

Study of Relationships Among Lifestyle, Health Locus of Control, and Happiness in Students

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A B S T R A C T

This study aimed to determine the relationship between lifestyle and health locus of control with happiness in college students. This study was descriptive within the framework of a correlation prediction plan. The sample consisted of 331 undergraduate students studying at Talesh PNU (246 females and 85 males) in the academic year 2014/15, who were randomly selected and completed lifestyle questionnaire, health locus of control scale and Oxford Happiness Questionnaire. The data was analyzed using descriptive indicators of mean and standard deviation and Pearson correlation coefficient along with stepwise regression methods. The results showed a positive and significant relationship between lifestyle and dimensions of happiness. Moreover, the results indicated that the relationship between internal locus of control and happiness was positive; however, a negative relationship was observed between external locus of control and happiness. Relationships between other loci of control and happiness were not significant. Further, regression analysis showed that 43 percent of happiness was subject to lifestyle and internal locus of control. Based on the findings, we can conclude that lifestyle and health locus of control affect students' level of happiness.

Key words: Happiness, Lifestyle, Health Locus of Control

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Introduction

Students comprise a significant portion of people in each society. Academic issues are sometimes acute and affect various aspects of their lives. Happiness is one of the basic concepts and components of life of people, especially students¹. Happiness is defined as positive emotions, life satisfaction and the absence of negative emotions such as depression and anxiety. Happiness is a set of emotions and a cognitive assessment of life. In general, happiness is a degree of quality of life which means to be positive. Happy people know themselves as possessing positive characteristics that control events in their lives². Happiness is among the most important and effective factors of human life; it can be claimed that all the efforts are done in order to achieve happiness. Happiness makes people value positive events more than negative events. This blessing creates peace and security and contributes to making better decisions in life. Happiness components are among cognitive-motivational structures in positive psychology³. Some studies have reported that people with high happiness have more mental energy and are more likely to do selfless acts. Happiness as a positive effect can facilitate interpersonal relationships, promote self-sacrifice, altruism, and dialogue skills, and have highly positive outcomes on cognition, social activity level, and health. Happiness also leads to a kind of thinking that enables people to creatively and innovatively solve problems¹. Happiness in students is affected by many variables, one of which is lifestyle.

Nowadays, health experts believe lifestyle to be one of the effective factors affecting health. The World Health Organization believes lifestyle to be a distinctive and definable behavioral pattern obtained from the interaction between personal characteristics, social relations, and environmental and socio-economic status⁴. Individuals, by choosing a lifestyle, do a set

of measures and activities, such as going on a diet, sleeping, doing exercise, controlling body weight, avoiding smoking and alcohol, and being immunized against diseases, to improve their health and prevent diseases that affect lifestyle⁵. Healthy lifestyle is considered as a valuable resource to reduce the occurrence and severity of diseases and their complications and a method to promote health and quality of life compatible with stress⁶.

The World Health Organization believes that, by changing and modifying lifestyle, one can deal with many risk factors which are among the most important causes of mortality. That is why the World Health Organization in 2010 aimed to promote healthy lifestyle as one of its goals⁷. Lifestyle associates with physical and psychological health⁸. For example, exercise reduces the risk of multiple disorders, including cancer, cardiovascular disease and diabetes⁹, depression, and Alzheimer's and Parkinson's disease^{10,11} and also anxiety disorders, including eating, addiction and malformed body. Exercise also reduces chronic pain, cognitive impairment associated with aging, and the severity of some symptoms of schizophrenia¹². Over all, a healthy lifestyle, by promoting psychological health, causes happiness and vitality in people.

Another important variable is health locus of control which conceptually is a type of cognitive variable usually used as a predictor of a person's medical conditions and compatibility with a variety of health threats¹³. This structure reflects the degree to which people believe their health to be under the control of themselves or external factors, like others' power or chance. A large volume of research has indicated that people with internal locus of control apparently show more adaptive responses compared to outsiders, when faced with health problems¹⁴ and have more preventive health behaviors that finally lead to reducing the risk of myocardial infarction in these people¹⁵.

According to the research conducted by Valas et al. (1984) and Donald, it has been shown that there is a positive and significant relationship between internal source of self-esteem and health subcomponent¹⁶. In addition, Lefkort stated that people with internal locus of control are likely to have less emotional or alcohol problems. They better deal with mental illness and less suffer from anxiety and depression¹⁶. The results of many other studies also show that people who feel they can be effective in events happening in their life enjoy their health more than people who do not have such a belief and that their efforts do not affect the outside world. Penlez and Claxton concluded that there is a difference among people with internal and external locus of control in terms of the level of happiness¹⁷.

In general, providing mental health for university students, who are active vulnerable young people in each society, is considered the most important social problem. Therefore, officials and stakeholders are required to use standards and programs to choose, prepare and educate this group of people. Analyzing the happiness process and improvement, according to the age range of people, seems to be very important. Therefore, in the present study, we intend to answer whether there is any relationship between lifestyle and aspects of locus of control in students?

Methods

The research, which was conducted within the correlational prediction framework, is fundamental in term of subject and descriptive in terms of collecting the data. The statistical population of this study included all the undergraduate students of Payam Noor University in Talesh in the educational year 2014-15 who, according to the received statistic, were over two thousand and five hundred people in number from which, a sample size of 331 students (246 females, 85 males) were selected based on

Morgan table using simple random sampling. In order to provide descriptive information, frequency percentage, mean and standard deviation indicators were used. Moreover, the research hypotheses were analyzed with the help of statistical methods, like Pearson's correlation coefficient and stepwise regression method. The research tools were:

1. The Oxford Happiness Questionnaire: the Oxford Happiness Questionnaire was developed by Argyle and Lu¹⁸ and has 29 items. The validity of the questionnaire was calculated using Cronbach's alpha for 347 subjects, which was equal to 0.9. Hadinejad et al.¹⁹ obtained the reliability of the questionnaire through the retest happiness questionnaire; the interval of the test was 4 weeks and the obtained correlation coefficient was 0.78. They also reported the correlation of the happiness questionnaire and five neo-desirable factors. The internal consistency coefficient in this study was obtained as 0.81.

2. The lifestyle questionnaire: the lifestyle questionnaire is a questionnaire containing 70 items which was designed by La'li, Abedi and Kajbaf⁸ and scored based on a 4-point Likert scale from never (score 0) to always (score 3). The scale has 10 dimensions (physical health, sports and fitness, weight control and nutrition, prevention of disease, cognitive mental health, spiritual health, avoiding drugs and narcotics, accident prevention and environmental health). In La'li et al.'s¹⁸ research, the construct validity was confirmed by using factor analysis. Cronbach's alpha was also reported as 0.87 in their research. In this study, the internal consistency was obtained to be 0.79 by using Cronbach's alpha coefficient.

3. One-dimensional measures to assess type of control, which were designed by Wollaston et al. To this end, the researchers presented a three-scale options with eight Likert scales (IPC scale) for public measurement of health locus of control; then, they combined one-dimensional scale HLC and IPC and

created multi-dimensional scaling MHLC. The MHLC scale consists of three components with six-point Likert items and is the abbreviation of the following words: 1- Internal locus of control (I): this includes the level of belief in the fact that internal factors and their behaviors are responsible for disease and health. 2- Others' power of locus of control (P): including the level of one's belief in the fact that one's health is determined by other people. 3-Chance locus of control (C): including the belief in the fact that one's health depends on one's chance, luck, or fate.

These tools help to predict health behavior based on personal beliefs. Wollaston's health locus of control questionnaire consists of 18 articles, each of which is expressed as a sentence. Each of the articles has six options ranging from strongly agree, agree, somewhat agree, somewhat disagree, disagree, and strongly disagree. The questionnaire was developed with the purpose of measuring health locus of control and people's beliefs and opinions²⁰. To this end, 6 out of 18 articles in the questionnaire were designed to measure people's beliefs with regard to health internal control and the 12 remained articles

Variables	Mean	Standard Deviation
Happiness	20/14	83/24
Lifestyle	26/87	145/41
Physical Health Dimensions	3/56	14/81
Exercise and Health	3/75	11/49
Diet and Weight control	4/29	11/82
Preventing Diseases	2/91	15/21
Psychological Health	4/13	14/63
Spiritual Health	3/29	13/8
Social Health	3/56	15/97
Preventing Medicine and Drugs	3/67	14/58
Preventing Occurrences	4/46	18/12
Environmental Health	3/69	15/83
Internal Control Resources	3/72	23/17
Other's Power Control Resources	5/44	18/53
Chance Control Resources	4/63	21/32

were developed to consider people's evaluation regarding the effect of factors such as chance, others' power, doctors and the public on health, indicating the health external locus of control. Scores one to six were determined for each option, indicating a range from strongly agree to strongly disagree. As a result, each participant's score ranged from 6-36 for each subtest which were not accumulated with each other and were estimated independently. The reliability of

this test, using the re-test method for internal components (I), was also obtained to be 0.60 for the chance factor (C), 0.51 for important people (P), and 0.77 for the Cronbach's alpha coefficient which indicated the internal consistency for the components I, P and C, to be 0.70, 0.75 and 0.69, respectively²¹. In the present study, by using Cronbach's alpha, the reliability coefficients were obtained as 0.76, 0.80, 0.78 for the components I, P, and C, respectively.

Results

The mean and standard deviation of the variables are presented in Table 1.

For the process of analyzing the data, Pearson's correlation test has been used; the results are presented in Table 2.

Table 2 shows a positive and significant relationship between lifestyle and happiness ($r = 0/615$, $P < 0/01$). Further, the relationship between all the aspects of life and happiness was positive and significant ($P < 0/01$). Moreover, the results show that the relationship between internal locus of control and happiness ($r = 0/507$, $P < 0/01$) is positive and significant. However, the relationships between external locus of control, chance, and happiness were observed to be negatively significant ($r = -0/174$, $P < 0/05$); there was also no relationship between external locus of control and happiness ($P > 0/05$). Moreover, to determine the role of lifestyle and locus of control in predicting happiness, the statistical stepwise regression method was used, the results of which are presented in Table 3. According to the result of the regression analysis presented in Table 3, lifestyle ($F=60.011$, $P<0.001$) and internal locus of control ($F=35.96$, $P<0.001$) both have significant impact on happiness. Moreover, life-style and locus of control together predict 43% of the variance in happiness. The coefficient b, in Table 3, also shows that the variables to predict lifestyle ($\beta=0.622$) and internal locus of control ($\beta= 0.255$)

Table 2: Pearson correlation coefficients between scores of lifestyle, health locus of control, and happiness	
Variables	Happiness
Lifestyle	0/615**
Physical Health Dimensions	0/542**
Exercise and Health	0/394**
Diet and Weight control	0/489**
Preventing Diseases	0/514**
Psychological Health	0/442**
Spiritual Health	0/52**
Social Health	0/626**
Preventing Medicine and Drugs	0/358**
Preventing Occurrences	0/36**
Environmental Health	0/318**
Internal Locus of Control	0/507**
Other's Power Locus of Control	0/122
Chance Locus of Control	-0/174*
Preventing Occurrences	0/514**
*P< 0/05 **P<0/01	

Variables	R	R ²	F	Sig	B	β
Lifestyle	0/2	0/387	60/011	0/001	0/474	0/622
Internal locus of control	0/658	0/433	35/96	0/001	1/394	0/255

meaningfully explain happiness.

Discussion

The findings in this study showed that there is a positive and significant relationship between happiness and lifestyle; this result is similar to those obtained in the previous research^{8, 12, 22-24}. The reason for such findings could be the associations between lifestyle, mental and physical health status, and quality of life²⁵. Accordingly, by choosing a lifestyle, people attempt to maintain and improve their health and prevent disease. Lifestyle has a moderating role in health promotion and disease prevention, and strongly affect health and disease pattern²¹. People with healthy lifestyles have less psychological disorders^{26, 27}. Healthy lifestyle is associated with reducing stress and depression²⁸ and promotes vitality and happiness in people. People with healthy lifestyle, who mostly use positive measures such as doing exercise and avoid negative measures such as smoking, have positive outlook toward life and the future, optimistic thoughts and ideas to reduce the pressures of life which help them to confront life's stressful events; these will cause them to feel security, peace and comfort in life, which, in turn, enhance psychological well-being and ultimately create a sense of satisfaction and happiness in people. The research by Kusaka, Kondou and Morimoto²⁹ indicated the impact of lifestyle on the function

of defense mechanism. It means that the function of defense mechanism is strong in people with general healthy lifestyle, including doing exercise, having enough sleep, eating properly, and not smoking, which ultimately results in high spirit and happiness in people.

The findings also showed that the relationship between internal locus of control and happiness is positive and significant. However, the findings revealed a significantly negative relationship between the external locus of control of luck and happiness; Moreover, there was no correlation between the external control source of power of others and happiness. These results are consistent with the results of the research by Penelz and Claxton¹⁷. Harris et al.²¹, in their study, showed that people with internal locus of control demonstrate better psychological adjustment. Yet in another research by Browse et al.¹⁴, it was shown that those with external locus of control of stress, especially in interpersonal communication, have lower job satisfaction and mental health. This is while individuals with internal locus of control have better physical and mental health; such people are also more successful in their lives and have greater attempt in achieving their goals¹⁴. In general, studies showed that internal locus of control associates with positive psychological adaptation and different health consequences³⁰. Furthermore, based on the findings, it should be noted that control has an important role in all the aspects of life.

Accordingly, high levels of control associates with better coping mechanisms, less stress effects, mental and physical health, endurance, fewer wishes and less anxiety, higher grades and skills, and more social popularity. Control, or what may be called as the feeling of efficiency, internal locus of control, or optimism, is defined with the social and environmental factors. Thus, the concept of control is the learned dimension of character¹⁴. Sense of control can effectively improve life quality and mental health, and also promote health behaviors. People affected by internal locus control are generally healthier and more influential. Such people look for information, are target-oriented, and can better deal with issues. They tend to keep adaptive strategies and avoid using those which lead to failure^{20,31}, and overall, they are happier.

people with external locus of control show higher levels of psychological distress³². Similarly people with external locus of control indicate more anxiety, depression and stress than those with internal locus of control³². People with external locus of control believe that occurrences in their lives are determined by some external forces such as doctors or luck, and one does not have sufficient control over one's life events. For this reason, they believe attempts one ever makes to change the course of events to be ineffective, thus, do not value them³³. Moreover, people with external locus of control are more nervous, full of hatred, distrustful, and stimulated and show signs of lethargy. These people have more anxiety and lower self-esteem, and are less reliable, more aggressive and less thoughtful. In a similar vein, Cooper et al in their study showed that external locus of control predicts psychological distress²¹. People with an external locus of control have high levels of psychological distress, tend to become depressed, and do not feel happiness³⁴. Individuals with internal locus of control, on the other hand, better respond to the treatment of depression³⁵

and do not feel helpless in dealing with stressful situations which make them have better performance while facing stressors; as a result, satisfaction and happiness are constantly observed in them. Studies have also shown that even thinking about controlling a stressful situation results in improving one's mood while facing stress³⁶.

Among the shortcomings in the study, using self-reported tools can be named, which may result in biased data to be obtained, and therefore, limits generalization of the results. Due to the aforementioned limitation, in future studies, along with self-report data, data obtained by assessment of clinical experts is recommended to be used.; Moreover, focusing on a single age group may also limit the generalization. Thus, further research is recommended to be carried out using other age groups.

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