

Relationship between Happiness Dimensions and Indexes of Quality of Doing Physical Activity among Boy Students in High School

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Abstract

Introduction: Happiness was being called to function of a person in high level of emotion and behavioral adaptation, and not merely have no illness, and it has been reported as a personal trait that may cause positive copying and decrease of daily stress in persons.

Material and Methods: In this study, 490 high school boy students; (mean = 15.67, SD = ±0.99 years) in Shandiz city were randomly selected. After the complement of questionnaires including; individual characteristics, quality of regular doing physical activity and Happiness; Chi-Square test was used to determine relationship between quality of regular doing physical activity, and Oxford Happiness subscales consist of life-satisfaction, joy, self-esteem, calm, control and efficiency. Data were analyzed in significance level of $P \leq 0.05$.

Results: Results showed that 67.36% of students regularly were doing physical activity. A significant difference was observed between regular physical activity and happiness, generally, and self-esteem, calm and control subscales separately. Also significant difference was existed between number of physical activity a week with happiness, generally, and control subscale, separately.

Discussion and Conclusion: Results showed that students who were regularly performed physical activity had more happiness. Thus, sport may be as an affected factor in increase of happiness among boy students in high school.

Key Words: Happiness dimensions, Regular doing physical activity, Boy students

Introduction

Gradually, it is being understood that adolescence should not typically entail stress and mental and psychological disorders. In order to attain self-actualization, adolescents tend to seek the empathy and approval of others. Adolescent happiness is the result of gaining personal experiences from the outside world, interaction with others, cultural background, gender and personality [1]. In this regard, an inquiry into the world of adolescents may open a window to the chief attributes of this period of life and help improve the feeling of happiness in adolescents. Veenhoven defines happiness as a set of emotions and cognitive assessment of life, which may be considered as an indicator of positive thinking. Happiness is indeed a hierarchical, multifaceted concept [2] which consists of cognitive, affective, emotional and social components [3]. Happiness applies to the adolescent performance at a high rate of emotional and behavioral adaptations but not

necessarily lack of mental condition. It is considered as a personality trait which may help improve positive modeling and reduce daily stress in adolescents [4]. In addition, it is positively correlated with mental health, extroversion and sense of responsibility and negatively correlated with mental disorders [5,6].

Adolescents with higher levels of happiness display better psychological indicators, higher levels of mental health and appropriate behavior. They may experience lower levels of such misbehaviors as smoking, the use of narcotics and alcohol and illicit drugs. Therefore, enjoying a high level of happiness may prevent risky behavior in adolescents [4]. In this regard, physical activity and sports significantly engender happiness and mental health in the adolescents [7]. Sports in general and the quality of sports in particular would improve the quality of life in all age groups [8]. Since happiness is applied to the individual's judgment of the favorable quality of the whole life [9], the relationship between sports and happiness can be investigated from various aspects. According to

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Leonhardt's (2002), sport may be regarded as a strong instrument in improving happiness and mental health and reducing mental pressures [10]. Moreover, as a positive addiction, physical activity can result in a state of ecstasy akin to drug ecstasy. Besides, membership in sports clubs increases happiness and improves one's body image. Argyle and colleagues (1998) reported that exercise training results in higher levels of happiness comparing with watching television, going to church and listening to music [11]. Considering the favorable effect of sports on happiness and the findings of longitudinal studies which have shown the relationship between training in adolescence and youth and high levels of physical activity in later stages of life [12], it may be that physical activity in this stage of life not only correlates with happiness but also influences living an active life and gaining happiness in future. Since adolescent and youth happiness indicates the happy profile of a dynamic, prospective society, it seems necessary to investigate the relationship between the dimensions of happiness and the quality of exercise training and physical activity. Considering the fact that most studies on happiness have focused on adult participants but not adolescents and youths, the present study aimed to investigate the relationship between the dimensions of happiness and the quality of exercise in male high school students in the city of Shandiz.

Material and Methods

Participants

The population of the study consisted of 490 male high school students ranging in age from 14 to 17 years (Mean age=15.67±0.99) in the city of Shandiz. The participants were randomly selected and questionnaires were directly distributed among them. A number of 196 questionnaires were completed and returned. Based on Morgan table and considering the population size, the number of participants was considered to be sufficient.

Instrument

A demographic data sheet and a researcher-made questionnaire were used to collect the data on the participants' personal characteristics and the quality of regular exercise, respectively. The latter instrument consisted of four items which examined

the regular or irregular exercise, history of regular sports activity, the number of sessions of regular sports activity in a week, and the intensity of regular sports activity. The content validity of the questionnaire was approved by three professors of physical education and sport sciences. Oxford happiness questionnaire (1989) was used to examine the participants' happiness. This questionnaire has been validated in Iran formerly, which has yielded a reliability coefficient of 0.93. It comprises 29 items on a 4-point Likert scale and consists of 6 subscales including satisfaction with life, pleasure, self-esteem, peace, control and self-efficacy. The reliability of the questionnaire was calculated to be 0.857 using Cronbach alpha formula.

Data analysis

Using both descriptive and inferential statistics, non-parametric Kruskal-Wallis test (Pearson Chi square) was run to examine the correlation between the quality of regular exercise and happiness in general and its subscales of satisfaction with life, pleasure, self-esteem, peace, control and self-efficacy separately ($P \leq 0.05$). SPSS software was used to do the statistical analysis.

Results

The results showed that 67.36% of male high school students in Shandiz city did regular sports activity (see Figure 1).'

The results showed that 67.36% of male high school students in Shandiz city did regular sports activity (see Table 1). There was a significant difference between regular sports activity and happiness in general as well as the subscales of self-esteem, peace and control separately ($P \leq 0.05$). There was also a significant difference between the number of sessions of sports activity per week and happiness holistically as well as the subscale of control separately ($P \leq 0.05$). Too, there was a significant difference between the intensity of sports activity and happiness holistically as well as the subscales of satisfaction with life, pleasure, self-esteem and peace separately ($P \leq 0.05$). However, no significant difference was found between the history of sports activity and happiness holistically as well as all its subscales separately ($P \leq 0.05$).

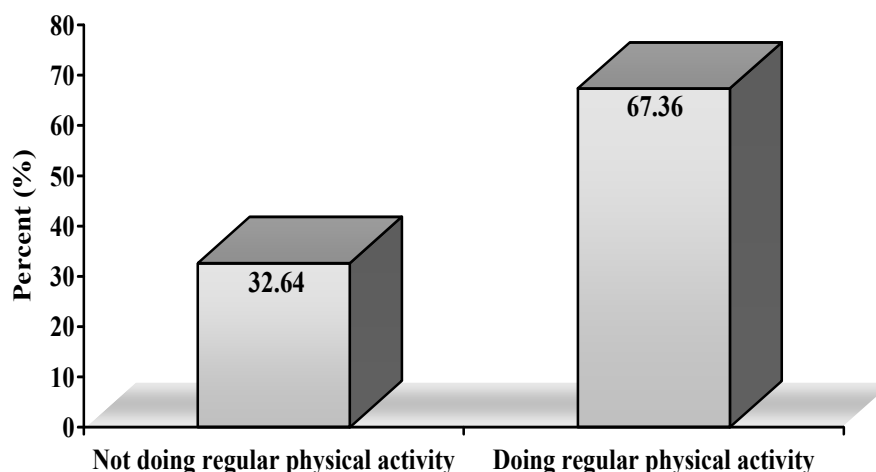


Figure 1: The percent of doing regular physical activity among high school students

Table1: Relationship between happiness dimensions and quality of doing physical activity of high school boy students (N=196)

Quality of Doing physical activity	Regular doing physical activity	History of doing regular physical activity	Number of doing regular physical activity sessions in one week	Intensity of doing regular physical activity
Happiness subscales:				
Life-satisfaction	$K^2= 2.672$	$K^2= 5.221$	$K^2= 6.952$	$K^2= 10.008^*$
Joy	$K^2= 1.803$	$K^2= 4.108$	$K^2= 3.983$	$K^2= 9.758^*$
Self-esteem	$K^2= 13.028^*$	$K^2= 3.138$	$K^2= 1.807$	$K^2= 8.724^*$
Calm	$K^2= 7.927^*$	$K^2= 2.845$	$K^2= 5.365$	$K^2= 10.128^*$
Control	$K^2= 4.455^*$	$K^2= 2.869$	$K^2= 9.159^*$	$K^2= 4.095$
Self-effectiveness	$K^2= 0.249$	$K^2= 2.352$	$K^2= 4.115$	$K^2= 0.743$
Total score	$K^2= 6.120^*$	$K^2= 5.094$	$K^2= 7.897^*$	$K^2= 13.107^*$

* Correlation is significant at the 0.05 level.

Discussion and Conclusion

The results of the present study showed that students who did regular exercise enjoyed higher levels of happiness, which is consistent with the findings of Mc Conville [7].

The positive effects of sports and physical activity on happiness is well understood so that sport may increase energy and reduce tensions, anger and depression [12]. Research has shown that a state of happiness increases blood flow in the body and reduces anguish and anxiety. Happiness is regarded as a shield against stress [13]. Thirlaway and Benton (1997) found that physical activity may result in cardiovascular fitness, which is directly related to mental health and good temperament.

Sports and physical activity significantly foster happiness in the individual [14]. A study showed that regular sports participation in adolescence, particularly in boys, positively correlates with physical activity in adulthood [15].

The results revealed no significant relationship between regular exercise, history of regular exercise and the number of exercise sessions per week with the subscale of satisfaction with life. Inconsistent with the present finding, Roland and colleagues reported a significant correlation between exercise and life satisfaction in students [16]. The inconsistency may relate to the particular characteristic of the present study which investigated the correlation between regular exercise, rather than merely exercise, and

satisfaction with life. The present findings showed a significant correlation between the intensity of regular exercise and satisfaction with life, which is inconsistent with the findings of Roland and colleagues.

Again, the effect of regular exercise may account for the inconsistency. Besides, it is expected that individuals who participate in sports activities, even those who do exhausting exercise activity, benefit from the positive mental states resulted from sports participation [10]. The present findings also demonstrated no significant correlation between regular exercise, history of regular exercise and the number of regular exercise sessions per week with the subscale of pleasure; however, a significant relationship was found between the intensity of regular sports activity and pleasure.

Argyle and colleagues reported that individuals experience high levels of pleasure following sports activity [17]. Roland and colleagues reported that students who did low-intensity exercise experience higher levels of pleasure comparing with those who did high-intensity exercise [18], which is inconsistent with the present findings. Considerably, the subscales of satisfaction with life and pleasure were found to bear quite similar relationship with the questions on regular exercise, which is consistent with the findings of Hills and colleagues who reported that satisfaction is one of the sources of pleasure created by sports activity [10]. They showed satisfaction is one of the joy resources that can be attained resulting from sport and physical activity [10]. However, no significant correlation was found between regular exercise and the respective subscales.

It is notable to mention that social-environmental factors such as peers influence may affect the pleasure gained through sports activity [18]. Though the present study did not investigate these factors. The present study examined the effects of regular rather than irregular exercise. Besides, pleasure accounts for high levels of emotions whereas happiness is associated with lower levels of emotions (satisfaction and wellbeing) [17].

Self-esteem is the general attitude the individual holds towards themselves including the feelings of general happiness and satisfaction [19]. It plays a crucial role in academic and life success. It is so crucial in the creation of happiness that some contend that it is the inseparable or most influential component of happiness [13] or even the source of

mental growth [20]. The results showed a significant correlation between regular exercise and the intensity of exercise with the subscale of self-esteem. Boyd and Hrycaiko (1997) reported that sports may reinforce self-esteem and enhance happiness, which is consistent with the present findings [21]. It is typically believed that athletes hold higher levels of self-esteem comparing with non-athletes [21]. Alfermann and Stoll (2000) contend that once a society has its citizens do exercise, it will help foster self-esteem and physical and mental health in them [22]. However, Aine and Lester (1995) in a study on 90 athlete students found that they did not have high levels of happiness and self-esteem [23]. Segar and colleagues contend that differences in beliefs and values may render the relationship between sports and self-esteem insignificant [24], which is inconsistent with the present findings. Sport may result in a sense of competence, which subsequently enhances self-esteem [25].

A study showed that individuals who perform heavy physical exercise may experience high levels of self-esteem [10] which is consistent with the present findings. Another study has shown that low-intensity exercise enhances self-esteem in adolescents, which is inconsistent with the present findings.

The present findings showed no significant correlation between the history of regular exercise and number of regular exercise sessions per week with self-esteem. Ekeland and colleagues (2003) in a review study showed that exercise training exerts positive short-term effects on self-esteem in children and adolescents [26]. Thus, it may be concluded that exercise training, though for a short period, may exert quick-impact and favorable effects on self-esteem. The results showed no significant correlation between regular exercise and intensity of exercise with the subscale of peace. There was also no significant relationship between the history of regular exercise and number of regular exercise session per week. A study showed that low-intensity exercise increases peace in adolescents [16], which is inconsistent with the present findings.

The present findings showed a significant correlation between regular exercise and number of regular exercise sessions per week with the subscale of control. Sports activity may be used as an instrument to help adolescents learn how to

control their emotions. Mc Ewan (1991) contends that sports participation is a complete educative program which may help foster self-control in the individual [27]. A research has shown that, in addition to improving health and physical fitness, sports also improve self-control in the individual [12], which is consistent with the present findings. The results showed no significant correlation between the statements of regular exercise questionnaire and the subscale of self-efficacy. Research has shown that young athletes have significantly higher levels of self-efficacy comparing with non-athletes [12]. A positive correlation has also been found between sports activity (either serious or leisurely) and self-efficacy [12], which is inconsistent with the present findings. The lack of correlation between sports activity and self-efficacy in the present study may relate to the fact that only one questionnaire item was allotted to examine self-efficacy in the participants.

The results also showed that there is a significant relationship between exercise, number of regular exercise sessions per week and the intensity of regular exercise with the total score of happiness whereas no significant correlation was found between history of regular exercise and the total score of happiness. Ryff and Singer (2002) contend that happiness is represented in long-term states rather than momentary joy, and sources of momentary joy may not bring about long-term happiness [28]. The present findings showed that adolescents who attended more sessions of regular exercise per week (i.e. those who did regular and continuous exercise) enjoyed higher levels of happiness, which is consistent with the findings of Ryff and Singer [28]. Sports activity facilitates blood flow, respiratory and muscular function resulting in a sense of higher physical activity in the individual [5]. Research has shown that aerobic exercise [14] as well as anaerobic exercise [14] may significantly improve happiness and well-being in the individual. Sports can be regarded as an emotional experience for many athletes. A marked victory may result in pleasure and happiness whereas a failure may lead to disappointment [29]. Age, sex, geographical conditions and education are other factors that may affect happiness and satisfaction with life [5], which may be regarded as factors to distinguish the level of happiness in adolescents. In regard to these

factors, the participants of the present study were homogeneous so that these intervening factors were partially controlled.

Adolescent participation in endurance exercise and skilled sports, particularly twice or more per week, may relate to high levels of physical activity in adulthood [15]. Thus, it may be concluded that regular adolescent exercise cannot only exert temporary effect on happiness but also result in long-term, sustainable effects.

The prevalence of obesity in adolescents is highly correlated with inactivity [15]. Besides, research has shown that obesity is associated with low levels of happiness [15]. Thus, regular exercise prevents not only obesity but also reduction of happiness. Adolescents with high self-esteem and extroversion enjoy higher levels of satisfaction with life and happiness [5]. Previous studies have frequently stressed the relationship between exercise and extroversion [5]. Therefore, extroversion may be one of the processes which result in increases in happiness in the athletes. Ahamed and colleagues(2007) reported that students who did more physical activity per week obtained the same scores as students who did less exercise [30]. Accordingly, sports activity may not prevent student academic success. With regard to the present findings and the positive correlation between sports activity and the subscales of happiness, it may be concluded that sports can increase happiness in adolescents.

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