

## Perceived social support, depression, and perceived stress in university students

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### ABSTRACT

Psychological disorders are universally common problems. Social support contributes much to the health of individuals. Focusing upon social support and upon vicissitudes of life can help prevent the depression-induced disorders. The present paper investigated the relationship between perceived social support, depression and perceived stress in university students.

The descriptive-analytical study was carried out on 390 students living in Shahid Beheshti University of Medical Science campus, whom were selected based on a simple random selection method. The related questionnaires of multidimensional scales of perceived social support, Beck's depression, and perceived stress then were distributed during midterm among students to collect the necessary data. Data was fed into SPSS 16 and analysed using ANOVA, Pearson correlation coefficient, independent t-test, Chi-square, and Fisher exact test.

Our results indicated that 49.7 per cent of students suffered from specific degrees of depression. 30.5 per cent of students had given educational progress and employment as sources of stress in living in the campus. The perceived social support scores were  $28.32 \pm 9.56$ , depression,  $12.10 \pm 9.02$ , and for perceived stress was  $26.84 \pm 8.27$ . A significant relationship was shown to be between perceived social support, depression, and perceived stress ( $p < 0.001$ ) The conclusion made in the paper is that considering depression and stress is crucial to the health of the students. Also, forming workgroups to increase social support for students can help alleviates depression and stress in university students.

**Keywords:** perceived social support; depression and perceived stress; university student

### INTRODUCTION

Psychological disorders are common problems throughout the world [1]. Among the disorders, depression is the most prevalent disorder. Research shows that 20 to 25 per cent of people suffer depression sometimes during their lives [2]. Depression is characterized by the feeling of despair, hopelessness, lack of motivation, and the reduced level of self-confidence, and pessimism [3]. It is a neurological-psychological disease not limited to particular time and place and individual, affecting all social ages and groups alike [4]. The research has reported the prevalence of depression among university students as high as 20 to 32 per cent [5], which can contribute to the rise of suicide, addiction,

low self-confidence, with the results of poor educational performance, and collectively, hampers occupational, familial, and social activities, thus inflicting high expenses on society indirectly [6].

Research has indicated that if stress-inducing factors in the environment prevail for a long time, it would result in psychological disorders such as excitement, depression, fear, cardiovascular symptoms, digestive problems, insomnia, headache, lymphadenopathy, and hyper-sweeting [7]. On the other hand, one of the most damaging sides of long-term stressful situation is impairment of thinking and learning power [8]. Psychological health plays an important role in any society's dilemma and

dynamism. Due to the important role played by the university students the society and given the staggering expenses invested in higher education in the country, psychological health of students has been in the focus of attentions during recent decade [9].

The introduction of students to new place of residence exposes them to several stresses including cultural shocks, which could bring about several disorders in the individuals [4]. In fact, disorientation of many of students to campus environment, familial problems, commuting problems, and incompatibility with other students in campus and the paucity of welfare and economic facilities and other problems are among factors inducing stress to the students and thus resulting in poor performance [10].

This group of individuals are exposed to different psychological disorders and variable degrees of in their living environment and separation from their families, course work pressures, semester examinations and other stress-inducing factors, thus they are considered as low risk group, making social programming for them highly important [11]. Different factors contribute to the prevalence of depression. Researchers have cited stress-inducing situations and lower social support as two factors related to depression [12]. They explain the role of social support as stress buffering process. In this process, psychological benefits of social support come from its impact on subjective evaluation of stress factors, adopting effective compatibility modes, the feeling of self-esteem, and individual skills [13]. Social support is defined in terms of enjoying love, care from family members, friends, and other individuals [14]. Studies have found that social support played an important role in keeping individuals' health, with direct impact of decreasing negative stresses from society and environment, and subsequently, on the quality of life [16]. Everett et al believed that individual could conclude based on previous experiment that he or she received social support or he or she did not. If the answer is yes, interactions with social network are enhanced and the vicissitudes of life would be decreased [17]. In general, research indicated that individuals with higher perceived social support and lower interpersonal conflicts would bear stressful situations, face

them effectively, and display less symptoms of depression or mental excitement [13].

Focus upon social support and vicissitudes of life would help prevent the prevalence of depression-related disorders, and it seems that social support functions like a protective shield in stressful situations, thus preventing depression symptoms and or alleviate psychological symptoms [18].

Given the importance of social support and alleviation of stress-inducing factors in cutting depression symptoms, in the present study, we investigated the relationship between perceived social support, depression and perceived stress in students living in Shahid Beheshti University of Medical Sciences campus.

## **MATERIALS AND METHODS**

The descriptive-analytical study was carried out on 390 students living in Shahid Beheshti University of Medical Science campus in 2012, whom were selected based on a simple random selection method. The related questionnaires of multidimensional scales of perceived social support, Beck's depression, and perceived stress then were distributed during midterm among students to collect the necessary data. The Beck's standard questionnaire consisted of 21 questions with points falling in a range of 0 and 63. Based on these scores, depression considered normal in the range of 0-10; mild 11-16; moderate 17-30; severe 31-40; and, highly severe higher than 40. Validity and reliability of the questionnaire measuring symptoms and attitudes based on depression were demonstrated in different studies [19 and 20]. Multidimensional perceived social support scale consisted of 12 specific questions developed by Zimet et al in 1988 [21].

This scale scored from 0 to 4, with any individual scoring between 0 and 48. Higher score, represents higher social support. Validity and reliability of the scale has been measured by Ghaedi et al [22]. To measure the perceived stress, we was used a universal scale developed by Cohen et al in 1983 [23]. Bastani et al has applied the scale in a research on health training in 2005 [24]. A sheet with 14 questions has been used in this study. The answers to questions were scored by a point between 0 and 4 or from zero to very high as descriptors.

The subjects of the study were briefed on the research process and the confidentiality of their provided information and the purpose of the study. Data was fed into SPSS 16 and analysed using ANOVA, Pearson correlation coefficient, independent t-test, Chi-square, and Fisher exact test.

**RESULTS**

The findings of the present study indicated that of 390 subjects, 83 (21.3 per cent) cited using drugs, and 307 (78.7 per cent) had no drugs at all, 54 (13.8 per cent) smoker, 51 (13.1 per cent) used anti-depressants and tranquilizers, and 337 (86.4 per cent) did not use any anti-depressant or tranquilizers. 2 (0.5 per cent) were not provided any answer to this question. 204 students (52.3 per cent) cited more than one source of stress during campus life, and 84 (21.5 per cent) one coursework, 35 (9 per cent) occupational issues, 29 (7.4 per cent) interpersonal relations and family relations, and 20 (5.1 per cent) physical

and psychological status as sources of stress. Of all studied students, 196 (50.3 per cent) were normal in terms of general depression; 86 (22.1 per cent) suffered from mild depression; 91 (23.3 per cent) moderate depression, and 17 (4.4 per cent) severe depression. Table 1 gives the means of perceived stress, perceived social support, and depression scores. According to data provided on Table 2, Pearson’s test of correlation indicated a significant and negative relationship between perceived stress and perceived social support ( $r=-0.33$ ;  $p,0.001$ ). According to Table 3, the mean scores of perceived stress in students with different degrees of depression was  $31.26\pm6.91$ , and with no depression it was  $22.46\pm7.1$ , thus indicating statistically significant difference between tow groups ( $p<0.001$ ). According to Table 4, the mean score of perceived social support in students by varying degrees of depression was  $25.43\pm9.41$ , and with no depression it was  $31.19\pm8.83$ , thus indicating a significant difference ( $p<0.001$ ).

**Table 1.**measures of central tendency and dispersion of perceived stress, perceived social support, and depression

Variable	Least score	Highest score	Mean	Standard deviation
Perceived stress	4	56	26.84	8.27
Perceived social support	0	48	28.32	9.56
Depression	0	58	12.10	9.02

**Table 2.** Relationship between perceived stress and perceived social support

	Perceived stress	Perceived social support	Test results
Perceived stress	1	-0.33	P<0/001
Perceived social support	-0.33	1	

**Table 3.** Relationship between perceived stress and depression

Perceived stress / Depression	Mean	Standard deviation	Test results
Yes	31.26	6.91	P<0.001 t= 12.39
No	22.46	7.1	

**Table 4.** Relationship between depression and perceived social support

Perceived social support / Depression	Mean	Standard deviation	Test results
Yes	25.43	9.41	P<0.001 t= -6/23
No	31.19	8.83	

**DISSCUSSION**

Psychological health of the students is an important issue of student campus life, with the direct impact on society’s development, and is an important condition for optimum performance of the educated labour force. In the present study, 52.3 per cent of the students had

cited more than one source of stress in their campus life, and 30.5 per cent of them cited university performance and employment as their source of stress. Hence both employment and compus life could significant affect the level of stress and mental health status. Akbari et al indicated that university stress-inducing factors

had significantly more impact on students' levels of stress than other non-university factors [7]. Scores for perceived stress was  $26.84 \pm 8.27$ . In Akbari et al this score has been  $16.22 \pm 10.06$  [7]. The findings by Shariati on students of the medicine indicated that 40.7 per cent of students had stress [25]. The prevalence of the stress in Malaysian medical students has been reported as 41.9 per cent [26]. In this study, the mean score for perceived social support was  $28.32 \pm 9.56$ , and higher score mean, better the social support in.

Because the highest score for perceived social support was 48, social support in students was rather lower. Ekochikean et al has reported a social support score of  $28.32 \pm 9.56$  [27]. It seems that difference between social support scores in different studies is attributable to different measurement tools. Our results indicated, that 49.7 per cent of students under study had varying degrees of depression, and this meant that almost half of the students had depression. A study by Najafipour and Yekta Talab has reported prevalence of varying degrees of depression from mild to severe in students in Jahrom University of Medical Science as 45.4 per cent [28]. A research by Mousavi et al reported that 25.63 per cent of subjects had depression [29]. Another study indicated varying degrees of depression in university students [30]. It seemed that difference in statistics could be attributable to various personality traits, different university- and employment-related stresses, and the paucity of leisure time. Most of these studies have been carried out in different place, time and with different methods and tools. In other words, the admission process, the percentage of native students, campus living students, and regulations ruling every campus would impose difference in scores. The present study illustrated that there was a negative and significant correlation between perceived stress and perceived social support ( $r=0.33$ ;  $p<0.001$ ). The findings by Foolandvand et al indicated a significant relationship between stress and social support [31]. Research by Hemati Rad and Sepah Mansour found a significant relationship between stress and social support, with lower stress reported for subjects with higher social support [32].

Delonge et al also reported that supporting individuals in workplace would alleviate the negative impact of source of stress and improve their health [33]. A research by Holtzman and Delonge has pointed to the role of personality traits and social support on adaptation to the environment and alleviation of stress [34]. Therefore, it can be contended that social support has an adjusting role in stress levels, and is a predicting factor of mental health. According to our findings, there was a significant relationship between perceived stress and depression ( $p<0.001$ ), that is, students with depression, reported higher stress. Kiecoit Glaser maintained that long-term severe stress could influence on the ability to adopt in individuals, bring about depression, and inflicting damage on body, decrease the joy of life [35]. The present study revealed a significant relationship between perceive social support and depression ( $P<0.001$ ), that is, individuals receiving less social support, reported higher depression. A research by Chan indicated that there was a negative and significant relationship between mean scores of social support and depression and stress in university students [36]. Dorothy and Lyndall maintained that social support provided mental health, and decreased depression symptoms [37].

## CONCLUSION

Overall, the present study concludes that with increasing social support to university students, and decreasing stress-inducing situations in campus environment, depression and stress could be significantly decreased. Holding regular council sessions for university students and encouraging them to participate in ultra-curricular programs, giant steps should be taken to decrease depression and stress and increasing the level social support for them.

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**REFERENCES**

1. Shafie N, Allahtavakoli M, Rafati F, Kazemi M. Effect of Ramadan Fasting on Mental Health of Nursing Students in Jiroft Nursing College. *Journal of Rafsanjan university of Medical Sciences*. 2007; 6: 73-78. [Full Text in Persian]
2. Gotlib C , Hammen F : *Handbook of depression*. 3rd ed . Newyork, Guliford Press. 2001; PP: 21 . 45.
- 3) kull M . “Risk groups of physical inactivity and relationship of inactivity with mental health of women ,outcomes health promotion” .*J of stress medicine*. 2000; 8(2): 93.
4. Azad marzabadi E. The role of cultural Stresses on mental health. *Proceedings of the Second Seminar on Student Mental Health*. Tarbiat Modares University 2004: 1. [Full Text in Persian]
5. Lotfinia H, Yazdandost R, Asgarnajad AA, Gharagi B, Grocei M. Effectiveness of Problem Solving Therapy among Depressed Students. *Medical Journal of Tabriz University of Medical Sciences & Health Services*. 2009; 31(4): 54-58. [Full Text in Persian].
6. Sharifi Kh, Soki Z, Khademi Z, Hosseinian M, Tagharobi Z. Prevalence of depression and its contributing factors among Kashan medical university students. *Feyz, Journal of Kashan University of Medical Sciences*. 2001; 4(4): 54-58. [Full Text in Persian]
7. Akbari Majid, Nejat AmirHossein, Dastorani SeyedMehdi, Rouhani Armita. aluation of Stress Level and Related Factors among Students of Mashhad Dental School (Iran) in Academic Year of 2008-2009. *Journal of Mashhad Dental School*. 2001; 35(3): 165-176. [Full Text in Persian]
8. Haljin PR, Vitborn SK. *Psychopathology: Clinical viewpoints about psychological disorders*. Translated by: Yahya Seyyed Mohammadi. 1st ed. Tehran: Nashre Ravan 2004. P. 42. [Full Text in Persian]
9. Mesgarani M. Epidemiology of mental disorders in newcomer college students in Zahedan. *Journal of Teb Va Tazkieh*. 2004; 13(2): 67-84. [Full Text in Persian]
10. Omigbodun oo, onibokun Ac, Yusef Bo, OdukogbeAA Omigbidun Ao. Stressors and counseling needs of undergraduate nursing students in Ibadan. *journal / Nurs Education*. 2004; 43 (9): 412-415.
11. Zeighami R, Sharif F, Ayatollahi A, Ashkani H. Stressor factors in nursing students at Shiraz University of Medical Sciences. *Proceedings of the National Seminar on Mental Health in Medical Students*. Tehran 2005: 16. [Full Text in Persian]
12. Lazarus, R.S., Folkman,S. *Stress, coping and adaptation*, New York;springer.1984; pp:83-95.
13. Ebrahimi A, Bolhari J, Zolfaghari F. Stress coping strategies and social support in depressive veterans with spinal cord injury. *Iranian Journal of Psychiatry and Clinical Psychology*. 2002; 8(2): 40-48. [Full Text in Persian]
14. Ali Pour A. The relationship of social support with immune parameters in healthy individuals: Assessment of the main effect model. *Iranian Journal of Psychiatry and Clinical Psychology*. 2006; 12(2): 134-139. [Full Text in Persian]
15. Uchino BN. Social support and health: a review of physiological processes potentially underlying links to disease outcomes. *J Behav Med*. 2006 Aug; 29(4): 377-87.
16. Bandura A, Barbaranelli C, Caprara GV, Pastorelli C. “Multifaceted impact of Self-Efficacy Beliefs on Academic Functioning, *Child Development*. 1996; 67: 1206-1222.
17. Dias Ribeiro de Paula Lima E, Norman EM, de Paula Lima A. Translation and adaptation of the Social Support Network Inventory in Brazil. *J Nurs Scholarsh*. 2005;37(3):258-60.
18. Bakhshani NM, Birashk B, Atef Vahid MK, Bolhari J. Correlation of social support and negative life events with depression. *Iranian Journal of Psychiatry and Clinical Psychology*. 2003; 9(2): 49-55. [Full Text in Persian]
19. Traghi jah S, Navab nejad S, Bolhary J, Kyamanesh A. Comparison of the Effect of group cognitive psychotherapy approach and spiritual approach on the depression of female students in Tehran University. *Counseling Research & Developments*. 2007; 6(21): 111-125. [Full Text in Persian]
20. Mokhtaripour M, Goodarzi Z, Siadat A, Keivanara M. Anxiety, Depression and some of their Demographic Correlates in Students of Isfahan Medical University. *Journal of Research in Behavioral Sciences*. 2007; 5(2): 107-112. [Full Text in Persian]

21. Zimet GD, Dahlen NW, Zimet SG, Farley GK. The multidimensional scale of perceived social support. *Journal of Personality Assessment*. 1988; 52: 30-41.
22. Ghaedi Gh., Yaaghoobi H. A study on the Relationship between Different Dimensions of Perceived Social Support and Different Aspects of Wellbeing in Male and Female University Students. *Armaghane-danesh Bimonthly Journal of Yasuj University of Medical Sciences*. 2008; 13(2): 69-81. [Full Text in Persian]
23. Cohen S, Kamarck T, Mermelstein R. A global measure of perceived stress. *J Health Soc Behav*. 1983; 24: 385 – 396.
24. Bastani F, Hidarnia AR, Kazemnejad A, Vafaei M, Kashani M. A randomized controlled trial of the effect of applied relaxation training on reducing anxiety and perceived stress in pregnant women. *J Midwifery Wom Heal*. 2005; 50(4): 36 – 40. [Full Text in Persian]
25. Shariati M, Yunesian M, Vash JH. Mental health of medical students, a cross-sectional study in Tehran. *Psychol Rep*. 2007; 100(2): 346-54. [Full Text in Persian]
26. Sherina MS, Rampal L, Kaneson N. Psychological stress among undergraduate medical students. *Med J Malaysia* 2004; 59(2): 207-11.
27. Akouchekian Sh., Roohafza H.R., Hasan zadeh A., Mohammad Sharifi H. Relation between Social Support and Coping with Stress in Nurses in Psychiatric Ward. *Journal Of Guilan University Of Medical Sciences*. 2009; 18(69): 41-46. [Full Text in Persian]
28. Najafpour S, Yektatalab SH. The prevalence depression and relationships with academic failure on students of jahrom university medical sciences and its relationship with Academic Failure. *Journal of Jahrom University of medical Sciences*. 2009; 6(2): 27-37. [Full Text in Persian]
29. Mousavi SS, Hajfathali AR, Taghva A, Bakhshi M. Evaluation of mental health of nonmilitary medical students at clinical training grade. *Scientific & Research Journal Of Army University Of Medical Sciences Of The I.R.Iran*. 2007; 5(1): 1127-1132. [Full Text in Persian]
30. Ildar Abadi E, Firouz Kouhi MR, Mazloum SR, Navidian A. Prevalence of depression among students of Zabol Medical School. *Journal of Shahrekord University of Medical Sciences*. 2004; 6(2): 15-21. [Full Text in Persian].
31. Fooladvand K, Farzad V, Shahraray M, Sangari A A. Role of social support, academic stress and academic self-efficacy on mental and physical health. *Contemporary Psychology*. 2009; 4(2): 80-86. [Full Text in Persian]
32. Hemati Rad G, Sepah Mansour M. relationship between stress and social support among Tehran universities students. *Iranian Journal of Psychiatry and Clinical Psychology*. 2008; 2(7): 79-86. [Full Text in Persian]
33. Delonge A, Takis T, Kompler M, Houtman I . Longitudinal research and the demand control – support model. *Journal of Occupational Health Psychology*. 2004; 18: 282-305.
34. Delongis A, Holtzman S. Coping in context the role of stress , social support , and personality in coping. *Journal of Personality*. 2005; 73(6): 131-134.
35. Kiecolt- Glaser JK , Speicher CE, Holiday JE, Glaser R. Stress and the transformation of lymphocytes by Epstein- barr virus. *Journal of Behavioral Medicine* 2002; 7: 1-12.
36. Chan DW. Stress, Self-Efficacy, Social Support, and Psychological Distress Among Prospective Chinese Teachers in Hong Kong. *Educational Psychology*. 2002; 22(5): 557-569.
37. Lyndall S, Dorothy B. The mental health costs and benefits of giving social support. *International Journal of Stress Management*. 2008; 14(4): 370-385.