

## The Effect of Physical Training on Psychological Aspects in Girls and Boys of Islamic Azad University of Ardabil Branch (Iran)

<sup>1</sup>Masoud Imanzadeh, <sup>2</sup>Akbar Asghari and <sup>3</sup>Nader Shayegan Asl

<sup>1</sup>Islamic Azad University, Ardabil Branch, Iran

<sup>2</sup>Islamic Azad University, Khalkhal Branch, Iran

<sup>3</sup>High School Teacher of Education Department District One of Ardabil, Iran

**Abstract:** A person, who has psychological weakness, undoubtedly has unusual appearance and body which effect on person's body movement and reaction greatly. Having a fit, right body creates sense of satisfaction in the person. The importance of this research is both physical and psychological training which complements are. So the purpose of this research this research is the effect of physical training on psychological aspects in girls and boys of Islamic Azad University of Ardebil Branch. Pool of this research was girl and boy university students of Islamic Azad University of Ardebil Branch who registered in physical Education 1 and 2 classes. To choose sample students from among the university students who registered in physical Education I and 2 in summer. First Students filled out SCL90R questionnaire and 70 Students, 35 boys and 35 girls, were chosen randomly. Then the students took part in physical fitness trainings for ten weeks, each three sessions and each session for one hour. In the present research, the depend t- test was used. The data was analyzed by SPSS software and showed a significant difference among boys between physical training and depression, anxiety, aggression and psychosis but there was not significant difference between physical training and individual sensitiveness physical complaints, paranoiydal imageries, patiyonal fray and obsession among boys. There was a significant difference between physical training and depression, anxiety, aggression, psychosis and physical complaints among girls and no significant difference among girls between physical training and individual sensitiveness, paranoiydal imageries and pational fray and obsession.

**Key words:** Physical fitness • Psychological aspects (Depression • Anxiety • Egression • Psychosis)

### INTRODUCTION

One of the important or the most important scientific aspects of Sport is its psychological aspect and applying psychological principles to increase level of education in every place is an important task. Because without having information about individual person and person's moods, we cannot make. Appropriate use of principles of education [1]. Entertainment, physical fitness, being sociable, tranquility. Communication and growth are sound. The attempt is for physical, mental, affective and social education of individuals. Overall, Physical exercises are good and important for mental health and happiness of the person [2]. From the past, the positive relationship between physical exercises and mental state has caught the attention of the scholars.

Greek people and Islamic philosophers believed in phenomental relation between mind and body. But nowadays human physical activities are decreasing and his health is in danger because these days life is machine based [3]. It is emphasized that athletes should be in a good psychological condition next to having regular and serious and advanced exercise and in this case athletes can achieve more. Maybe it can be said that psychological value of each training is not less than its physical value [4]. Psychological problems effect on the person's body, for instance, a person who is depressed, is weak and disable because of having an occupied mind, Feeling underestimate, lack of confidence and these states gradually effect on the social position of the person. One of the main reasons of exercising is that women and men can gain powerful identity and develop.

Having reviewed the women abilities, we can understand that women can make great use of their Owen mental and psychological potential. A person, who has psychological problems, undoubtedly has unusual appearance and body which effect on his body movement and reaction greatly. Having right and fit body gives the sense of satisfaction to the person. The importance of this research is both physical and psychological trining which complements are. It seems that knowing about oneself nature is more important than ones development and communication with others and environment. It seems that there is a relationship between body and mind and the sort of viewpoint of the person toward himself is based on the body states. So feeling sense of accomplishment in life, occupation education and society is as a result of the person's physical abilities and training [5].

**Depression:** Is an unpleasant psychological state which is characterized with disappointment and tiredness that effects on the viewpoint, behavior and quality of individual reaction. Anxiety: is a mental and physical disturbance which causes vague superiority, feeling of insecurity and reverse [6]. Obsession: a psychological phenomenon means hesitation for doing jobs which is consistent feeling in the mind of the person and it is painful. Individual sensitiveness: this kind of feeling assesses the incapability and inferiority of the person. Restlessness, inconvenience in communication with the others are part of individual sensitiveness. Physical complaints: In this disease the patient complaints a lot about his physical body which starts before 30 and its result is a long- term cure. The complaints involve all parts of the body and it cannot be identified clearly. Psychosis: It is a kind of disease in which patient break his relation with outside community and usually the patient has unusual speech and behavior. Paranoyidal imageries: It involves dishonesty and suspicion toward others and people's intentions are interpreted negatively. Patients imagine that others want to annoy and cheet them. Pational fray: It is an identified period of great fear which accompanied with 4 characteristics: heartbeat, shuddering, shortness of breath and asphyxia. It can be concluded that planning physical education is a factor in preventing the psychological problems. The study of previous researches gives a wide view of the topic. Studying the past works can help us to enrich the topic of the research and we can use the previous works in analyzing and discussing of the new researches. Limen based on the relationship between mind and body claimed

that physical training effects on the mental health and he also claimed that physical capabilities reinforce the mental abilities [7]. Undoubtedly, youth and university students are going to make the frame of the future and their health and happiness equal with a promising future. So if they have any psychological problems, they will not be successful in their social role and education. For this reason university students who have psychological problems should be identified and treated [8]. Findings of research by Alison *et al.* [9] about the effect of physical training on depressed patients in a 24-week plan showed that there is a significant difference between the experimental and placebo groups in their depression scores. In another research by Wyshak the result indicates that there is a positive relationship between depression or psychological problems and physical training of university girl students [10]. Norris *et al.* [11] did a research on anxious, depressed and aggressive people and the finding showed that doing weakly respiratory exercises, each week two times and each time 20-30 minutes for ten weeks caused improvement in the physical state of the body and decrease in depression and anxiety. In another research the anxiety of runners and grups sports has been investigated with the use of STAI Eshpilbergh and the result showed decrease [12]. Women sport research organization [13] and the research of Groning Saetter [14] showed that the athletes got involved in psychological problems less than the ordinary people. Rolgin [15] under the investigation of physical exercises and mental health introduced the advantages and disadvantages and procedures. He claimed that physical exercises effect positively on the person's mental health but exercises can effect negatively when the person stick to the physical exercises for a long time which cause changes in the mood of the person. Research by Weye and Kupter [16] showed there is a positive correlation between the physical exercises and mental health; physical exercises follow the decrease in depression, anxiety and illness in people of the society. Slusher *et al.* [17] has investigated differences among the athletes of wrestling, swimming, basketball and football and claimed that swimmers had the least proportion of nervousness, football players and wrestlers had the same proportion of nervousness and basketball players has a little depression. Kraut and Elliot claimed that the most intensive depression is experienced by those who lost one of his family members before the age of 17. Esterman and Highinz showed that those who have low self-confidence are depressed too.

**MATERIALS AND METHODS**

This research is a kind of mid experimental and uses descriptive and inferential statistics. Two groups of boy and girl took part in this research. First to one of boy and girl group spread questionnaires to fill out and for posttest, each group exercised for ten weeks and each week one hour and after exercises questionnaires speeded among members of groups and then the results compared with each other.

**Measurement Tool:** SCL90R questionnaire (psychological aspects). This test has 90 items to assess the psychological sign which gives the answer of the report. At first, it was organized to show the psychological aspects of mental and physical patients. The first form initially introduced by ghotis, lipman and kuri in 1972 and its last version organized based on clinical experiences and psychological analysis. Draghotis and kilzorak) 1976) the answers of the questionnaires ordered in five scales from any to all. The ninety items of this test involved nine different physical complaints, obsession, individual sensitiveness, depression, anxiety, aggression, pational fray, paranoiydal imageries and psychosis. The needed time to fill out the form can be from 12 to 15 minutes and for those who are serious in choosing the answers can be 30 or more minutes.

**Pool and Sampling:** Pool of this research is boy and girl university students of Islamic Azad University of Ardebil or other branches under the control of Ardebil. They registered in physical education 1 and 2 classes.

To sample the university students who registered in physical education 1 and 2 classes of summer semester, questionnaires speeded among them and after their completion those students who had psychological problems chose randomly. They were 70 students.

**Data Collection and Statistical Procedures:** To collect data, first, the students answered the questionnaires voluntarily and then 70 students chose randomly and exercised for ten weeks, each week 3 times and each time for one hour. Their exercises were physical fitness one. Finally, the posttest questionnaires spreader among 35 girls and 35 boys and the results pre\_ test and posttest were specified and then statistical analysis were done.

The research used descriptive statistics for (age, height and weight) and inferential to examine research hypothesis. To find the degree of relationship between psychological aspects and physical fitness dependent t-test was used. Independent t-test was used to compare the means of psychological aspects and physical fitness; the researcher did not control these variables and just measured them. The data analyzed to find result and all the statistics were done by SPSS computer software.

**RESULTS**

Table 1 shows that there is a significant difference between physical training and depression, anxiety, aggression and psychosis but there is no significant difference between physical training and individual sensitiveness, physical complaints, paranoiydal imageries and pational fray and obsession.

Table 1: The relationship between physical trainings and psychological aspects of university boys

Statistic indexes Groups	Member	Mean	Standard deviation	Calculative T	df	P Value
Pretest of depressed boys	35	42.91	3.17	4.79	34	0.00011
Pretest of depressed boys	35	39.80	4.01			
Pretest of anxious boys	35	48.50	7.17	5.60	34	0.00041
Pretest of anxious boys	35	42.40	7.76			
Pretest of aggressive boys	35	23.57	4.38	5.91	34	0.0014
Pretest of aggressive boys	35	24.70	5.72			
Pretest of sensitive boys	35	52.40	6.3	11.70	34	0.241
Pretest of sensitive boys	35	50.18	7.91			
Pretest of boys physical complaint	35	57.11	8.40	10.42	34	0.027
Pretest of boys physical complaint	35	43.12	3.13			
Pretest of psychosis boys	35	48.17	6.14	5.60	34	0.001
Pretest of psychosis boys	35	39.10	5.42			
	35	53.12	4.39	9.41	34	0.147
	35	50.14	4.12			
	35	49.19	5.81	8.45	34	0.172
	35	42.90	5.01			
Pretest of obsessive boys	35	44.09	7.14	7.44	34	0.314
Pretest of obsessive boys	35	40.16	6.18	4.79	34	0.00011

Table 2: The relationship between physical training and psychological aspects of university girls

Statistic indexes Groups	Member	Mean	Standard deviation	Calculative T	df	P Value
Pretest of depressed girls	35	33.81	4.07	3.98	34	0.0021
Pretest of depressed girls	35	44.70	4.18			
Pretest of anxious girls	35	41.44	6.10	4.58	34	0.0012
Pretest of anxious girls	35	42.40	5.11			
Pretest of aggressive girls	35	34.57	4.30	4.01	34	0.0074
Pretest of aggressive girls	35	39.70	4.72			
Pretest of sensitive girls	35	33.40	5.39	10.12	34	0.149
Pretest of sensitive girls	35	39.18	6.97			
Pretest of girls physical complaint	35	49.10	7.40	6.42	34	0.007
Pretest of girls physical complaint	35	41.17	4.13			
Pretest of psychosis girls	35	44.11	5.79	5.60	34	0.0064
Pretest of psychosis girls	35	36.17	5.11			
	35	50.11	4.01	10.01	34	0.197
	35	43.14	3.98			
	35	47.91	5.88	8.78	34	0/184
	35	40.90	5.01			
Pretest of obsessive girls	35	53.01	6.17	7.68	34	0.214
Pretest of obsessive girls	35	41.12	17.5	68.7	34	0.214

Table 2 shows that there is a significant difference between physical training and depression, anxiety, aggression, psychosis and physical complaints and no relationship with individual sensitiveness pational fray, paranoidal imageries and obsession.

### DISCUSSION

There is a significant difference between physical training and psychological aspects of university boys and girls. The research of Alison *et al.* [12] 8 showed that physical activities change the mood of the person which confirms the findings of the present studies that there is relation between physical training and psychological aspects such as depression, anxiety, aggression, psychosis had no relationship with paranoyidal imageries and pational fray.

And individual sensitiveness may be the physical training does not effect on the real reasons of such psychologists problems, so it is better to ask help from psychologists or prepare the mind of patient to remove such psychological problems. This research is in concordance with the researches of Norris *et al.* [11] and Slusher *et al.* [17] about depression and anxiety and with that of Roglin [15] which claims that more physical training changes the mood of the person. It can be claimed that some aspects of life such as lifestyle can be effective on increasing the psychological problems of university students. Some psychological pressures are being present at university classes, participation in exam sessions, doing the homework and project, feeling homesick being responsible for family and vague future.

Psychologists believe that physical training fulfill our need of interaction, in fact surviving the culture of the society depends on mental and physical health of people. So can we come to conclusion that doing group's sports can cause sociability, mutual agreement, social collaboration and respect to other and decrease the psychological pressures because of social and psychological nature of group's sports, Developments and changes caused the greater presence of women in society that before and produced more occupational positions for women. On one hand, the differences between two genders of male and female and on the other hand hardworking cause the psychological pressures. As far as this research did not show a significant difference between physical training and some psychological aspect, it is hoped that these problems can be removed by psychotherapy. The therapy which is suggested in sport psychology is psychotherapy but lack of finding in this field and variety of sports and lack of valid assessment tools were the limitations of this research. So expanding the result of the present research should be done carefully. Doing physical exercises especially in group are suggested by this research because they decrease the psychological problems by instructing the needed skills.

### REFERENCES

1. Frasat, D. Sport Psychologist, 1987. Translated by Alikhani, E, & Nourbakhsh, M. Physical Education Organization and Research Center.
2. Physical Education Training Magazine, 2002. Third Year. Instructional Aid Publication, Winter.

3. Khalagi, H., 2000. The study of the effect aerobic physical fitness and skill training on boy stress of public university of Arak. International monograph and the third national conference of physical education and physical sciences. Olympic Committee of Iran Islamic Republic Publication.
4. Gaini, A., 1988. The relationship between movement readiness and mental readiness one instructors and couches. M.A. Thesis. Tehran University.
5. Shekhzadeh, B. and R. Sanatgaran, 2000. The comparison of active and inactive adults' anatomy and their relation with body structure. Research Center of Physical Education and Physical Sciences Tehran.
6. Dadsetan, M. and P. Dadsetan, 1991. Psychology Dictionary. Zarf, Tehran.
7. Mohamadzadeh, Y., 1992. The study of rate of depression in two groups of athletic and common handicapped persons and devotees. M.A. Thesis. Tehran University.
8. Nourbakhsh, M., 2004. The study of the physical activities on the Chamran girl university students depression. Scientific Journal, research center of physical education and physical sciences. Tehran University.
9. Alison, A., K. Kelli and T. William, 1997. Exarches Against Depression the Physical and Medical End (10).
10. Wyshak, G., 2001. Women's college physical activity and slep-ports of psychiatric distress, J. womaen's Health Gen. Based Med., 10(4): 363-370.
11. Norris, R., C. Douglas and R. Cohran, 1992. The Effect of Physical Activity and Exercise Training on Physical of Psychosomatic Res., 36(10): 650-655.
12. Ravivo, R., 2004. International J. Sport Psychology.
13. Women Sport Research Organization, 1992. The study of the degree of effect of depression on athletic and common women.
14. Groning Saetter, H., 1992. Physical exercise, job stress and health, thesis (PhD), Norwegian University of Sport and Physical Education.
15. Roglin, J.S., 2005. Exercise and Mental Health Bane Determine Effects, Sport Medicine June.
16. Weye Re, S. and B. Kupter, 2004. Physical Health Sport-medicine. FEB.
17. Slusher Goldhng, J. and K. Porter, 1989. Mood profile of mastek track and field athletic MAT, Skelks.