Research Article

The Relationships of Personality Traits and Homesickness with Mental Health Among Dormitory Students

Foozieh Rafati [1, *], Habibe Vazirinasab [2], Pardis Rooyan [3] and Arman Sedighi [1]

[1]Nursing and Midwifery School, Jiroft University of Medical Sciences, Jiroft, Iran
[2]Medicine School, Jiroft University of Medical Sciences, Jiroft, Iran
[3]Health College, Jiroft University of Medical Sciences, Jiroft, Iran

*Corresponding author: Nursing and Midwifery School, Jiroft University of Medical Sciences, Jiroft, Iran. Email: foozieh1384@yahoo.com

Abstract

Background: The prevalence and the intensity of mental health problems among university students are increasing. Entering university may require students to change their place of residence and hence, put them at risk for mental health problems.
Objectives: This study aimed to evaluate the relationships of personality traits and homesickness with mental health among dormitory students.
Methods: In this cross-sectional study, 205 students were recruited from the dormitories of Jiroft University of Medical Sciences, Jiroft, Iran. Data were collected using a demographic questionnaire, the Homesickness Questionnaire, Eysenck Personality Inventory, and Goldberg General Health Questionnaire. Data were analyzed through the stepwise multiple linear regression, Pearson correlation analysis, and independent-sample t test.
Results: Married students had significantly poorer mental health than their single counterparts. The significant predictors of mental health were the two personality traits of extroversion (B = - 0.616, P = 0.032) and neuroticism (B = 1.44, P < 0.001), the two homesickness dimensions of disliking the university (B = 0.619, P < 0.001) and attachment to home (B = - 0.346, P = 0.002), and marital status (B = 6.29, P = 0.023). These five predictors explained 40% of the total variance of mental health.
Conclusions: Personality traits, homesickness, and marital status affect mental health among dormitory students.

Keywords: Personality Trait, Homesickness, Mental Health, Students

1. Background

Mental health refers to "personal and social adjustment and the absence of pathologic signs, symptoms, and syndromes" (1). Good mental health is the successful performance of mental functions that leads to productive activity, effective communication with others, and the ability to adapt to changes and coping with incompatibilities. Mental health is necessary for personal well-being, interpersonal and family relationships, and community participation. It paves the way for thinking, communication skills, learning, emotional growth, resilience, and self-esteem (2).

There are worries about students' mental health around the world (3). In Iran, the number of students with mental health problems is reported to vary from 40% to 75% in different studies (4-6). These disorders can negatively affect students' ability to achieve educational objectives, reduce their productivity, and cause them to be absent from class (7). Contrarily, good mental health is sig-

nificantly associated with the greater sense of well-being, higher quality of life, better academic performance, lower use of drugs, and lower prevalence of depression among young people (8).

Mental health is determined by different factors such as emotional breakdown, cigarette smoking, drug abuse, disinterest in the field of study, the despair of the future (9), and low income (10). A study reported a strong correlation between students' mental health and family support (11). Another factor behind students' mental health is educational activities, which separate students from their families, expose them to other persons, places, and cultures, and can cause them to be involved with different problems such as the sense of homesickness (12).

Homesickness is the willingness to return to the previous familiar environment (13). Around 83% - 95% of people who move away from their families to a new environment experience some levels of homesickness (14). Mild homesickness can promote healthy attachment behaviors and coping skills (13); however, prolonged unresolved home-

sickness may cause adjustment disorders (15). The severity of homesickness is determined by factors such as age, gender, resilience, and personality (12). Since has an important effect on students' well-being, it is important for university administrators to gain a better understanding of homesickness impact on students and provide them with appropriate interventions for a better transition to the university (16).

Personality traits are cognitive, emotional, and behavioral characteristics that remain almost unchanged in different situations and different stages of life (17). They can affect psychosocial adjustment with new situations (18). Studies show that personality traits such as extroversion (19, 20), openness to experience, and neuroticism (20) are among the predictors of students' psychosocial adjustment. Personality traits can also contribute to different dimensions of mental health (17). Some studies reported that personality traits had significant correlations with mental disorders (21) such as depression (22). However, little is known about the effects of homesickness and personality traits on students' mental health.

2. Objectives

The present study was undertaken to evaluate the relationship of personality traits and homesickness with mental health among university students.

3. Methods

In this cross-sectional study, we selected 220 students (154 female and 66 male) who were living in the dormitories of Jiroft University of Medical Sciences using the census method. The inclusion criteria were living in a dormitory and a willingness to participate in the study. Participants were informed about the study objectives and procedure, their voluntary participation, and confidentiality of their information. The anonymous questionnaires were distributed to students in their dormitories and were collected after 30 minutes.

The data collection tools were a demographic questionnaire (age, gender, marital status, the field of study, type of degree, place of family residence, employment, and family size). Moreover, the total grade point average (GPA) was asked at this stage. We also used the Homesickness Questionnaire, the Eysenck Personality Inventory, and the Goldberg General Health Questionnaire for data gathering.

The homesickness questionnaire was developed by Archer et al. in 1998. It consists of two subscales, namely attachment to the home and disliking the university. The

questionnaire contains 33 items (23). Item scoring is done based on a Likert-type scale from one ("very little homesick") to five ("extremely homesick"). The scoring of the items 4, 9, 15, and 30 is done reversely. Higher scores show severer homesickness. Besharat et al. translated and validated the questionnaire in junior undergraduate college students whose university was far from their family residency by content validity and face validity. Three items were deleted after the initial implementation. Moreover, the Cronbach's alpha values were reported to be 0.90 and 0.82 for attachment to the home and disliking the university subscales, respectively. The three-week test-retest correlation coefficients were 0.81, 0.83, and 0.78 for the whole questionnaire, attachment to the home subscale, and disliking the university subscale, respectively (24). The third tool of the study was the Eysenck Personality Inventory. This inventory contains 24 yes/no questions on neuroticism, 24 yes/no questions on extroversion, and nine questions in a lie scale. Each question is scored either one or zero. Scores of less than six in the lie scale indicate the authenticity of the answers to the inventory. Higher scores for the extroversion and the neuroticism dimensions show that the person is more extrovert and more neurotic, respectively. The Cronbach's alpha values were reported as 0.69, 0.77, and 0.47 for the extroversion, neuroticism, and lie dimensions of the inventory in an Iranian sample, respectively (25). Moreover, the split-half correlation coefficients were 0.74 and 0.91 for the extroversion and the neuroticism dimensions and the test-retest correlation coefficients were 0.84 and 0.94, respectively, in Yousefi et al. study among Iranian students (26). The fourth data collection tool was the 28-item Goldberg General Health Questionnaire. The items of the questionnaire are scored on a four-point Likert-type scale from zero to three with higher scores standing for poorer mental health. Validity and reliability of this questionnaire were assessed among Iranian students by Taghavi, the values of 0.93, 0.90, and 0.70 were reported for split-half, test-retest, and Cronbach's alpha, respectively. Moreover, the score of the questionnaire was found to have a significant correlation with the score of the Middlesex Hospital Questionnaire with a coefficient of 0.55, confirming its concurrent validity (27).

The independent samples *t*-test was used for comparing the mean scores between the two groups. Pearson's correlation analysis was used to investigate the correlations between mental health and age, family size, and GPA. Stepwise multivariate regression analysis was done to investigate the association of personality traits and homesickness with mental health and estimate the explained variance via the SPSS software (V. 20.0).

Ethical approval for this study was obtained from the Ethics Committee of Jiroft University of Medical Sciences,

Jiroft, Iran (approval code: IR.JMU.REC.1395.38).

4. Results

In total, 220 students participated in the study and completed the study tools. However, 15 were excluded due to a score of more than six on the lie scale of the Eysenck Personality Inventory. Therefore, the data retrieved from 205 students were analyzed. The majority of the students were female and single (Table 1). Only were two participants employed. The means of their age, GPA, and family size were 20.92 ± 1.61, 16.32 ± 1.80, and 5.57 ± 1.83, respectively.

Table 1. Demographic Characteristics of Study Participants

Characteristics	No. (%)	Mental Health Score Mean±SD	P Value
Gender			0.393
Female	145 (70.7)	28.32 ± 14.55	
Male	60 (29.3)	30.27 ± 15.94	
Marital status			0.001
Married	23 (11.2)	27.66 ± 14.25	
Single	182 (88.8)	38.61 ± 15.91	
Type of degree			0.399
Bachelor	175 (85.4)	28.52 ± 11.46	
Doctoral	30 (14.6)	31.00 ± 14.54	
Total	205 (100)		
Place of family residence			0.078
Outside Kerman province	88 (42.9)	30.99 ± 13.38	
In Kerman province	117 (57.1)	27.31 ± 15.68	
Total	205 (100)		

The mean score of homesickness was 74.07 ± 16.74 while the mean scores of its subscales including attachment to the home and disliking the university were 37.34 ± 9.9 and 36.75 ± 8.8, respectively. Moreover, the mean score of students' mental health was 28.89 ± 14.82. The results of the independent samples t-test illustrated no significant relationships between students' mental health scores and their gender, type of degree, and place of family residence (P > 0.05). However, the mean score of mental health was significantly lower in single students than in their married counterparts (P = 0.001; Table 1). To determine the relationship between mental health and continuous variables, Pearson's correlation coefficient was done. It showed only a marginally significant negative relationship between the GPA and the mental health score (Table 2).

Table 2. Pearson's Correlation Coefficients Between Mental Health, Age, Family Size, and GPA

Variables	Age	Family Size	GPA
Mental health scores	0.087	0.032	-0.187
P value	0.215	0.653	0.013

Stepwise multivariate regression was done to survey the relationship of marital status, GPA, extroversion, neuroticism, disliking the university, and attachment to the home with mental health scores (single status was coded as one and married status as two). The mental health score was entered into the model as the dependent variable and marital status, GPA, extroversion, neuroticism, disliking the university, and attachment to the home as the independent variables. Table 3 reports the regression coefficients of variables predicting the mental health score. All the assessed variables were significant except GPA.

The unadjusted and adjusted coefficients of determination were 0.417 and 0.40 in the final regression model, respectively. In other words, 40% of the total variance of mental health was explained by neuroticism, extroversion, disliking the university, attachment to the home, and marital status (Table 3).

5. Discussion

The results of this study showed personality traits and homesickness feeling in university students can affect their mental health. According to the findings, the two personality traits including neuroticism and extroversion were influential on the university students' mental health score. In other words, neurotic students had higher mental health scores, indicating poorer mental health status, while extrovert students had lower mental health scores or better mental health status. This is congruent with the findings of earlier studies (28, 29). Bagherinia et al. showed that personality traits had direct and indirect effects on nurses' mental health (30). In addition, personality traits can affect other aspects of mental health such as life satisfaction and well-being. For example, research showed that students with various states of extroversion, neuroticism, agreeableness, and conscientiousness significantly differed from each other respecting their life satisfaction (31). A study on 400 male and female students also reported that extroversion was positively correlated with well-being and life satisfaction (32). Another study showed that personality traits not only directly affected mental health but also mediated the effects of metacognition or thinking styles on mental health (17). Personality traits were also reported to have significant effects on students' depression (22).

Table 3. The Results of Regression Analysis for the Predictors of Mental Health Scores[a]

Model	B	Standardized Beta	Standard Error	P Value
Constant	8.178		6.083	< 0.181
Neuroticism	1.441	0.462	0.191	< 0.001
Extroversion	-0.615	-0.128	0.284	0.032
Disliking the university	0.619	0.340	0.131	< 0.001
Attachment to the home	-0.346	-0.218	0.112	0.002
Marital status	6.297	0.137	2.751	0.023

[a]R^2 (adjusted) = 0.40.

Our findings also revealed that disliking the university had a positive effect and attachment to the home had a negative effect on the score of mental health. These results are congruent with another study that showed three aspects of homesickness (i.e. adjustment, longing for family, and loneliness) affected the general health score (33). Moreover, a study showed that both subscales of homesickness (i.e. attachment to the home and disliking the university) had significant effects on depression (22). Homesickness has physical, cognitive, emotional, and social manifestations (34) and can increase the risk of physical and mental problems and reduce well-being; it even may be perceived as separation and a mini-grief experience (35).

Although technological advances have provided students with many opportunities to contact their families, they still feel homesickness. Considering the negative effects of the feeling of homesickness on students' academic achievement (36), providing the students with better welfare and educational facilities may reduce their negative feelings towards their educational setting. Moreover, after the students were admitted, they should be supported by university administrators to experience a better entry into the university.

5.1. Conclusions

This study shows that personality traits and homesickness, as well as marital status, can significantly predict students' mental health. Recognizing neurotic, introvert, and homesick students is a key prerequisite for any intervention to improve the mental health of students.

This study was conducted in a newly established university and hence, its findings should be generalized to other students with caution. Future studies in this area need to be conducted on students in different universities and using longitudinal designs in order to assess students' homesickness and mental health status in their course of education.

References

1. Abdel-Khalek AM, Lester D. The association between religiosity, generalized self-efficacy, mental health, and happiness in Arab college students. *Personal Individ Diff.* 2017;**109**:12–6. doi: 10.1016/j.paid.2016.12.010.

2. Satcher D. Mental health: A report of the surgeon general-executive summary. *Profession Psychol Res Pract.* 2000;**31**(1):5–13. doi: 10.1037/0735-7028.31.1.5.

3. Macaskill A. The mental health of university students in the United Kingdom. *Br J Guid Counsell.* 2013;**41**(4):426–41. doi: 10.1080/03069885.2012.743110.

4. Ghamari F, Mohammad Beygi. A. A. F , Mohammad Salehi N. The association between mental health and demographic factors with educational success in the students of Arak Universities. *J Babol Univ Med Sci.* 2010;**12**:118–24.

5. Moradian Sorkhkalaee M, Eftekhar H, Nejat S, Saeepour N, Esmaeel Shemirzadi S. The state of mental health of students of Tehran Medical Sciences University in the Academic Year 2010-2011. *Jorjani Biomed J.* 2012;**14**(2):16–22.

6. Yousefi F, Mohamadkhani M. Investigation of students mental health at Kurdistan University of Medical Science and it related with age, gender and their academic courses. *Med J Mashhad Univ Med Sci.* 2014;**56**(6):354–61.

7. Cook LJ. Striving to help college students with mental health issues. *J Psychosoc Nurs Ment Health Serv.* 2007;**45**(4):40–4. [PubMed: 17477328].

8. Furlong MJ, You S, Renshaw TL, Smith DC, O'Malley MD. Preliminary development and validation of the social and emotional health survey for secondary school students. *Soc Indicators Res*. 2013;**117**(3):1011–32. doi: 10.1007/s11205-013-0373-0.

9. Poorolajal J, Ghaleiha A, Darvishi N, Daryaei S, Panahi S. The prevalence of psychiatric distress and associated risk factors among college students using GHQ-28 questionnaire. *Iran J Public Health*. 2017;**46**(7):957–63. [PubMed: 28845407]. [PubMed Central: PMC5563878].

10. Said D, Kypri K, Bowman J. Risk factors for mental disorder among university students in Australia: Findings from a web-based cross-sectional survey. *Soc Psychiatry Psychiatr Epidemiol*. 2013;**48**(6):935–44. doi: 10.1007/s00127-012-0574-x. [PubMed: 22945366].

11. Ran MS, Mendez AJ, Leng LL, Bansil B, Reyes N, Cordero G, et al. Predictors of Mental Health Among College Students in Guam: Implications for Counseling. *J Couns Dev*. 2016;**94**(3):344–55. doi: 10.1002/jcad.12091.

12. Khademi A, Aghdam AAF. The role of personality traits and resilience on homesickness of college students. *Procedia Soc Behav Sci*. 2013;**82**:537–41. doi: 10.1016/j.sbspro.2013.06.305.

13. Hendrickson B, Rosen D, Aune RK. An analysis of friendship networks, social connectedness, homesickness, and satisfaction levels of international students. *Int J Intercul Relat*. 2011;**35**(3):281–95. doi: 10.1016/j.ijintrel.2010.08.001.

14. Bardelle C, Lashley C. Pining for home: Studying crew homesickness aboard a cruise liner. *Res Hosp Management*. 2017;**5**(2):207–14. doi: 10.1080/22243534.2015.11828346.

15. Thurber CA, Walton E; American Academy of Pediatrics Council on School Health. Preventing and treating homesickness. *Pediatrics*. 2007;**119**(1):192–201. doi: 10.1542/peds.2006-2781. [PubMed: 17200288].

16. Sun J, Hagedorn LS, Zhang Y. Homesickness at college: Its impact on academic performance and retention. *J College Student Dev*. 2016;**57**(8):943–57. doi: 10.1353/csd.2016.0092.

17. Marino C, Vieno A, Lenzi M, Fernie BA, Nikčević AV, Spada MM. Personality traits and metacognitions as predictors of positive mental health in college students. *J Happiness Stud*. 2016:1–15. doi: 10.1007/s10902-016-9825-y.

18. Mesidor JK, Sly KF. Factors that contribute to the adjustment of international students. *J Int Students*. 2016;**6**(1):262–82.

19. Lin JH, Peng W, Kim M, Kim SY, LaRose R. Social networking and adjustments among international students. *New Media Soc*. 2011;**14**(3):421–40. doi: 10.1177/1461444811418627.

20. Lee EJ, Lee L, Jang J. Internet for the internationals: effects of internet use motivations on international students' college adjustment. *Cyberpsychol Behav Soc Netw*. 2011;**14**(7-8):433–7. doi: 10.1089/cyber.2010.0406. [PubMed: 21117984].

21. Peng L, Zhang J, Li M, Li P, Zhang Y, Zuo X, et al. Negative life events and mental health of Chinese medical students: The effect of resilience, personality and social support. *Psychiatry Res*. 2012;**196**(1):138–41. doi: 10.1016/j.psychres.2011.12.006. [PubMed: 22405636].

22. Beck R, Taylor C, Robbins M. Missing home: Sociotropy and autonomy and their relationship to psychological distress and homesickness in college freshmen. *Anxiety Stress Copin*. 2003;**16**(2):155–66. doi: 10.1080/10615806.2003.10382970.

23. Archer J, Ireland J, Amos SL, Broad H, Currid L. Derivation of a homesickness scale. *Br J Psychol*. 1998;**89 (Pt 2)**:205–21. doi: 10.1111/j.2044-8295.1998.tb02681.x. [PubMed: 9644822].

24. Besharat MA, Farhadi M, Gilani B. Investigating the relationship between attachment styles and homesickness. *J Tabriz Univ Psychol*. 2008;**2**:23–47.

25. Ganji H. *[Personality evaluation]*. Tehran: Savalan; 2001. Persian.

26. Yousefi F, Azadi NA, Taymoori P, Khasi B. [The relationship between personality types with trait anger at Kurdistan University of Medical Sciences]. *Zanko J Med Sci*. 2016;**16**(51):45–51. Persian.

27. Taghavi S. Validity and reliability of the general health questionnaire (ghq-28) in college students of Shiraz University. *J Psychosoc Nurs Ment Health Serv*. 2002;**5**(4):381–98.

28. Emami PS, Sabzmeydani P. The relation between personality characteristics and perfectionism with general health of university students. *J Psychol Res*. 2010;**2**(5):95–106.

29. Motlagh Z, Sabzemakan L, Tavassoli E, Shahbazi H. [The relationship between personality traits and general health in the students of Yazd University of Medical Science, Yazd, Iran, 2010]. *Zahedan J Res Med Sci*. 2012;**13**(10):38. Persian.

30. Bagherinia H, Ildarabadi E, Bagherinia F. [Relationship between personality traits and mental health with resilience mediation in nurses]. *J Sabzevar Univ Med Sci*. 2016;**22**(6):1063–70. Persian.

31. Joshanloo M, Afshari S. Big five personality traits and self-esteem as predictors of life satisfaction in Iranian Muslim University Students. *J Happiness Stud*. 2009;**12**(1):105–13. doi: 10.1007/s10902-009-9177-y.

32. Singh S, Lal R. A study of subjective well-being of adolescents in relation to big five factors of personality. *J Psychosocial Res*. 2012;**7**(1):33.

33. Pouraqa Roodbordh FKM, Rezaei S, Kafi SM. [Relationship of the homesickness and perceived social support with the mental health of students]. *Clin Psy Pers Sci Res J Shahed Univ*. 2012;**2**(6):27–36. Persian.

34. Van Tilburg MA, Vingerhoets J, Van Heck GL, Kirschbaum C. Homesickness, mood and self-reported health 1999. *Stress Med*. 1999;**15**:189–96.

35. Stroebe M, Schut H, Nauta M. Homesickness: A systematic review of the scientific literature. *Rev General Psychol*. 2015;**19**(2):157–71. doi: 10.1037/gpr0000037.

36. Thurber CA, Walton EA. Homesickness and adjustment in university students. *J Am Coll Health*. 2012;**60**(5):415–9. doi: 10.1080/07448481.2012.673520. [PubMed: 22686364].