

Original Research

The effect of body building on stress and mental health of sportsmen in Rasht city

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ABSTRACT:

Mental health is one of the important parameters in the daily life of human beings. There are many factors that affect mental health, but in this research two factors of body building and stress are counted as factors affecting mental health of sportsmen in Rasht city. Therefore current research is applied and regarding classification of research based on the way of data collection it is descriptive and correlation based research. Statistical society of research is sportsmen in the field of body building. Sampling method is available improbable and sharing method. Number of studying sample in this research is 334 people. Tool of data collection is questionnaire. All data analysis has been done through SPSS and PLS software. For considering hypothesis of research confirming factor analysis and structural equation modeling with partial least square method has been used. Result of research hypothesis denotes positive and meaningful effect of body building on mental health. On the other hand in second hypothesis negative and meaningful effect of stress and depression on mental health has been approved.

Keywords:

Mental health, body building, stress and depression, Rasht city, partial least square

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INTRODUCTION

As human society have faced innumerable infective diseases in the past nowadays for changes in healthcare condition most places in the world have faced less dangers of such kinds. The thing that is significant nowadays is occurrence of mental disorders in different kinds with different severity. Different psychological hypothesis have suggested various solution for curing psychological problems that some believe the importance of the role of playing sport for human health (Moghaddam *et al.*, 2011). Sport and physical activities are as a low-cost and available tool that recently its role at preventing mental disorders, curing these disorders and also enhancing mental and physical health has been emphasized a lot. Sport has been known as a positive factor at increasing sense of feeling well, self-esteem, self-profitability and self-esteem high social compatibility and better cognitive function (Tofighi *et al.*, 2014). In different societies sport is used as a tool for preventing disease, improving health and sense of feeling well. Sport due to positive mental and physical effects has valuable role at reliability and management of curing mental diseases. Many studies have shown positive effect of aerobic regular sports at decreasing symptoms related to mental disorders such as stress, anxiety and depression and increasing self-esteem and improving behavior situation very well. Researches have shown that sport causes increasing mental health, strengthening sense of valuable, decreasing stress and depression and increasing mental power. However some people by knowing positive features of sport and existence of repeated advices in this fields don't value sport much (Moghaddam *et al.*, 2011). Different research denotes that regular physical activity has positive effect on mental health regarding social function, stress and depression, in recent researches it has been known that by increasing age and decreasing tendency to doing sport, stress and depression related to disability occurs. Participation in regular sport activity causes decreasing depression at the moderate level. In different research the

relationship between exercise and factors related to mental health like respecting himself, self-efficiency and sense of feeling well has been observed (Salman, 2014). As we regard implementation of different levels of sport in sport competition we see that many sportsmen although having high level of physical preparation, mental preparation, capabilities and implementing skills, due to stress of competitive mood they are not able to manifest all their potential powers and so having decrease in the degree of meagerness and encourages duality and their fear. Consequence of these events decreases output and quality of level of performance of sportsmen. On the other hand extensive research of sport psychologist in the world denotes importance of mental skills because all have the same idea that if an sportsman has optimized implementation of techniques and tactics this situation doesn't include mind and optimization of mental features doesn't have final limit and existence of favorable level of mental skill compensates low level of performance and leads to success for sportsmen in sport competition and in the area of life (Badi *et al.*, 2010). Regarding that body and mind have reciprocal effect and health of these two categories includes integrity and health of mind of people, considering this subject and identification of permanent effect of them on each other is necessary. Therefore curing and mental control in different classes of the society has significant importance and physical activities and sport in the key of this cue and control (Tofighi *et al.*, 2014). The subject of controlling body is the point that has been paid attention by sociologist in recent years. Dominance on body and controlling it has much dependency with dominance on mind of people as basically dominance on body without dominance on mind is a non-achieving action. It seems that in gyms regarding the importance of the point, all dimension of life of body-builder is controlled by his mind so that he can achieve self-ideality. Result showed that body-building farthest its primary goals that is giving health and increasing personal ability increasingly and has been

changed into a destructive tool for the health of body and problems. In addition to body, it has useful effect on mind soul by the effect of cultural industry and process of being and emotional mood. Nowadays any plan that reduces good (Mohsenzadeh *et al.*, 2015). Regarding that now in stress certainly includes many sport movement like Iran less research has been done about mental health of running and static movements (Dehkordi, 2007). sportsmen especially in the field of body-building and Identification and finding root of stressing factors is the more attraction in this field is necessary to consider first way for reducing effect and its consequences and can psychological features of people and athletes. Therefore be used in managerial plans for effective control and the main question of research problem identified here is confrontation of stress as director and efficient tool the body-building and its effect on stress and mental (Reyhani *et al.*, 2010). Regarding presented theoretical health of the sportsmen in the city of Rasht. framework research conceptual model has been presented in pattern (1-1):

Research theoretical framework

Nowadays, by the development and skillfulness

of sports and gyms, teams face complicated problems that **MATERIALS AND METHODS**

they haven't been paid attention is stress or mental pressure that its effect on different dimensions. Therefore surveying-correlation type. Data collection, was carried successful management of sport team is a known out in the field of theoretical principle and subject complicated skill (Reyhani *et al.*, 2010). Attention to sport literature library studies and papers and for data collection activities causes emptying excitement; it means some and for information analysis, questionnaire has been used. negative emotions, confliction and internal conflicts of a Statistical society of the research is sportmen in the field person becomes empty and sense of self-reliance, of body-building in the city Rasht. Sampling method is respecting himself, sense of happiness and physical health sharing and available improbable sampling (Mohsenzadeh manifestation in a person. This means that sport and *et al.*, 2015). For implementing this method, the physical activity strengthens body systems like heart and researcher referred to 10 reliable gyms of body-building breath and improves physical preparation in a person, in Rasht and gave questionnaires to the respondents. because body and soul of human acts like a united part, so Number of final samples in this research is 334 people. we can expect improving one will have positive effect on Researcher has distributed 360 questionnaires during 10 the other. Sport has useful effect on the behavior of a days among the customers. Among the distributed person. Some research observation showed that muscles questionnaires 341 questionnaires were collected. After activities caused production of material in mind that considering questionnaire it was distinguished that some causes happiness in a person. Body and soul of human act questionnaires were deficient and finally 334 ones were like a united part as improving and health of one has chosen for the final analysis. Information related to positive effect on the other. Nowadays sport for curing questions of the questionnaire regarding number of mental and psychological disorders has been paid questions and resources were mentioned in the table (1).

attention by sport and psychology. Mental pressure that **Validity and reliability of the questionnaire**

strengthens by machinery life and stress of daily life

In order to be able to assure about result of becomes more, forced specialties and experts to use sport measurement and simply claim that data resulted from as a vaccination for curing physical and mental diseases, measurement are certain, measurement should have two because sport is one simple, non-dangerous, low-cost and features i.e., validity and reliability. In this research by natural way for confronting physical and mental using Cronbach alpha reasonable compatibility, it has

Table 1. Information of research questionnaire

SL. NO	Resource	Row of questions	Number of questions	Research variable
1	Osvim and swimberg (2014) Das standard questionnaire	1-4	4	Stress and depression
2	(Lovibond and Lovibond, 1995)	5-11	7	Mental health
3	Done (Tofighi et al., 2014)	12-16	5	Body-building

been assessed between questions of the questionnaire normality of data distribution used Kolmogorov-smirnov (Bonett, 2002). For considering content validity, test (Marsaglia et al., 2003). Kolmogorov-smirnov test is questionnaire of research were given to experts and a simple non-parametric method for determining authorities and in some sessions their considering reforms convergence of experimental information with selective were acted on structure and content of questionnaire. statistical distribution (Table 3). Regarding that After designing and writing questionnaire and approving significance of all variables of research is less than 0.5% it by professors and specialties, researcher decided to so distribution of all variables of research doesn't fallow determine degree of reliability of the questionnaire. normal distribution so PLS software (Ringle et al., 2015) Therefore firstly a primary sample including 30 was used for statistical analysis.

questionnaires was pre-tested and then by using obtained **Considering reliability of research model**

data of these questionnaires and through statistical software of SPSS degree of reliance coefficient was obtained through Cronbach alpha method (Levesque, famous to composite reliability is the counted ratio of 2007). Amount of Cronbach alpha for all indexes of Cronbach alpha of more modern criteria for determining research was over 0.7. Exact amount of these coefficient reliability. This credit is obtained through Dillon-Goldschtain coefficient and amount more than 0.7 is acceptable for this document. Also the third document of is given in the Table (2):

RESULTS AND DISCUSSION

Data analysis

Before data analysis, researcher for considering construction with its index. In fact this criteria shows

Table 2. Reliability coefficient of variables of questionnaire

SL. NO	Variables of research model	Amount of cronbach alpha coefficient
1	Stress and depression	0.891
2	Mental health	0.749
3	Body-building	0.816

Table 3. Kolmogorov-smirnov test for testing normality of data

SL. NO	Variables of model	Number of sample	Z statistic	Sig
1	Stress and depression	377	1.751	0.004
2	Mental health	377	1.873	0.002
3	Body-building	377	2.206	0.000

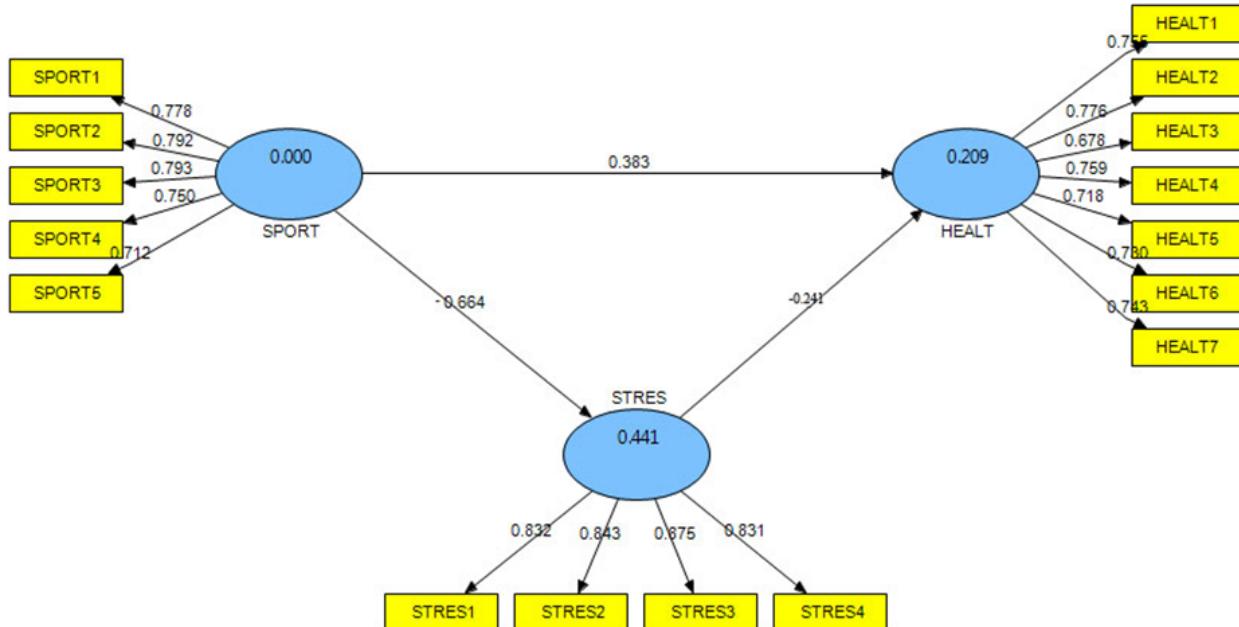
Table 4. Considering credit of research construction

Sl. No	Cronbach alpha	Determination coefficient	Extracted average mean	Combined credit	Varied criteria
1	Cronbachs Alpha	R Square	AVE	CR	Abbreviation sign
2	0.866	0.44	0.714	0.909	Stress and depression
3	0.861	0.209	0.544	0.892	Mental health
4	0.824		0.586	0.876	Body-buildng

degree of correlation of a construction with its index that beta or direction coefficient. Factor load of the model in as this correlation is more, model fit is better. Amount standard mode show effect of each variable or items in over 0.5 for this document shows proper reliability of explaining variance of scores of main variable of factor construction. In table (4) criteria related to the In standard solution mode there is the possibility of construction of research is presented:

Standard solution mode

This estimation is called model in standard showed that model of measuring variables are proper and solution mode. Standard solution mode is a convergent all numbers and parameters are meaningful. Result of coefficient that is their scale became alike and there shows measurement denotes relation of positive and meaningful the possibility of comparing them. In a mode that this correlation between variables in the model. Regarding Fig amount between hidden and obvious variables related to (1) we can observe confirming factors of each questions them is considered as equal, the same correlation of research. Amount of determination coefficient is a coefficient or factor loads (in doing confirming factor number between zero and 1 that as it near 1 amount of analysis) and if it is considered between two hidden variance becomes more. variables it is direction coefficient or regression standard

**Figure 1. Research model in standard solution mode**

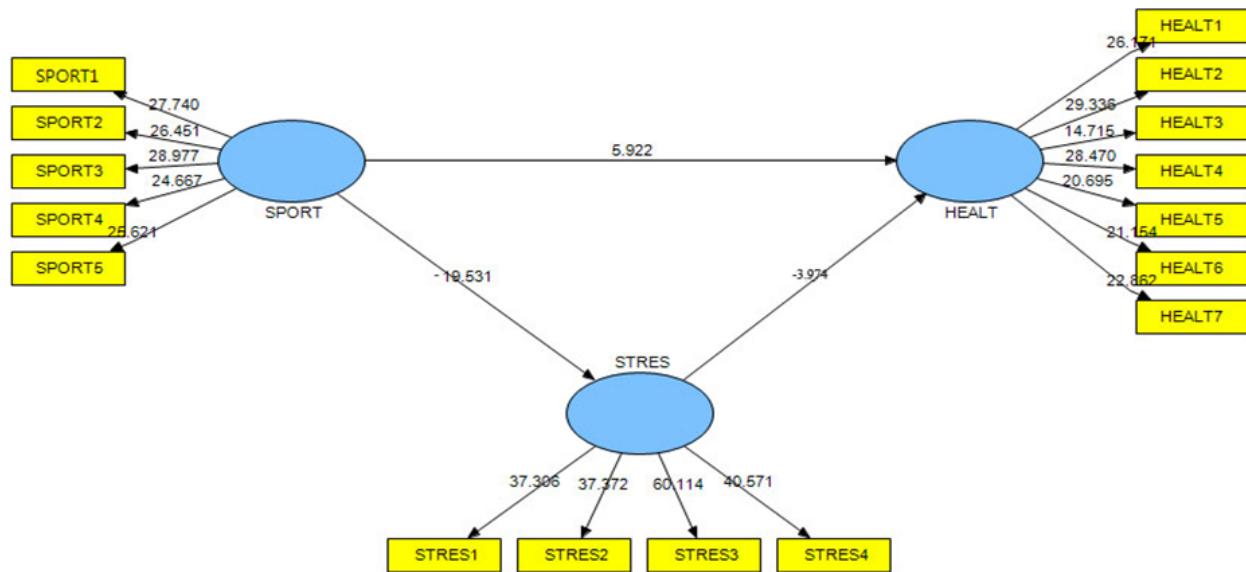
**Figure 2. Research model in t-value mode****T-value mode**

Fig (2) shows meaningfulness of coefficient and parameters obtained from the model that all coefficient became meaningful. Basis of confirming or rejecting hypothesis of research is considering model in meaningful coefficient mode. Regarding mentioned cases all **CONCLUSION** hypothesis of researchers are approved.

In table (5) result of considering first hypothesis of research has been mentioned briefly that for analyzing Sport role a positive factor at increasing sense of feeling them meaningful number and standard coefficent has been used.

In final discussion research hypothesis denotes positive and meaningful effect of body building on mental health. In addition meaningful effect of stress and depression on mental health has been approved, so that people who were under stress had lower health indicators.

This finding was same with research of Moghaddam *et al.* (2011) who stated role of playing sport for human health. Also the relation of exercise and mental health was quite evident as the research which done by Salman (2014).

The body-building and its effect on stress and mental health of the sportsmen was quite approved and well, self-esteem, self-profitability and self-esteem and better cognitive function.

SUGGESTIONS

- Regarding the much importance of stress at depression on mental health it is suggested that much

Table 5. Consideration of the result of research hypothesis

SL. NO	Research hypothesis	Results	Standard coefficient	Significance level
1	Body-building has positive effect on mental health of sportsmen in Rasht city	Approve	0.383	5.922
2	Body-building has negative effect on stress and depression of sportsmen in Rasht city	Approve	-0.644	-19.531
3	Stress and depreesion has negative effect on mental health of sportsmen in Rasht city.	Approve	-0.241	-3.974

attention should be paid to stressing factors and necessary support should be done.

- It is suggested that authorities should provide proper field towards decreasing mental health. It is suggested that related organization should pay attention to sport plans as useful and easy strategy for decreasing negative result of presenting in stressing condition of the job.

LIMITATIONS

- At the end it is necessary to mention that any research work must have limitation. In this research there are some limitations that researcher had mentioned some of them and presented some suggestions in the direction of each limitation:
- In this research, only sportmen of body-building have been studied and in case of studying sportmen of other field the result of research should face changes so it is suggested that future studies must be carried out among the sportsmen of other fields.
- In this research, studying samples were considered without considering sport record and research model may be different in people that devote more years to sport, so it is suggested in the future research that enter variable of record of body-building as moderating variable.

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