

STUDY OF THE EFFECTIVENESS OF EXERCISE ON THE SELF-ESTEEM, HAPPINESS AND QUALITY OF LIFE OF YOUNG

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ABSTRACT

The aim of this study was the Evaluation of the effectiveness of exercise on the self-esteem, happiness and quality of life of young. Thus, among referring to bodybuilding club of Darab city in the summer 2013, 60 beginner people were selected by convenience sampling and also among ordinary society 60 people were matched to experimental group for age, gender and education. After selecting the sample groups, exercise for bodybuilding instructors for 3 months (each week three seasons, one-hour) on an experimental group (beginner athletes) was performed. Participants completed the self-esteem (1967), Oxford happiness (1989) and World Health Organization Quality of Life (1999) questionnaires in pre-test and post-test stages. Data were analyzed by descriptive statistics index, MANOVA test, and by using the statistical software SPSS-16. The MANOVA showed effectiveness of exercise and significant increase scores for self-esteem, happiness and quality of life and their components in beginner athletes on post- test stages .Overlay it suggests due to lack of side effect and physical and psychological benefits of exercise as a factor to be used to increase physical and mental health of the population.

KEY WORDS: exercise, self-esteem, happiness, quality of life

INTRODUCTION

Studies in different areas of medical science and psychology indicate that there is a relationship between health and the lifestyle of people (Phipps, 2001). In 2001 American Heart Association considered lifestyle as one of the important factors in susceptibility to disease and mortality in the US, and around 70 percent of all physical and psychological illnesses are related to lifestyle (American Heart Association, 2001). Controlling risk factors in lifestyle and bad health habits like malnutrition, lack of physical exercise, smoking, drinking alcohol and using drugs, reduces almost 50 percent of premature deaths (Long, 2000).

Among effective factors in healthy mind and lifestyle, the role of exercise is very important and is approved in several studies (Kheirjoo, 2012), so much as in 2002 the motto of World Health Organization was “Mobility the Key to Health”. The application of psychology in sport is clearly emphasized (TheIWell and Greenles, 2003). Also, psychological elements involved in the process of exercise, have been long noticed by athletes, coaches, and psychologists of sport (Gucciardi *et al.*, 2008). The effectiveness of exercise on psychological and mental health is tested in different studies (Landers, 2005).

The findings of the researchers in sport shows that intense and moderate exercises have many physical and mental advantages (Galvao, 2005); practice is considered as fundamental part of healthy lifestyle and clearly exercise is associated with mental health and as a behavioral pattern could prevent or control different diseases (Parker, Hetrick, 2011).

Studies also show that exercise increases mental health and strengthen the feeling of worthiness, reduces anxiety and depression (Giacobbi *et al.*, 2005) and enhances mental strength (Lowy and Lowy, 2005). In different important variables considered as mental health indices and will be discussed in this research are self-esteem, subjective well-being and quality of life.

Self-esteem is one of the psychological contracts that have attracted the attention of a host of psychologists and researchers. Generally an individual’s evaluation of him/herself shapes his/her self-esteem (Yasaii, 1981). So far, studies on self-esteem and practice are conducted that reported a significant difference in the self-esteem of athletes and nonathletic and revealed the effectiveness of a regular schedule in increasing self-esteem. On the whole, studies in this

area insist that exercises quickly discover the success and defeat (of the individual). In other words, successful performance in sports provides the athlete with immediate feedbacks that creates a feeling of qualification and self-esteem (Maleki, 2011).

Another variable in this study is subjective well-being. In case individuals are happy with their lives and experience more positive feeling and less negative impressions, that they enjoy a high state of well-being (Addington and Showman, 2004). Evaluating the studies about well-being also shows that one of the most important factors that cause well-being is sportive and physical activity (Mc Annville, 2003); studies have shown that those who exercise regularly enjoy a higher well-being (Mc Annville, 2003). Badel and Mutri (1991) stated that exercise enhances self-esteem and increases well-being. Regular practice in students also results in more happiness with life (Roland et al. 2003).

Today people's quality of life is used as a framework for providing proper services with different aspects of life and allocating resources. The importance of evaluating the quality of life is so much that some people consider its improvement as the most important goal of the therapeutic intervention (Casing, 2002). Reviewing results of the studies on the effects of physical activities and exercise on different aspects of quality of life (health, job satisfaction, and creativity, social and family relations) shows the indubitable role and effects of these relationships between healthiness and mental well-being and social development. Physical exercises reduce depression and anxiety and increase good mood and social interaction (Taghavi, 2006), they also reduce the risk of heart attack (Seddigh, 2005) and blood pressure and enhance the self-image and have dozens of other positive effects (Ramezani Nejad, 2008).

Despite the rich literature that indicates the researcher's attention to the role of exercises as a proper, cheap medical method without side effects, it hasn't found its place in our country. Moreover, most of the studies on exercise and three other variables of the quality of life, well-being and self-esteem have been descriptive and interrelated or consequentially causal researches. Therefore, not only the causal relationship of exercise on these indices is not clarified, but also the amount of the effects of intervention exercises is very limited. Furthermore, considering the increasing importance of prevention and psychology of health in the recent years, in-depth study about exercise could be a guideline for the prevention from disorders and also increasing individual's mental health. Thus the goal of present study is to evaluate the effectiveness of intervention of physical activity on the quality of life, well-being and young people's self-esteem and to determine eta correlation with practical significance of this intervention.

Methodology: this study is semi-experimental that was conducted using Pretest-posttest randomized group design. The society was all of the amateur young athletes in the city of Darab in summer 2013. Sampling was done with the availability of the amateur athletes who frequented the city gymnasium. The sample volume was 60 persons for each group and 60 people were the control group of the same sex, age and education. After sampling, in a justification session all the participants did the exercises of the pretest questionnaires in group. After choosing the sample groups, physical exercise intervention (bodybuilding training) was conducted on the test group (amateur athletes) for 3 months. After finishing the sessions the participants were requested to attend in a session to fill in the posttest questionnaires. The data was analyzed using MANOVA analysis, descriptive statistic indices, and graph analysis using SPSS 16.

Information Gathering Tools

World Health Organization's Quality of Life Questionnaire

World Health Organization's Quality of Life Questionnaire has been designed by WHO in order to evaluate the quality of life. The short form of this questionnaire has 26 questions. In order to evaluate the quality of life 7 items, for mental health 6 items, for social relations 3 items and for environmental health 8 items have been designed, the first two questions evaluate the general zone for the quality of life (Nejat, 2008) in Iran the short form is normalized and its authenticity and stability is approved (Nasiri, 2006).

Oxford's Happiness Questionnaire

Oxford's Happiness Questionnaire was prepared in 1989 by Argil Volo and contains 29 items. In different assessments, retest stability is reported 0.81 after 4 months, 0.67 after 5 months and 0.53 after 6 months (Argil, Martin and Cruiseland, 1989). In order to evaluate the primary stability and validity of Oxford's happiness questionnaire, 101

Allameh Tabatabai and Shahed students 39 males and 62 females with the average age of 22.5 in the range of 19-39 were studied. In this research by Alipoor and Noorbala (2008), the homogeneity of the contents of the questionnaire showed that all 29 items have a high integrity with the total points.

Self-esteem Questionnaire of Cooper Smith

This questionnaire is used in order to evaluate the general self-esteem by Cooper Smith (1967) which includes 58 questions. Cooper Smith *et al.* (1967) calculated the retest correlation of 0.88 after 5 weeks and 0.70 after three years for the self-esteem scale. The Analysis showed that the individuals evaluate different factors of self-esteem (quoted from Ansari, 1995). Falsafinejad (2009), has reported the validity of this questionnaire using test-retest method as 0.83. Also in another research the calculated internal homogeneity using Kronbach alpha was 0.81 (quoted from Biabangard, 1993).

RESULTS AND DISCUSSION

Participants

In the descriptive section, the average central tendency statistics and the standard deviation related to separating the groups will be shown:

Table1. Mean and standard deviation for quality of life, well-being and self-esteem with their elements in order of groups in pretest

Related variables	Control group		Test group	
	Mean	Standard deviation	mean	Standard deviation
Quality of life	59.53	3.87	59.01	4.95
Physical health	18.32	2.05	18.05	2.32
Mental health	14.56	2.96	14.33	3.14
Social relations	6.11	1.11	6.86	1.06
Environmental health	20.08	2.52	20.96	2.43
total self-esteem	26.05	2.24	25.98	2.06
General	12.28	1.77	12.36	1.69
Social	4.51	0.779	4.4	0.88
Familial	4.63	0.58	4.66	0.74
Educational	4.37	0.75	4.55	0.61
Well-being	46.95	2.83	46.85	3.08
Self-image	13.98	1.58	13.91	1.6
Life satisfaction	6.51	1.32	6.45	1.5
Mental readiness	6.18	1.25	6.41	1.36
Being on mood	3.11	0.61	3.16	0.66
Feeling beautiful...	7.38	1.35	7.43	1.35
Self-efficiency	6.41	0.99	6.40	1.21
hopeness	3.01	0.67	3.06	0.68

Results of the descriptive table show that there is no considerable difference between the means of both groups and in most of the cases the difference is slight. Therefore descriptively the pretest of both groups has no significant difference.

Table2. The mean and standard deviation for the quality of life, well-being and self-esteem with their elements in order of groups in posttest

Related variables	Control group	Test group
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	Mean	Standard deviation	mean	Standard deviation
Quality of life	58.20	4.52	68.06	5.86
Physical health	17.35	2.12	20.66	3.18
Mental health	14.70	3.1	16.65	2.86
Social relations	6.16	1.71	8.61	1.96
Environmental health	19.98	1.84	22.13	2.56
total self-esteem	25.61	2.49	363.71	3.86
General	11.91	1.84	14.71	2.24
Social	4.36	0.88	7.63	1.97
Familial	4.81	1.43	7.71	2.32
Educational	4.51	0.65	6.73	2.16
Well-being	44.88	3.47	63.75	5.59
Self-image	13.36	2.02	18.46	2.38
Life satisfaction	6.25	1.39	8.86	2.03
Mental readiness	6.08	1.21	8.48	1.68
Being on mood	2.96	0.68	5.23	0.87
Feeling beautiful...	6.76	1.78	9.53	2.04
Self-efficiency	5.9	1.08	7.91	1.59
hopeness	3.55	1.21	5.25	0.79

The descriptive table revealed that the means of both groups in all of the dependent variables have shown a difference in posttest. In order to clarify the differences of the groups regarding the significance or insignificance, inductive analysis is used. In the inductive section, in order to analyze the hypotheses, multivariable variance analysis test with default tests was used. The reason for preferring MANOVA over MANCOVA was the lack of any significant difference in the pretest grades of the groups. Therefore, where there is no considerable difference in the pretest grades of the groups, there is no need to control it in covariance because it increases the error. Also, in order to prevent multiple linear errors when using MANOVA, two different analyses were done.

1. Physical training intervention has an effect on young people's well-being and quality of life.

After evaluating the necessary presuppositions, it was concluded that MANOVA should be used for inductive analysis. The following shows the conclusion of MANOVA test in order to evaluate the effectiveness of physical training intervention on young people's self-esteem, well-being and quality of life.

Table3. Results of MANOVA

	test	Value	F	df hypothesis	df error	p	Eta
group	Pillai's Trace	0.863	243.73	3	116	0.001	0.86
	Wilks' Lambda	0.137	243.73	3	116	0.001	0.86
	Hotelling's Trace	6.30	243.73	3	116	0.001	0.86
	Roy's Largest Root	6.30	243.73	3	116	0.001	0.86

These results show that in the studied groups at least there a significant difference with one of the dependent variables (Wilkes lambda $\lambda=0.137$, $F=243.73$, $p<0.001$).

Square of eta shows that on the whole the difference between the groups regarding the dependent variables is significant and this difference based on lambda Wilkes test is 0.86, it means that 86 percent of the variance of the difference between the groups is resulted from the effect of the intervention.

In order to evaluate the difference between the groups in each one of the variables, the output of the one-variable variance analysis is shown:

Table4. The output of the one-variable variance analysis

	Dependent variable	SS	DF	MS	F	P	Eta
group	Quality of life	2920.53	1	2920.53	106.38	0.001	0.47
	Self-esteem	2920.53	1	2920.53	492.32	0.001	0.8
	Well-being	2920.53	1	2920.53	349.94	0.001	0.74

AS it is shown in the table 4 one-variable variance analysis, there is significant difference between two groups in all three elements ($P < 0.01$). In other words, self-esteem, well-being and quality of life show a significant increase in pretest and after physical training intervention. The amount of eta also shows that maximum standardized difference is related to the self-esteem of the groups (0.80). Therefore, the main hypothesis of the research is verified.

DISCUSSION AND CONCLUSION

This study was conducted to evaluate effectiveness of physical training intervention on young people's self-esteem, well-being and quality of life. Results of multi-variable variance analysis indicated the effectiveness of physical training intervention and an increase in well-being, self-esteem and quality of life and their elements in the amateur athletes in posttest. Later on the hypotheses of the study are discussed. According to the findings of the research, the hypothesis that "physical training intervention has an effect on young people's self-esteem, well-being and quality of life", was verified. Results show that physical training intervention significantly had increased self-esteem, well-being and quality of life in the test group, while no significant change in pretest and posttest was observed. In other words, athletes who participate in physical training and exercise with comparison to the control group had higher self-esteem, well-being and quality of life. This finding along with the results of other researches (Elasky 2006; Igor *et al.* 2007; Tetly *et al.* 2008; Martinson, 2008; Amini 2011; Jokar 2011; Mozanetti 2013), indicate the effectiveness of physical training intervention in increasing self-esteem, well-being and quality of life.

Generally speaking, the effects of exercise and physical activities on these elements are undeniable. Physical activities in different ways could increase the positive factors. One of the existing models in this area is the psychological model of San Strum (1978). This model assumes that participation in physical activities increase the physical strength which positively affects the self-confidence and finally enhances the self-esteem of the individual. Different findings (Boyd and Haricot 1997; Koyata 2002), also show that physical activities increase the self-esteem. It goes without saying that increase in the self-esteem makes positive changes in a person's individual relation and social network and these changes are good for the individual's mental health and quality of life.

Another model is the distraction hypothesis. In this model it is assumed that physical activities act as a distracting or relieving factor from worrying feelings and stimuli, and this could psychologically improve the individual (Bark and Morgan, 1978). The fact is that continuation of many psychological disorders such as anxiety and behavioral disorders (like depression), failure in social actions etc. is due to the concentration on negative thoughts and attitudes. Therefore, one of the psychological interventions is to prevent the individual from concentrating on negative thoughts and worrying aspects of life and physical training carry this out very well, using distraction feature and saves the person from falling prey to vicious circle. The third model is the effect of physical training on mental health and quality of life is the biological model. In this model it is said that the reason for the effect of exercise on mental health is, biochemical and biological changes (Ahmadi *et al.* 2006). Many researches have shown that exercise and physical training has positive effects on physical and mental health. Ben McConville (2013) considers nine important factors in mental health and quality of life one of which is exercise and physical activities. In a meta-analysis by Plant and Robin (2006) to evaluate the effect of exercise on mental health, they concluded that exercise increases the well mood, mental health, self-confidence and self-esteem of the participants. The restrictions of the research were: 1- society was limited to the amateur athletes of Darab, that doesn't allow extending the results to other amateur and professional athletes. 2- Mere using of questionnaire to gather the information. 3- Lack of female samples to compare with male athletes prevents the understanding of the role of gender.

Also for further researches, given that this study was specific to Darab, therefore, it is recommended that other

researches will be done in different cities so that it will be possible to extend the findings to other cities. Moreover, it is suggested that the comparison between male and female samples in these variables become possible in order to determine the effectiveness of gender factor. For applicable recommendations given the physical advantages and lack of side effects of exercise, it is suggested to use it as a factor for increasing self-esteem and physical and mental health of young people and adolescents. Specific attention of the specialists to other mental aspects of professional and amateur athletes and learning on this issue can be of great help to improve their quality of life. It is recommended to teachers, principals and parents who are in direct contact with adolescents and youth, to always consider physical activities proper to their age and capability as one of their school schedules.

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REFERENCE

- Ahmadi E., Sheikh Alizadeh S. and Shir Mohammad Zadeh M. (2006).** 'Experimental Evaluation of the Effect of Exercise on Student's Mental Health'. *Harkat* 28: 19-29.
- American Heart Association (AHA) (2001).** Heart and Stroke Facts. New York: American Heart Publication
- Amirtash A., Sobhani Nejad M., Abedi A (2006).** 'Comparison of Social Development of Male Athlete and Non-Athlete Students of Middle School. *Olympic* 2: 53-61.
- Argil M. (2004).** Psychology of Happiness. Trans. Masoud Gohari Anaraki et al. 2nd ed. Jihad Daneshgahi. Isfahan.
- Bahrke M.S., Morgan W.P. (1978).** Anxiety reduction following exercise and mediation cognitive therapy and research. 2: 323-333.
- Ben Macconville (2003).** "Revealed: nine ways to find your inner happiness", www.the-costman.co.uk/index/126272003.
- Boyd K.R. Hrycaiko D.W. (1997).** The effect of physical activity intervention package on the self-esteem of pre-adolescent and adolescent females. *Adolescence*; 32(127): 693-708.
- Edington N. Shuman R. (2004).** Subjective well-being. Presented by continuity. *Psychology Education*, 61, 282-312.
- Galvao D.A. Newton R.U. (2005).** Review of exercise intervention studies in cancer patients. *J. Clinoncol.* 23(4): 899-909.
- Giacobbi PR., Hausenblas Jr. and Frye N.E. (2005).** A naturalistic assessment of the relationship between personality, daily life events, leisure-time exercise, and mood. *Psychology of Sports and Exercise*, 6, 67-81.
- Gucciardi D., Gordon S. and Dimmock J. (2008).** Towards an Understanding of Mental Toughness in American Football. *J. Applied Sport Psychol.* (3): 261-281.
- Kastching Heiz F, Hung A. and Satorius N. (1998).** Quality of life in mental disorder. John wiley, 70-80.
- Long F., Vernz K (2000). [Surgical nursing, stress and stress management]. Translate by Dalavar H. Moghadam L. Tehran. Chehr Publication (Persian).
- Maleki B., Mohammad Zadeh H., Seyed Ameri M. and Zamani Sani J. (2011).** 'Evaluation of the relationship between Self-esteem and Encouragement for Success in Successful and Unsuccessful Athletes of the Province of Western Azerbaijan: A Study in Rehabilitation Sciences', Year 7, No. 1.
- Nasiri H.A. and Jokar B. (1998).** Primary Evaluation of Stability and Validity of Oxford Happiness Questionnaire in the Students of Tehran University", *Andisheh Behaviour* J.5(1 and 2).
- Noorbakhsh P., Zarghami M. and Hasani S. (2005).** Comparison Sportive Tendencies of Male and Female Students of Individual and Group Fields Participating in the 7th Athletic Olympiad and its Relation to Competitional Motives. *Harkat (journal)*. 3: 103-121.
- Parker A.G., Hetrick S.E., Jorm A.F., Yung A.R., McGorry P.D., Mackinnon A., Moller B. and Purcell R. (2011).** The effectiveness of simple psychological and exercise interventions for high prevalence mental health problems in young people: a factorial randomised controlled trial. *parkeretd. Trials.* 12:76.
- Paul Henry M. Gerome K (1981).** trans. Mahshid Yasai . Markaz Publication. 672 pgs.
- Phipps C (2001).** Fundamental of nursing. Philadelphia: Lippincott; 2001. P.50-52.
- Plante T. and Robin Judith G (2006).** " phtsical fitness and enhanced psychological health", *Curr. Psychol. Res. Rev.* 21: pp:36-39.

Pronk Np., Course SF., Rohack JJ (2005). "Maximal and acute mood response in women", *J. Physiol. Behavior.* 27: pp: 56-62.

Richardson C.R., Foulkner G., Mcdevitt J., skrinar G.S., Hutchinson D.S. and Piette J.D. (2005). Integrating physical activity into mental health services for persons with serious mental illness. *American Psychiatric Asso. Psychiatry Serv.* 56 (3): 324 – 31.

Sonstroem J.C. (1978). Physical estimation and attraction scales: rational and research. *Medicine Sci. Sports.* 10: 97-102, Medline.

Stanley . (2000). Introduction to exercise science. Published by Lippincott Williams & Wilkins. Page 327.

Stewart K.J., Turner K.L., Bacher A.C., Regis J.R., Sung J. and Tayback M. (2003). activity, and fatness associated with health-related quality of life and mood in older persons. *J. Cardiopulmonary Rehabil.* 23(2): 115-121.

Taghavi O (2006). "Evaluating Socio-economic Status and Motivations for Participating in Public Sports", MA Thesis, University of Guilan.

Thelwell R.C. and Greenlees I.A. (2003). Developing competitive endurance performance using mental skills training. *The Sport Psychol.* 17:318-337.