression subscale had the highest score mean in athlete (6.79 ± 4.01) and non-athlete students (7.01 ± 3.11).

Table 2. The mean and standard deviation of general health in male athlete and non-athlete students on the basis of demographic characteristics

| Male students' Demographic characteristics | Athlete | Non-athlete | T | Sig |
|--|--------------|--------------|-------|------|
| | SD ± Mean | SD ± Mean | | |
| Marital status | | | | |
| Married | 18.21± 9.11 | 19.21± 10.12 | -2.11 | 0.02 |
| Single | 18.23± 11.42 | 21.23±10.11 | -4.12 | 0.92 |
| Education | | | | |
| Bachelor's degree | 18.21±11.21 | 24.99±13.79 | -3.21 | 0.02 |
| Associate's degree | 16.21±9.28 | 26.12±18.99 | -9.72 | 0.34 |

The results in table (2) showed that there was a significant difference between male athlete and non-athlete single students in general health score ($P < 0.05$). In addition to, There was a significant difference between male athlete and non-athlete students in general health score in the bachelor's degree ($P < 0.05$).

DISCUSSION AND CONCLUSION

The results of this study showed that there was a significant difference between male athlete and non-athlete students of Islamic Azad University Branches of Guilan Province in mental health. Therefore, male athlete students had better mental health than non-athlete students. According to the results of this study, the presence in sports environment has a more effective role in the improvement of mental health. The results of this study is consistent with the results of Martinsen (2008); Korrendich (2005); Poormokhtar and Hosseinchari (2008); Schuch, et al., (2011); Ahmadi, et al., (2010); Hemayattalab, et al., (2004); and Isfahani's (2002) study (9, 14, 15, 16, 17, 18, 19). Anxiety subscale had the lowest score mean in this study but it has been observed that depression subscale has had the lowest score mean in similar studies (18, 24, 25). Depression subscale had the highest score mean in athlete and non-athlete students in this study than other studies. This can be due to the lack of recreational and welfare facilities so students had not been joyful leisure time. This can be effective on the increasing of depression. Overall, athlete students had lower depression than non-athlete students in this study that this results is consistent with the results of other studies (26, 27). Effect of Exercise have been confirmed in different studies. The results of study showed that aerobic trainings reduce significantly symptoms of depression (28). Physical dysfunction had a significant difference between two groups and this result was consistent with the results of some studies (26). It was observed no significant difference between two groups in social function. It may be said that there are more powerful factors than sports in some studies such as this study that have been

more effective on social function so there was no significant difference between two groups in social function. Studies show that physical activity and exercise have a considerable effect in the reduction of depression and anxiety. Regular exercise is also associated with the reduction of depression. (20). Sport is closely related to mental health and the prevention of mental anomalies in addition to it is a valuable tool to maintain physical health. Exercise reduces anxiety and depression and it increases individuals' confidence (9). The endorphins secretion increase during exercise so athletes feel pleasure and special relaxation after trainings. Physical activity is effective on cognitive and emotional functions of brain such as learning and memory with effectiveness on the secretion of endorphins, norepinephrine, catecholamine, serotonin, and other neurotransmitters of the brain (19). Studies show that exercise increases blood flow, oxygen, and glucose of brain and this improves the optimal function of brain (21). Scientific evidence shows that exercise can significantly reduce anxiety and somatic symptoms, depression, and general health in male athlete students and improve the quality of life (22). Effectiveness of exercise on general health is so explicable that it causes people feel self-efficacy and self-confidence by the increasing of their physical ability. This improves interpersonal relationships, social functions, and mental health (23). The results of this study showed that there was a significant difference between male athlete and non-athlete single students in general health score. On the other hand, single students' mental health status was better than married students. It may show that single students' have more opportunity and motivation to do regular exercise. Also, it can be explained that the difference of general health score in undergraduate and college students is due to that college students have more leisure time. In general, there was a significant difference between male athlete and non-athlete students in Islamic Azad University Branches of Guilan Province. It showed that male athlete students' mental health status was better than male non-athlete students. Finally, if we want to pay

attention to this problem with an appropriate approach, we will change conditions of training and society environment by the relevant organs (Ministry of Science and Research, Youth and Sports Ministry). This causes to reduce individuals' mental problems and we protect them against the risk of mental disorders. We can

concluded that physical activities as an easy, inexpensive, and appropriate strategy and approach should be emphasized to increase mental health in students.

Conflict of interest

The authors declare no conflict of interest.

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