Original Research Paper

A Study of Mental Health, Perceived Stress, and Self-Esteem among Students in Higher Education

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ABSTRACT

Now a day's mental health has become one of the most critical issues among individuals of all ages. Due to the demanding nature of academic field more and more students in higher education are now experiencing elevated level of health difficulties. The consequences of these problems can be devastating for some individuals (Abouserie, 1994) leading to discontinuation of studies also at times. Therefore, the present research was designed to understand the mental health status and the contributing factors if any for the students to drop out of higher education. For the present study the sample comprised of 200 students, 100 from Ph.D. research programs and 100 from post-graduation with equal number of males and females under each group. The students were randomly selected from Panjab University Chandigarh. The participants were administered the following measures viz., General Health Questinnaire-12 (GHQ-12, Goldberg & Williams, 1988), Perceived Stress Scale (Cohen & Williamson, 1988) and Self-Esteem Scale (Rosenberg, 1965). Results indicate significant differences on mental health among research students and post graduate students.

Keywords: Research Students, Post Graduate Students, Mental Health, Self-Esteem, Perceived Stress

According to the National Institutional Ranking Framework, by Ministry of Human Resource Development (MHRD), Government of India, in Panjab University, Chandigarh, total 20203 students were studying in the under graduate courses during the academic session 2014-15 and 10484 in 2015-16. 14347 were enrolled in post graduate courses in 2014-15 and 6538 in 2015-16. 638 were registered for Ph.D. research programs in 2014-15 and 909 in 2015-16. This statistical picture clearly indicates the variation of 9719 students in undergraduate courses, 7809 in post graduate courses and 171 in Ph.D. research programs in Panjab University (National Institutional Ranking Framework, 2016, 2017). Despite the possible reasons such as academic pressure, tough competition and work stress there could be some negative health

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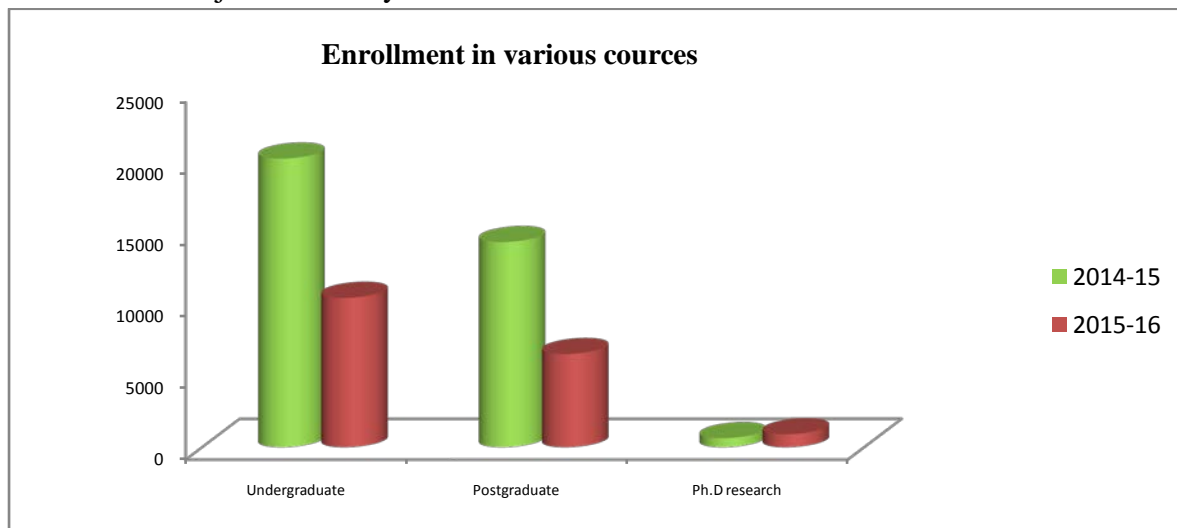[2] Research Scholar, Department of Psychology, Panjab University, Chandigarh, India
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outcomes which could be the possible cause for this decline in enrolment of students in higher education at Panjab University.

Source: MHRD ranking frame work 2016 & 2017

Mental health is a critical factor for the well-being of an individual. Whether it is student life or professional life, without sound mental health it becomes difficult to excel in their respective fields. The nature of education and knowledge become more complex as one moves upward in the academic hierarchy. The academic workload also increases in higher classes. Whether in terms of project reports, assignments or examinations, students have to show their capabilities at various phases of their student life.

The mental health difficulties among students are an issue of concern (Castillo and Schwartz, 2013; Milojevich & Lukowski, 2016)). Researches indicate that students suffer mental health difficulties (Blanco et al., 2008; Milojevich & Lukowski, 2016). Studies also reveal that when compared to individuals of the same age (Roberts et al., 1999; Adlaf et al., 2005; Boujut et al., 2009) and, in general, to any other population (Nerdrum et al., 2006; Blanco et al., 2008; Walsh et al., 2010; Moreira & Telzer, 2015), students suffer more psychological problems.

Students' psychological discomfort can be observed in various mental health problems such as depression, anxiety, stress, and sleeping disorders (Lejoyeux et al., 2011; Schraml et al., 2011; Boulard et al., 2012; Nyer et al., 2013; Petrov et al., 2014; Feld & Shusterman, 2015; Milojevich & Lukowski, 2016). Anxiety as a disorder is seen in about eight percent of children and adolescents worldwide (Bernstein & Borchardt, 1991; Kostanski et al., 2000). Depression is also becoming one of the most common mental health issues among students (Arehart, 2002). Poor problem solving ability, cognitive distortion, family conflict, living away from parents, wrong attribution style, gender issues are all causing mental health difficulties (Becker-Weidman et al, 2009; Smith et al.2009). Mental health problems among students in India are also increasing (Narang 1994; Verma 1998).Deb, Strodl & Sun (2015) conducted a study on 190 school students in Kolkata and reported that 63.5 per cent report mental health issues such as stress and anxiety.

In a sample of 6479 Australian University students, 83.9 per cent reported elevated distress levels on the basis of the Kessler Psychological Distress Scale (K10) administered on them (Stallman, 2010). Results suggest that university student population is at high-risk for developing mental health difficulties. Saleh, Camart and Romo (2017), conducted a study on 483 university students and reported that students were suffering from psychological distress (72.9 percent),anxiety (86.3 percent), and depressive symptoms (79.3 percent) respectively. More than half the sample was also suffering from low self-esteem (57.6 percent), little optimism (56.7 percent), and a low sense of self-efficacy (62.7percent).

Poor mental well-being is also associated with physical disorders (Graziani et al., 2001), low self-esteem (Ditto, & Griffin, 1993; Malle & Horowitz, 1995; Furegato et al, 2006; Saleh 2013) & low level of life satisfaction (Tamini & Mohammady-Far 2009; Nergüz, Oguz & Filiz 2010; Kumaret al., 2013; Sevgi, Temel, & Murat 2013).

There are a number of studies which discuss about mental health and how it affects self-esteem and overall wellbeing among students. But there is a lack of research which compares the students at different academic levels, especially in the Indian context. In order to take remedial measures it is important to compare the students at different levels of academics. The current research intends to work towards the same. Therefore the primary aim of the study is to compare the mental health status, perceived stress and self-esteem among post graduate and research students..

Objectives
- To compare the research students and post graduate students on mental health, perceived stress and self-esteem.
- To study the gender differences on mental health, perceived stress and self-esteem among research students and post graduate students.
- To study the correlates of mental health among students across gender and academic level.

Sample
A sample of 200 students was randomly selected from various faculties of Panjab University, Chandigarh, India. The sample was divided into 2 categories i.e. research students (N=100) and post graduate students (N=100). Equal number of males (N=50) and females (N=50) were included under each group with age ranging between 22-28 years.

Measures
To assess the mental health of the post graduate and the research students, GHQ-12 (Goldberg & Williams, 1988) was used. This is a 12 item scale and each question had 4 responses which were scored as 3-2-1-0. The higher score is the indicator of poor general and psychological health. Scores range from 0-36.

To assess perceived stress, Perceived Stress Scale (Cohen & Williamson, 1988) was used. The scale consists of 10 items and each question had 4 responses which were scored as 0-1-2-3-4. Scores range from 0-40. Higher score is the indicator of more perceived stress.

To assess self-esteem, Rosenberg Self-Esteem Scale (Rosenberg, 1965) was used. It consists of 10 statements with 4 responses for each statement. Each item is to be scored as 1-2-3-4. Total score range from 10-40. Higher score depicts high self-esteem of the respondent.

Design

The variables were measured using standardized scales. Statistical analysis was conducted using SPSS 20. t-test was calculated to assess the mean differences between the groups on all the variables. Correlations among the variables were calculated with the help of Pearson's product moment method.

Procedure

For the present research, primary data was obtained through field survey method using questionnaires for each variable. Editing, scoring and coding were done manually. The data was then processed and analyzed using SPSS. Results obtained in the form of tables are discussed below.

RESULTS

Table-1 Group statistics

	Mean	*Standard Deviation*	*Minimum*	*Maximum*
Mental health	17.17	7.23	0.00	35.00
Perceived stress	24.20	6.55	9.00	36.00
Self-esteem	28.07	5.93	14.00	40.00

Table- 2 t-ratio among research students and postgraduate students

Group		*N*	*Mean*	*Std. Deviation*	*t-ratio*
Mental health	Gp-1	100	21.77	5.97	11.65**
	Gp-2	100	12.57	5.15	
perceived stress	Gp-1	100	29.17	3.38	16.49**
	Gp-2	100	19.23	4.98	
Self-esteem	Gp-1	100	27.78	6.55	0.68
	Gp-2	100	28.35	5.25	

*t value significant at 0.05 level, ** t value significant at 0.01 level
Gp-1 research students, Gp-2 post graduate students

Table-3 t-ratio among male and female students

Group		*N*	*Mean*	*Std. Deviation*	*t-ratio*
Mental health	Gp-1	100	16.59	8.19	1.13
	Gp-2	100	17.75	6.09	
Perceived stress	Gp-1	100	23.35	6.32	1.84
	Gp-2	100	25.05	6.68	
Self-esteem	Gp-1	100	28.73	5.86	1.59
	Gp-2	100	27.40	5.95	

*t value significant at 0.05 level, ** t value significant at 0.01 level
Gp-1 male students, Gp-2 female students

Table-4 Correlation between mental health, perceived stress and self-esteem among total sample

	Mental health	Perceived stress	Self-esteem
Mental health	1	0.56**	-0.41**
Perceived stress	-	1	-0.13
Self-esteem	-	-	1

**. Correlation significant at 0.01 level

*. Correlation significant at 0.05 level

Table-5 Correlation between mental health, perceived stress and self-esteem among research students

	Mental health	Perceived stress	Self-esteem
Mental health	1	0.11	-0.05
Perceived stress	-	1	-0.17
Self-esteem	-	-	1

**. Correlation significant at 0.01 level

*. Correlation significant at 0.05 level

Table-6 Correlation between mental health, perceived stress and self-esteem among post graduate students

	Mental health	Perceived stress	Self-esteem
Mental health	1	0.21*	-0.14
Perceived stress	-	1	-0.02
Self-esteem	-	-	1

**. Correlation significant at 0.01 level

*. Correlation significant at 0.05 level

Table-7 Correlation between mental health, perceived stress and self-esteem among male students

	Mental health	Perceived stress	Self-esteem
Mental health	1	0.56**	-0.40**
Perceived stress	-	1	-0.32**
Self-esteem	-	-	1

**. Correlation significant at 0.01 level

*. Correlation significant at 0.05 level

Table-8 Correlation between mental health, perceived stress and self-esteem among female students

	Mental health	Perceived stress	Self-esteem
Mental health	1	0.58**	-0.09
Perceived stress	-	1	-0.17
Self-esteem	-	-	1

**. Correlation significant at 0.01 level

*. Correlation significant at 0.05 level

DISCUSSION

In table-1, the descriptive findings showed mean $(\overline{x}) \pm$ S.D. values of mental health as 17.17 ± 7.23, stress as 24.20 ± 6.55, and self-esteem as 28.07 ± 5.93. Minimum and maximum mental health scores were 0.00 and 35.00 respectively. Minimum and maximum perceived stress scores were 9.00 and 36.00 respectively. And self-esteem scores were 14.00 and 30.00.

Table- 2 is representing t-ratio among research students and post graduate students on mental health, perceived stress, and self-esteem.

t-ratio on mental health come out to be 11.65** which shows a significant difference on mental health among research students and post graduate students. A perusal of the results reveals a higher mean score for the research students $(\overline{x}=21.77)$ as compared to the post graduate students $(\overline{x}=12.57)$which clearly indicates that research students score higher on mental health. A high score on GHQ-12 is an indicator of poor mental health. It shows post graduate students have better mental health than research students.

t-ratio on perceived stress came out to be 16.49** which indicates a significant difference on perceived stress among research students and post graduate students. Results reveal a higher mean score for research students $(\overline{x}=29.17)$ as compared to the post graduate students $(\overline{x}=19.23)$ which shows that research students perceive more stress than postgraduate students. t-ratio on self-esteem come out to be 0.68 which do not show any significant difference among research students and postgraduate students. However the results indicate a higher mean score for postgraduate students $(\overline{x}=28.35)$ as compared to research students $(\overline{x}=27.78)$.Which shows that post graduate students score higher on self-esteem.

Table- 3 is representing t-ratio male and female students on mental health, perceived stress, and self-esteem.

t-ratio on mental health came out to be 1.13. A perusal of the results reveals a higher mean score for the female students $(\overline{x}=17.75)$ as compared to male students $(\overline{x}=16.59)$. t-ratio on perceived stress came out to be 1.84. Mean score for female students $(\overline{x}=25.05)$ is higher than male students $(\overline{x}=23.35)$. t-ratio on self-esteem came out to be 1.59. Mean score for male students $(\overline{x}=28.73)$ is higher than female students $(\overline{x}=27.40)$. However no significant mean difference emerged on mental health, perceived stress and self-esteem among students with respect to their gender.

In table-4 results indicate that there are significant relationships between mental health & stress scores ($r= 0.56**$), and among mental health & self-esteem ($r= -0.41**$). Which shows mental health is negatively correlated to stress and positively related to self-esteem.

Table-5 is showing coefficients of correlation between mental health and stress, and self-esteem among research students. Results indicate no significant correlation between mental health and perceived stress (0.11) and self-esteem (-0.05).

Table-6 is presenting correlation coefficients between mental health and stress, and self-esteem among post graduate students. Results indicate that there is significant relationship among mental health and perceived stress (0.21*) which reflects that mental health is negatively related with perceived stress. Results showed no significant relation between mental health and self-esteem among post graduate students.

Table-7 is showing coefficients of correlation between mental health & stress, and self-esteem among male students. Result indicates that there are significant relationship among mental health & perceived stress scores (r= 0.56**), and self-esteem scores (r=-0.41**). Which shows mental health is negatively correlated to level of stress and positively related to self-esteem.

Table-8 is showing correlation coefficients between mental health & stress, and self-esteem among female students. Results indicate that there are significant relation among mental health and perceived stress scores (0.58*) which reflects that mental health is negatively related with perceived stress. Results showed no significant relation between mental health and self-esteem scores among female students.

The present research concludes that research students suffer poor mental health; and they perceive more stress. Results revealed no significant gender differences on mental health, perceived stress and self-esteem.

Current study also revealed positive correlation between mental health, perceived stress, and self-esteem among total sample of the study. Among research students, no significant correlation emerged between mental health, perceived stress and self-esteem. Significant correlation emerged between mental health and perceived stress among postgraduate students. Study also revealed significant correlation between mental health, perceived stress and self-esteem among male respondents and between mental health and perceived stress among female respondents.

CONCLUSION AND IMPLICATION

The aim of the current study was to explore how academic levels affect individual's mental health. Students' progress may be affected if they suffer poor mental health. There is a need to monitor mental health of the students and to facilitate them so that they are able to cope with stress and ensure wellbeing. Various studies indicate that in comparison to other students the research students suffer poor mental health (Bayram & Bilgel 2008; Benderma, 2013). Huyn et al. (2007) conducted a study in which 44 percent of the research students have reported mental health problems that are significantly affecting their wellbeing and academic performance.

The mental health problems of the research students affect the individual himself as well as the research institution. Health outcomes become serious enough that they will lead them to quit their research for obtaining Ph.D. degrees (Podsakoff et al., 2007).

As a matter of fact that the development of a nation in every aspect including scientific advancement, social changes, cognitive expansion and growth depends upon the various researches which are being conducted in several research institutions (Rindermann & Thompson, 2011). But some of the research students are no longer willing to pursue a research career because of mental health problems which is an area of concern. Despite the large proportion of individuals who are experiencing mental health difficulties, mental health treatment is extremely underutilized(McIntyre et al., 2014).Kessler et al.(2005)stated that only 30 percent of people experiencing mental health problems and 40 percent of people experiencing severe mental illness, seek treatment. Therefore, the study concludes that it is essential to provide emotional support, create opportunities for students to explore their areas of interest and remove the stigma from taking psychological assistance (Parthi, 2015). Helping them take remedial measures which are easily available in order to resolve their physical and mental health issues will enhance student enrolment, work productivity and improve the research scenario on campuses.

REFERENCES

Adlaf, E. M., Demers, A., & Gliksman, L. (2005). Retrieved from world wide web: https://www.camh.ca/en/research/research_areas/social-epi-research/Documents/ CCS _2004_ report_french.pdf

Al Khatib, S. A. (2013). Satisfaction with life, Self-esteem, gender and marital status as predictors of depressive symptoms among United Arab Emirates college students. *International Journal of Psychology and Counselling*, 5(3), 53-61.

Arehart-Treichel , J. , 2002, Mental illness on rise on college campuses. *Psychiatric News*, 37(6), 6-38.

Bayram, N., & Bilgel, N. (2008).The prevalence and socio-demographic correlations of depression, anxiety and stress among a group of university students. *Social Psychiatry and Psychiatric Epidemiology*, 43(8), 667-672.

Becker-Weidman, E. G., Reinecke, M. A., Jacobs, R. H., Martinovich, Z., Silva, S. G., & March, J. S. (2009).Predictors of hopelessness among clinically depressed youth. *Behavioral and Cognitive Psychotherapy*, 37, 267-291.

Benderma, H. (2013). *Doing a PhD can be a lonely business but it doesn't have to be. The Conversation, Academic rigour, journalistic flair.* Retrieved from world wide web: http://theconversation.com/doingaphdcanbealonelybusinessbutitdoesnthavetobe19192.

Bernstein, G. A., & Borchardt, C. M. (1991). Anxiety disorders of childhood and adolescence: A critical review. *Journal of the American Academy of Child and Adolescent Psychiatry,* 30, 519-532.

Blanco, C., Okuda, M., Wright, C., Hasin, D. S., Grant, B. F., &Liu, S. (2008). Mental health of college students and their non-college-attending peers: results from the National Epidemiologic Study on Alcohol and Related Conditions. *Arch. Gen. Psychiatry*, 65, 1429–1437.

Boujut, E. (2007). *Factors predicting the development of depressive symptoms, organic symptoms, eating disorders and academic failure in first-year students: a prospective study in health psychology* (Doctoral dissertation).

Boulard, A., Quertemont, E., Gauthier, J. M., & Born, M. (2012). Social context in school: Its relation to adolescents' depressive mood. *Journal of Adolescence*, 35(1), 143-152.

Boyd, C. P., Kostanski, M., Gullone, E., Ollendick, T. H., & Shek, D. T. L., (2000). Prevalence of anxiety and depression in Australian adolescents: Comparisons with worldwide data. *The Journal of Genetic Psychology*, 161, 479-492.

Castillo, L. G., & Schwartz, S. J. (2013). Introduction to the special issue on college student mental health. *Journal of Clinical Psychology*, 69(4), 291-297.

Deb, S., Strodl, E., & Sun, J. (2015). Academic stress, parental pressure, anxiety and mental health among Indian high school students. *International Journal of Psychology and Behavioral Sciences,* 5(1), 26-34.

Ditto, P. H., & Griffin, J. (1993). The value of uniqueness: Self-evaluation and the perceived prevalence of valenced characteristics. *Journal of Social Behavior and Personality*, 8(2), 221-240.

Dyrbye, L. N., Thomas, M. R., & Shanafelt, T. D. (2006).Systematic review of depression, anxiety, and other indicators of psychological distress among US and Canadian medical students. *Academic Medicine*, 81(4), 354-373.

Feld, L. D., & Shusterman, A. (2015). Into the pressure cooker: student stress in college preparatory high schools. *J. Adolesc*.41,31–42.

Furegato, A. R. F., Silva, E. C. D., Campos, M. C. D., & Cassiano, R. P. D. T. (2006). Depression and self-esteem among nursing students. *Archives of Clinical Psychiatry* (São Paulo), 33(5), 239-244.

Goldberg, D., Williams, P., & Williams, P. (1988). A user's guide to the General Health Questionnaire. *NferNelson.*

Graziani, Hautekèete, Rusinek, and Servant (2001).Stress Anxiétéet Trouble de l'adaptation. Paris; Milan; *Barcelone: Masson.*

Guney, S., Kalafat, T., &Boysan, M. (2010). Dimensions of mental health: life satisfaction, anxiety and depression: a preventive mental health study in Ankara University students population. *Procedia-Social and Behavioral Sciences*, 2(2), 1210-1213.

Kessler, R. C., Demler, O., Frank, R. G., Olfson, M., Pincus, H. A., Walters, E. E., ...& Zaslavsky, A. M. (2005). Prevalence and treatment of mental disorders, 1990 to 2003. *New England Journal of Medicine,* 352(24), 2515-2523.

Kumar, H., Shaheen, A., Rasool, I., & Shafi, M. (2016). Psychological Distress and Life Satisfaction among University Students. *Journal of Psychology & Clinical Psychiatry* 5 (3).

Lejoyeux, M., Richoux-Benhaim, C., Betizeau, A., Lequen, V., & Lohnhardt, H. (2011). Money attitude, self-esteem, and compulsive buying in a population of medical students. *Frontiers in psychiatry,* 2(13).

Malle, B. F., & Horowitz, L. M. (1995). The puzzle of negative self-views: An exploration using the schema concept. *Journal of Personality and Social Psychology*, 68(3), 470.

McIntyre, D., Rowland, M., Choi, K., & Sarkin, A. (2014).Gender differences in the relationships between mental health symptoms, impairment, and treatment-related behaviors among college students. *Mental Health & Prevention*, 2(3), 80-85.

Milojevich, H.M., & Lukowski, A. F. (2016). Sleep and mental health in undergraduate students with generally healthy sleep habits. *PLoS ONE11*.

Moreira, J. F. G., & Telzer, E. H. (2015). Changes in family cohesion and links to depression during the college transition. *J. Adolesc.* 43, 72–82.

Narang, S. K. (1994). Mental health and school children. PTA Magazine, 32(10), 23-28.

National Institutional Ranking Framework, (2016).Ministry oh Human Resource Development, Government of India. *Ranking of Higher Educational Institutions on performance.* Ranking Report Retrieved from world wide web: https:// www.nirfindia.org/ Ranking.

National Institutional Ranking Framework, (2017). Ministry oh Human Resource Development, Government of India. *Ranking of Higher Educational Institutions on performance.* Ranking Report Retrieved from world wide web: https://www.nirfindia.org/OverallRanking.html.

Nerdrum, P., Rustøen, T., & Rønnestad, M. H. (2006). Student psychological distress: a psychometric study of 1750 Norwegian 1st-year undergraduate students. *Scandinavian Journal of Educational Research,* 50(1), 95-109.

Nyer, M., Farabaugh, A., Fehling, K., Soskin, D., Holt, D., Papakostas, G. I., ...& Mischoulon, D. (2013). Relationship between sleep disturbance and depression, anxiety, and functioning in college students. *Depression and anxiety,* 30(9), 873-880.

Parthi, K. (2015). *Alienation and Depression among Students in Higher Education: An overview*. In K. Singh & N. Kaur (Eds.),Challenges in Higher Education: An Inclusive Perspective. New Delhi:Gaurav Book Centre Private Limited.

Petrov, M. E., Lichstein, K. L., & Baldwin, C. M. (2014). Prevalence of sleep disorders by sex and ethnicity among older adolescents and emerging adults: relations to daytime functioning, working memory and mental health. *Journal of adolescence*, 37(5), 587-597.

Podsakoff, N. P., LePine, J. A., & LePine, M. A. (2007). Differential challenge stressor-hindrance stressor relationships with job attitudes, turnover intentions, turnover, and withdrawal behavior: a meta-analysis. *Journal of Applied Psychology*, 92(2), 438.

Rindermann, H., & Thompson, J.P. (2011).Cognitive capitalism: the effect of cognitive ability on wealth, as mediated through scientific achievement and economic freedom. *Psychological Science*.22, 754–763.

Roberts, R., Golding, J., Towell, T., & Weinreb, I. (1999).The effects of economic circumstances on British students' mental and physical health. *Journal of American College Health,* 48(3), 103-109.

Rosenberg, M. (1965). *Society and the adolescent self-image* (Vol. 11, p. 326). Princeton, NJ: Princeton university press.

Saleh, D., Camart, N., & Romo, L. (2017). Predictors of stress in college students. *Frontiers in psychology*, 8.

Schraml, K., Perski, A., Grossi, G., & Simonsson-Sarnecki, M. (2011). Stress symptoms among adolescents: The role of subjective psychosocial conditions, lifestyle, and self-esteem. *Journal of Adolescence,* 34(5), 987-996.

Serin, N. B., Serin, O., & Özbaş, L. F. (2010). Predicting university students' life satisfaction by their anxiety and depression level. *Procedia-Social and Behavioral Sciences*, 9, 579-582.

Smith, M., Calam, R., & Bolton, C. (2009). Psychological factors linked to self-reported depression symptoms in late adolescence. *Behavioural and Cognitive Psychotherapy*, 37(1), 73-85.

Stallman, H. M. (2010). Psychological distress in university students: A comparison with general population data. *Australian Psychologist,* 45(4), 249-257.

Tamini, B. K., & Far, M. A. M. (2009). Mental Health and life satisfaction of Irani and Indian Student. *Journal of the Indian Academy of Applied Psychology,* 35(1), 137-141.

Verma, S., & Singh, M. B. (1998). Perceived causes of behavior problems among Indian adolescents. *Psycho-lingua*, 28(2), 151-158.

Walsh, J. M., Feeney, C., Hussey, J., & Donnellan, C. (2010).Sources of stress and psychological morbidity among undergraduate physiotherapy students. *Physiotherapy*, 96(3), 206-212.

WHO (2004). *Promoting mental health: concepts, emerging evidence, practice: summary report No.7,* World Health Organisation, New Delhi. Retrieved from world wide web: http://www.who.int/mental_health/evidenc/en/promoting_mhh.pdf.

WHO (repeated 2014). *Mental Health: Strengthening our response* (Fact sheet N0 220). Retrieved from world wide web: http://www.who.int/mediacentre/factsheets/fs323/en/