



Original Article

Homesickness, Depression and Happiness in University Students of Hamadan, Iran

Babak Moeini¹, Hamid Abasi², Maryam Afshari^{2*}, Morteza Haji Hosseini³, Ali Ghaleiha⁴

¹PhD Health Education, Associate Professor, Social Determinants of Health Research Center, Hamadan University of Medical Sciences, Hamadan Iran

²MSc, PhD Student of Health Education and Health Promotion, Student Research Committee, Hamadan University of Medical Sciences, Hamadan Iran

³MSc in Biostatistics, Atherosclerosis and Coronary Artery Research Center, Birjand University of Medical Sciences, Birjand Iran

⁴Psychiatrist, Associate Professor of Psychiatry, Behavioral Disorders and Substance Abuse Research Center, Hamadan University of Medical Sciences, Hamadan Iran

Abstract

Background and aims: Students are exposed to multiple various mental disorders. One of the most important difficulties the students encounter are homesickness and depression the occurrence of which cause less happiness in the students. This study was conducted to investigate the relationship among 3 factors of homesickness, depression, and happiness in dormitory students of Hamedan University of Medical Sciences.

Methods: A cross-sectional study was carried out on 387 dormitory students of Hamedan University of Medical Sciences from January to April 2016.

The participants of the study were selected through stratified random sampling technique with proportional allocation. Data were collected through self-reporting and four questionnaires including demographic data questionnaire, homesickness Benflect questionnaire, University Students Depression Inventory (USDI), and Oxford happiness questionnaire. A quantitative analysis of the inquiry was performed using SPSS software, version 23.

Results: The results showed that depression had an indirect relationship (-0.6) with happiness. That is, by increasing the depression scores happiness will decrease. In addition, depression had a significantly direct relationship (0.3) with homesickness. It implies that an increase in homesickness score leads to an increase in depression score. Moreover, homesickness had a significantly indirect relationship (-0.2) with happiness. Namely, an increase in homesickness, results in a decrease in happiness.

Conclusion: In view of the results obtained and given the importance of mental health of the students in dormitories, it seems that the reasons related to homesickness and depression should be recognized and included in intervention and prevention programs. Besides, appropriate interventions must be designed and implemented in this regard.

Keywords: Depression, Happiness, Homesickness, Mental health, Students, Iran

*Corresponding Author:

Afshari Maryam,
Tel: +988138381646;
Email:
afshari_m20@yahoo.com

Received: 2 March 2018

Accepted: 9 June 2018

ePublished: 15 September 2018



Introduction

Mental health is one of the most important features of the health of a community.¹ People in all societies are exposed to several mental disorders. Depression which is one of the most common mental illnesses among the prevalent mental disorders, is not limited to the time, place, and person and involves all groups and classes of the community.² University life is a stressful period so that students encounter different problems with other people.³ Because of life changes and sudden separation of students from their families, they are at the risk in this regard.⁴

All of the students, specially medical students face

special problems regarding their majors including psychological tension of hospital environment, emergency, health centers, dealing with patients' problems, and duration of education during their education in addition to other problems such as living in a dormitory and student evaluations by other professors. For this reason, the majority of the students are at the risk of losing mental health and therefore falling into depression of different degrees.⁵

One of the greatest difficulties the students face during their university education is homesickness. It is regarded as a complex cognitive motivational and emotional situation that is associated with great preoccupation of

mind with regard to previous environment and a desire to return to it, so the students experience depression and different psychosomatic symptoms.⁶ Homesickness can lead to a lack of reassurance and the incidence of underlying risk of anxiety, depression, alcohol as well as drug abuse, and even suicide.⁷

Depression is one of the major diseases in the world and the most common cause of disability in coping with the diseases. Depression is a disorder diagnosed by the loss of energy and appetite having a sense of guilt, thoughts of death, , suicide, and difficulty in concentrating and is accompanied by changes in activity levels, cognitive abilities, sleeping habits, as well as appetite and other problems.⁸ The World Health Organization (WHO) declares that depression will come to the second place in 2013 as compared to 1990 which was at fourth place.⁹ Besides, the results of previous studies on the students showed that 24.3% of the students had moderate to severe depression.¹⁰

Some of researchers believe that experience of psychological problems such as depression, reduces the feeling of happiness, this means that the more a person experiences the problems, the less is his/her level of happiness which is threatening for his/her mental health.¹¹ Depression affects the quality of the students' lives and results in less happiness in their life.¹² The study by Khosh Konesh and Keshavarz Afshar demonstrated a significantly negative relationship between depression and happiness in students.¹³ According to happiness value and its effect on life especially during university education, the identification of its effective factors, is of great important. This will keep away people from psychological problems such as depression and allow them achieve happiness. This study was conducted aiming at exploring the relationship between homesickness with the level of depression and happiness among students in Hamedan University of Medical Sciences.

Methods

Design and Participants of the Study

This research was a descriptive-analytical study that was carried out (from January to April 2016) on 387 students residing in dormitories of Hamedan University of Medical Sciences). Our study includes ICD-10 version (the International Classification of Diseases 10th revision): on mental and behavioral disorders, which is a standard international diagnostic classification for medical diagnoses. Stratified random sampling technique with proportional allocation was the way through which the data was collected. According to a study by Pour Agha Roudbordeh et al,¹⁴ 400 students were considered as the final sample of the present study. Due to the number of students in dormitories, for this study the sample size

was determined from each dormitory. It should be noted that the university consisted of seven dormitories for boys (n=2) and girls (n=5).

Participants' Inclusion and Exclusion Criteria

Inclusion criteria were related to students' educational occupation in Hamedan University of Medical Sciences and residence in state dormitories under the cover of Hamedan University of Medical Sciences. Exclusion criteria of the study was the lack of students' consent to participate in the study.

Materials

Questionnaires

Four questionnaires were employed for data collection. All of them were completed, through self-reporting, by dormitory students who showed willingness to participate in the study. Demographic data collected include information about participants' age, gender, field of study, semester, level of education, marital status, living place, number of brothers and sisters, child ranking, economic status, health status, parents' education and job, sports activity experience, study of non-academic books, use of TV and internet, and computer game playing during the day. Homesickness questionnaire which was designed by Fenfelit in 2001, is a 45-point scale contains 5 factors including homesickness for family (items 1-11), the desire to return to hometown (items 12-20), feeling homesickness (items 21-26), adaptability with the new environment (items 27-33), and homesickness for close friends (items 34-36). The Cronbach alpha coefficients for each of the above-mentioned factors (for 349 members) were 0.90, 0.87, 0.85, 0.88, and 0.80, respectively, indicating that the questionnaires enjoyed a good internal stability. In addition, the questionnaire contains 3 supplementary points, the two of which measure the frequency of homesickness experience in current and past situations, and the third point which measures the intensity of homesickness. Ezzheei et al in their study began to investigate about psychometric properties of the questionnaires. The results indicated the appropriate internal consistency for factors of this questionnaire. Each question measures the issue according to the Likert scale. The following values were assigned to responses provided for Likert Scale items: Never = 1, Slightly = 2, Average = 3, Much = 4, and Very much = 5. The total score of the subjects in homesickness was obtained from sum of the scores. In this test, minimum and maximum scores were 36 and 180, respectively. High scores on this test indicate high level of homesickness and low scores represent low level of homesickness. To check the status of subjects in test factors, the scores related to questions of that factor should be summed up.

The University Students Depression Inventory (USDI) is a new tool for measuring the students' depression designed by Khawaja and Bryden.¹⁶ This scale consists of 3 subscales including lethargy, cognitive-emotion, and academic motivation. These 30 items have 5 options numbered from 1 to 5 and each subject is placed from 30 to 150 scores. This questionnaire has 3 subscales and questions related to each subscale were identified for the study. In this scale, participants will be asked to identify their mental status during the past two weeks. In order to achieve the points for each part, total scores of that part should be summed up. In addition, scores relating to all the questions must be added up in order to achieve the overall questionnaire part. High scores indicate high level of depression or vice versa. Hejazi et al in their study showed the results of validity in 2 ways including internal consistency and time stability that based on Cronbach alpha, the validity of depression scale are 0.93 and also 0.86 performing retest. Related research for content validity was simultaneous, divergent, predictor, denotative, and the structure of USDI confirmed the validity of this scale.¹⁷

Oxford Happiness Questionnaire has 29 items and measures the individual happiness. Theoretical basis of the questionnaire is based on Argyle and Krasland's definition of happiness (They provide an operational definition of happiness that has 3 important parts: frequency and degree of positive affection, the average level of satisfaction during a period, and negative feeling). This test which was designed by Argyle (1989) is based on Beck depression (1976, BDI) questionnaire. Ten items of this questionnaire were adapted from BDI and reversed, 11 questions have been added to it in order to cover other aspects of mental health similar to Beck depression test that each happiness questionnaire has 4 options and participants must choose one of them, according to their current status. Nowadays, this test is widely used in studies related to happiness. Argyle¹⁸ calculated the reliability of Oxford questionnaire by Cronbach alpha coefficient which showed a total estimation of 0.90 and during a seven-week period, test-retest reliability was 0.43. Additionally, it was considered that happiness has 3 components including positive affection, satisfaction, and lack of negative affection. Correlation of this questionnaire with Bradburn positive affection scale (0.32), life satisfaction (0.57) and depression questionnaire was calculated. This test consists of 29 phrases with 4 options the scoring of which for each phrase were as follows, respectively. The first option = 0 score; second option = 1 score; third option = 2 scores; and fourth option = 3 scores. Therefore, the highest score of the subject can be obtained on/in 87 points that represents the highest level of happiness and the lowest score of the

scale is zero which shows unhappy state of the students and depression. The norm score of this test is ranged from 40 to 42.

Data Analysis

Following data collection and data entry in SPSS software (version 23), descriptive data were reported suitable using descriptive indicator charts. Then, to analyze the data, Pearson correlation and generalized linear model (GLM) were applied at a significance level of 0.05. Moreover, to compare the obtained means, *t* test, Fisher exact test, and analysis of variance (ANOVA) were run. Besides, multiple comparisons were run in order to find the exact differences among the means using the post hoc Tukey HSD test.

Results

Totally, 387 students participated in this study and the response rate of whom was 97%. Students who did not give consent, did not participate in this study. After checking the information, it was found that the mean \pm SD age of the students was 22 ± 0.1 years. Most of the fathers had little formal education (20.4%) or diploma (20.2%). And most of the mothers were housewives (80.6%). The majority of the students did not have sports activities (58.4%) and did not use computer games (77.5%). On average, there was no relationship among happiness score, homesickness, and depression regarding the above-mentioned variables.

Results of Table 1 showed that mean scores of depression and homesickness in both genders had significant differences. Depression scores in boys were more than girls and homesickness scores in girls were more as compared to the boys' scores. Besides, as can be seen in Table 1, the mean scores of depression and happiness in people with different economic status are different. Tukey HSD test results indicated that the mean scores of depression in higher economic status had a significant difference with medium and minor groups. Furthermore, the mean scores in higher economic status had significant differences with other groups and also the mean scores of happiness in strong or weak groups were statistically different. Based on the mean scores obtained, health variable varied as compared to all the 3 indicators in different groups. Depression and happiness scores of strong group together with the scores of other groups except for weak group were statistically different. In mother education category, there was a meaningful relationship between mean scores of depression in the group having doctorate degrees and other groups; furthermore, depression mean score in diploma with junior, Bachelor, and diploma was different. In addition, homesickness mean score varied between the group

Table 1. Comparison of Depression, Homesickness, and Happiness Scores Using Demographic Variables

Demographic Variables		Depression Mean±SD	P Value	Happiness Mean±SD	P Value	Homesickness Mean±SD	P Value
Sex	Boy	80.5±1.6	0.001	38.6±1	0.069	101.1±1.7	0.009
	Girl	72.5±1.5		41±0.8		107.3±1.5	
Economic status	High	66.5±5.1	0.022	51.3±3.5	<0.001	105.6±6.2	0.854
	Good	72.8±1.9		40.9±1		106.2±1.8	
	Medium	77.7±1.5		39.1±0.8		104±1.5	
	Weak	82.6±4.7		32±2.8		104.8±4.5	
Health status	Good	67.6±1.3	<0.001	43.4±0.7	<0.001	102.9±1.5	0.022
	Little good	85.5±2.1		35.6±1.2		109.2±2.2	
	Medium	85.5±2.4		36.6±1.6		105.2±3.1	
	Bad	101.5±5.6		26.1±5.6		98.5±5	
	Little bad	94.6±5.6		34±12.4		136.6±14.4	
Mothers' education	Died	79.1±5.2	0.012	43.2±3.8	0.115	90.5±5	0.028
	Illiterate	77.7±2.9		38.2±1.5		103.2±2.4	
	Primary school	77.9±2		38.6±1.5		107±2.2	
	Middle school	69.8±3.4		38.6±1.1		102±3.9	
	High school	79.7±5.6		36.4±3.1		95.7±3.9	
	Diploma	72.5±2.4		42.5±1.5		105.8±2.5	
	Associates degree	94.1±6.6		34±3.8		116.9±10.1	
	Bachelor's degree	71±3		43±1.5		108.7±3.4	
Master's degree	78.2±9.6	42.5±0.7	100.7±13.4				
	Doctorate	80.7±10.7		47±4.2		123.7±6.4	
Fathers' jobs	Died	72.6±5	0.097	46.7±1	0.116	94.6±4.6	0.045
	Working	74.5±1.9		40.2±1		106.2±2.2	
	Free	76.6±1.7		39.6±1		106.1±1.6	
	Retired	72.3±3.4		40.6±1.6		98.6±3.2	
	Farmer	77±3.4		37.6±1.9		109.2±3.5	
	Unemployed	105.2±16.8		35.2±11.6		115.5±23.1	
Using internet	1 h	71.3±3.2	0.435	44.8±2	0.030	106.3±3.5	0.353
	2 h	72.6±2.9		41.8±1.5		99.6±2.9	
	3 h	77.8±2.4		38±1.3		107.3±2.5	
	4 h	77±2.1		39.2±1.3		102.6±2.3	
	5 h	77.1±2.2		38.7±1.2		106.7±2.1	
	Not use	72.9±5.3		41.6±3.5		105.5±5.8	

having mothers with PhD degrees and the group whose mothers were MA, junior, or illiterate, homesickness mean score showed a statistically significant difference in students whose fathers had been died as compared to those students whose fathers were alive and unemployed. Moreover, happiness mean score in individuals who used internet one hour a day had significant differences with others who used the net for 3, 4, or 5 hours.

Depression had an indirectly negative relationship (-0.6) with happiness. However, it had a significantly positive correlation (0.3) with homesickness. Therefore, an increase in homesickness score resulted in an increase in depression score, and an increase in depression score also led to an increase in happiness score. In addition, homesickness had a significantly indirect relationship (-0.2) with happiness, indicating that an increase in

homesickness caused a decrease in happiness.

The results of the study showed that mean ± SD scores for depression, happiness, and homesickness were 75.5 ± 1.1, 40.1 ± 0.6, and 105 ± 1.1, respectively. The Mean ± SD of different aspects of depression were as follows: depression for, homesickness = 39.3 ± 0.4; desire to return to the homeland = 24.8 ± 0.4; a feeling of loneliness = 14 ± 0.2; incompatibility with the new environment = 16.8 ± 0.3; and nostalgia for close friends = 9.9 ± 0.1.

Homesickness had a significant relationship with a desire to return hometown (0.4) and nostalgia for close friends (0.4). Besides, a desire to return to hometown and a feeling of loneliness (0.4) as well as the incompatibility with the new environment (0.4) and nostalgia for close friends (0.3) had significantly positive

relationships. Furthermore, a feeling of loneliness and incompatibility with the new environment (0.6), as well as nostalgia for close friends (0.2), nostalgia for friends, and incompatibility with the new environment (0.2) had significantly positive correlations. The mean \pm SD of different aspects of depression questionnaire for lethargy, cognitive-emotional and also academic motivational aspects were 24 ± 0.4 , 12.7 ± 0.2 , and 38.8 ± 0.5 , respectively. The results revealed that lethargy aspects and cognitive-emotional aspects (0.7) as well as academic motivation (0.8) were significantly correlated. In addition, academic motivational and cognitive-emotional aspects had a significantly positive relationship.

The results of GLM univariate showed that homesickness, age, using the internet, mothers' education, health status, economic situation, and education are significant variables affecting happiness (Table 2).

The results of GLM Univariate showed that homesickness, age, mother's education, and health status were significant variables regarding depression (Table 3).

Discussion

The results of the study showed that depression had an indirect relationship with happiness while having a significantly positive correlation with homesickness. The results also indicated that there was a moderate level of homesickness among dormitory students. Nowadays, moving out more than is an exception, has become a part of everyday life with its own consequences, one of which is homesickness.

There exist several researches showing the students' homesickness in different cultures and societies. Khademi and Farshid Aghdam and also Terry et al confirmed the existence of homesickness in students.¹⁹ Various studies demonstrated that there was homesickness among colleges in Iran, especially students who were not native and were far from their homes.^{15,20}

Results obtained from the study also revealed that homesickness was found more in girls as compared to boys. Stroebe et al and Besharat et al in their studies found that women feel homesickness more than men.^{21,22} This is consistent with the results of the present study. Down's studies did not show gender differences in homesickness.²³ Since depression is one of the homesickness components which occurs more in women than men and that women show more self-disclosure on emotional issues, it can be argued that women show more homesickness. The results of the present study also showed that homesickness had a significant relationship with students' health status so that the lower is the students' health status the more will be their homesickness. This is also in line with the results of other studies in this field.^{24,25} The results also demonstrated that educated mothers had better

Table 2. Checking Predictive Happiness Variable in Students Using ANOVA Model

Variables	Fisher's Statistics	P Value	Predictive
Gender	0.06	0.806	-
Grade	3.03	0.018	+
Number of brothers	0.41	0.867	-
Number of sisters	0.65	0.734	-
Economic status	3.60	0.014	+
Health status	4.94	0.001	+
Fathers' education	0.49	0.863	-
Mothers' education	2.00	0.045	+
Fathers' jobs	0.31	0.869	-
Mothers' jobs	1.21	0.299	-
Sport	0.157	0.693	-
Non-school studies	0.291	0.590	-
Using TV	1.38	0.229	-
Using internet	2.69	0.021	+
Computer games	1.27	0.274	-
Age	4.59	0.033	+
Homesickness	21.94	<0.001	+

Table 3. Checking Predictive Depression Variable in Students Using ANOVA Model

Variables	Fisher's Statistics	P Value	Predictive
Gender	1.09	0.297	-
Grade	1.89	0.111	-
Number of brothers	0.774	0.591	-
Number of sisters	0.77	0.591	-
Economic status	0.333	0.802	-
Health status	13.16	<0.001	+
Fathers' education	0.621	0.760	-
Mothers' education	3.41	0.001	+
Fathers' jobs	1.04	0.384	-
Mothers' jobs	1.57	0.210	-
Sport	0.19	0.659	-
Non-school studies	0.004	0.950	-
Using TV	1.79	0.113	-
Using internet	1.33	0.250	-
Computer games	1.31	0.257	-
Age	3.99	0.047	+
Homesickness	52.20	<0.001	+

understanding and social support (emotional support and evaluation) for their children and such a support had a positive impact on their children, so they could overcome such feelings during being away from home.^{14,26}

The prevalence of depression is high in students. Kalani et al²⁷ and Najafi Kalyani et al²⁸ have described a moderate rate of depression. Eisenberg and Chung found that 22% of the students had depression symptoms.²⁹ The results of the above-mentioned studies are in conformity with the results of the present study. Homesickness is considered as one of the effective factors in development and exacerbation of depression in students. According to cognitive stress theory gains, anxiety and stress are long-term consequences of depression.³⁰ In the current study, the prevalence of depression was higher in boys than girls

and the association between them was significant. Sadock et al in their study showed that women were more likely to experience depression than men.³¹ However, in another studies, men were more likely to experience depression as compared to women.^{32, 33} Probably, boys due to their concerns about job and social future were more likely to be depressive.³⁴ In another study, as is confirmed by various studies, students who had good health status, showed less depression.^{35,36} Moreover, student's age was a major predictor of depression. Zaid and colleagues' study showed that older students had better health status and fewer mental health problems.³⁷ These results were also consistent with the findings of the present study. It can be pointed out that dormitories of this university are suitable in terms of the number of students and their areas which are not large so that most students can easily communicate with each other. Besides, these dormitories had provided good welfare facilities for the students. In addition, the majority of the students were from Hamedan and the surrounding cities who could go home in less time and last but not least, this condition had an effect on their happiness. Previous studies demonstrated that homesickness had a significantly indirect relationship with happiness. It implies that an increase in homesickness results in less happiness. Anasori's study also showed that mental health had a significantly direct correlation with happiness in people.³⁸ Consequently, better mental health will increase the level of happiness or vice versa. In Pernegar's study, it was revealed that there was a strong correlation between happiness and mental health,³⁹ This is in line with the results of the current study. The findings of our study showed that health status had a significant relationship with happiness. Jayasvasti's study also showed that an increase in happiness led to better health conditions, appetite, sleep, family relationships, memory, friendship, family status, and finally, mental health.⁴⁰ In the present study, using the internet properly was a predictor of happiness. In a study conducted by Samouei et al, computer and internet were regarded as one of the entertainments for the students after entering the university. These findings suggest that students do not require higher cost as well as more facilities, and also planning for fun and amusement and that this source of responsiveness is quite simple and accessible.⁴¹ The economic status was a predictor of students' happiness, that is, higher economic status resulted in more happiness in people. Probably, higher economic status helps the individuals access more facilities and amusement, as a result, people will be happier. And finally, qualified mental life in dormitories needs considerable attention on the part of the authorities in this field. Separation from family, undertaking new and different responsibilities, communication with different cultures, and adapting

to new circumstances require special capability and energy in order to for the students to achieve the inner satisfaction and happiness. In this study, 3 areas of happiness, homesickness, and depression have been focused on as a whole, while most of the other studies have only reviewed 2 of the variables simultaneously. The only limitation of this study was the self-reporting technique applied.

Conclusion

According to the results of the present study and given the importance of mental health of the students residing in the dormitories, it seems necessary to perfectly identify and include factors of homesickness and depression in interventional and preventive programs. Appropriate interventions should be planned and implemented, according to effective factors, to avoid unintended and irreparable consequences. Most of the plans regarding students' amusement and fun should be considered by the authorities as well.

Ethical Approval

The study was approved by Hamadan University of Medical Sciences (ethics code No. IR.UMSHA.REC.1394.353).

Conflict of Interest Disclosures

None.

Acknowledgment

This study was financially supported by Hamedan University of Medical Sciences. The authors would like to acknowledge all the students who cooperated with the research team.

References

1. Mohammadi MR, Davidian H, Noorbala AA, Malekafzali H, Naghavi HR, Pouretamad HR, et al. An epidemiological survey of psychiatric disorders in Iran. *Clin Pract Epidemiol Ment Health*. 2005;1:16. doi: 10.1186/1745-0179-1-16.
2. Nasir R, Zamani ZA, Khairudin R, Latipun. Effects of Family Functioning, Self-esteem, and Cognitive Distortion on Depression among Malay and Indonesian Juvenile Delinquents. *Procedia Soc Behav Sci*. 2010;7:613-20. doi: 10.1016/j.sbspro.2010.10.083.
3. Barron LW. Effect of religious coping skills training with group cognitive-behavioral therapy for treatment of depression. North Central University, College of Psychology; 2007.
4. Rezaei Adaryani M. Comparison of depression, anxiety, stress and quality of life for Male and female students living in Tarbeyat Modares student dormitories. *Pajoheshe Parastari*. 2007;2(4):31-8. [In Persian].
5. Nariman A, Akbarzadeh M, Hamzeh M. Evaluation of general health in medical students of AJA university of medical sciences, 2009. *Ann Mil Health Sci Res*. 2010;8(1):49-55. [In Persian].
6. Farhadi M. Study of relationship between attachment style and homesickness [dissertation]. Tehran: Tehran University; 2005.

- [In Persian].
7. Tavakoli S, Lumley MA, Hijazi AM, Slavin-Spenny OM, Parris GP. Effects of assertive-ness training and expressive writing on acculturative stress in international students: A randomized trial. *J Couns Psychol.* 2009;56(4):590-6. doi: 10.1037/a0016634.
 8. Chou PC, Chao YM, Yang HJ, Yeh GL, Lee TS. Relationships between stress, coping and depressive symptoms among overseas university preparatory Chinese students: a cross-sectional study. *BMC Public Health.* 2011;11:352. doi: 10.1186/1471-2458-11-352.
 9. Beck AT. The evolution of the cognitive model of depression and its neurobiological correlates. *Am J Psychiatry.* 2008;165(8):969-77. doi: 10.1176/appi.ajp.2008.08050721.
 10. Azizi M, Khamseh F, Rahimi A, Barati M. The relationship between self-esteem and de-pression in nursing students of a selected medical university in Tehran. *Iran J Psychiatr Nurs.* 2013;1(1):28-34. [In Persian].
 11. Alberktzen G. happiness and related factors in pregnant women, deparment of psychiatare, faculty of mediene. Bangkok, Thailand: Chulalongkorn University; 2003.
 12. Seligman M. *Authentic Happiness: Using the new positive psychology to realize your po-tential for lasting fulfillment.* New York: Free Press; 2002.
 13. Khosh Konesh A, Keshavarz Afshar H. The relationship between happiness and mental health of students. *Journal of Andisheh va Raftar.* 2008;2(7):41-51. [In Persian].
 14. Pour Agha Roudbordeh F, Kafi SM, Rezaei S. Relationship between homesickness and perceived social support and mental health of students Newcomer. *Clinical Psychology & Per-sonality.* 2012;19(6):45-66. [In Persian].
 15. Ezheei J, Dehghani M, Ganjavi A, Khodapanahi MK. Validation of Utrecht Homesickness Scale in Students. *J Behav Sci.* 2008;2(1):1-12. [In Persian].
 16. Khawaja NG, Bryden KJ. The development and psychometric investigation of the university student depression inventory. *Journal of Affective Disorders.* 2006;96(1-2):21-9. doi: 10.1016/j.jad.2006.05.007.
 17. Hejazi E, Rezaei Sharif A, Shalchi B. Investigation of psychometric properties of university student depression inventory (USDI). *Psychol Stud.* 2008;4(2):125-49. [In Persian].
 18. Argyle M. *The psychology of happiness.* Routledge; 2013
 19. Terry ML, Leary MR, Mehta S. Self-compassion as a Buffer against Homesickness, Depression, and Dissatisfaction in the Transition to College. *Self and Identity.* 2012;12(3):1-13. doi: 10.1080/15298868.2012.667913.
 20. Yaghoobi A, Farhadi M, Ghanbari N, Kakabarai K. Examine the relationship between emotional intelligence and general health with homesickness. *J Psychol Univ Tabriz.* 2008;3(9):137-53. [In Persian].
 21. Stroebe M, van Vliet T, Hewstone M, Willis H. Homesickness among students in two cultures: antecedents and consequences. *Br J Psychol.* 2002;93(Pt 2):147-68.
 22. Besharat MA, Farhadian M, Gilani B. Investigate the relationship between attachment style and homesickness. *J Psychol Univ Tabriz.* 2006;1(2-3):23-47. [In Persian].
 23. Downs J. *Adapting to secondary and boarding school: self concept, place identify and homesickness.* Australia: Driving International Research Agendas, James Cook University; 2002.
 24. Messina J. *Helping students cope with Homesickness.* University Business website; 2007. <https://www.universitybusiness.com/article/helping-students-cope-homesickness>.
 25. Van Vliet T. *Homesickness: antecedents, consequences, and mediation processes.* The Netherlands: Ponsen & Looijen; 2001.
 26. Cutrona CE. Objective determinants of perceived social support. *J Pers Soc Psychol.* 1986;50(2):349-55. doi: 10.1037/0022-3514.50.2.349.
 27. Kalani N, Eslami Akbar R, Kooti W, Noori Ahmad Abadi M, Zare Marzoni H. The study of depression prevalence among the students of Jahrom University of Medical Sciences in 2013. *Zanko J Med Sci.* 2015;15(47):58-66. [In Persian].
 28. Najafi Kalyani M, Pourjam E, Jamshidi N, Karimi S, Najafi Kalyani V. Survey of stress, anxiety, depression and self-concept of students of Fasa University of medical sciences, 2010. *J Fasa Univ Med Sci.* 2013;3(3):235-40. [In Persian].
 29. Eisenberg D, Chung H. Adequacy of depression treatment among college students in the United States. *Gen Hosp Psychiatry.* 2012;34(3):213-20. doi: 10.1016/j.genhosppsych.2012.01.002.
 30. Nijhof KS, Engels RC. Parenting styles, coping strategies, and the expression of homesickness. *J Adolesc.* 2007;30(5):709-20. doi: 10.1016/j.adolescence.2006.11.009.
 31. Sadock BJ, Sadock VA, Ruiz P. Kaplan and Sadock's *Synopsis of Psychiatry: Behavioral Sciences/Clinical Psychiatry.* 11th ed. Philadelphia: LWW; 2014.
 32. Ershadi Kia B, Shajari A, Tayebi F, Yaghubifar MA. Identifying the prevalence and contrib-uting factors of depression in students of health and health-related schools of Sabzevar University of Medical Sciences in academic year 2009-2010. *Beyhagh.* 2015;16(1):33-43. [In Persian].
 33. Abedini S, Davachi A, Sobhani F, Mamoudi M, Safa O. Prevalence of depression among students of public health and nursing-midwifery schools of Hormozgan University of Medi-cal Sciences. *Hormozgan Med J.* 2006;11(2):252-6. [In Persian].
 34. Rezaei T, Yazdi-Ravandi S, Ghaleiha A, Seif Rabieei MA. Depression among medical students of Hamadan University of Medical Sciences in 2014: The Role of demographic variables. *Pajouhan Scientific Journal.* 2015;13(4):1-8. [In Persian]
 35. Ovuga E, Boardman J, Wasserman D. Undergraduate student mental health at Makerere University, Uganda. *World Psychiatry.* 2006;5(1):51-2.
 36. Wong JG, Cheung EP, Chan KK, Ma KK, Tang SW. Web-based survey of depression, anxiety and stress in first-year tertiary education students in Hong Kong. *Aust N Z J Psychiatry.* 2006;40(9):777-82. doi: 10.1080/j.1440-1614.2006.01883.x.
 37. Zaid ZA, Chan SC, Ho JJ. Emotional disorders among medical students in a Malaysian private medical school. *Singapore Med J.* 2007;48(10):895-9.
 38. Anasori M. The relationship between mental health and happiness male and female students. *Andisheh va Raftar.* 2007;2(6):75-84. [In Persian].
 39. Pernegar TV. *Health and happiness in young swiss adults, Qulity of care until.* Geneva, Switzerland: Geneva University Hospital; 2004.
 40. Jayasvasti K. *Happiness and related factors in pregnant women, deparment of psychiatry, faculty of mediene.* Bangkok, Thailand: Chulalongkorn University; 2005.
 41. Samouei R, Moslehi M, Heydari M, Toghiani Z. Management of Students' Happiness in Dormitories of Isfahan University of Medical Sciences. *Iran J Med Educ.* 2012;11(9):1057-62. [In Persian].

How to cite the article: Moeini B, Abasi H, Afshari M, Haji Hosseini M, Ghaleiha A. Homesickness, depression and happiness in university students of Hamadan, Iran. *Int J Epidemiol Res.* 2018;5(3):73-79. doi: 10.15171/ijer.2018.17.