

Psycho-Geographical Study of Mental Health, Well-Being and Perceived Stress among Students Belonging to Urban and Rural Areas of Chandigarh



Shilpa Singh Rohilla

Research Scholar,
Department of Psychology,
Panjab University,
Chandigarh



Ravinder Singh

Senior Research Fellow,
Department of Geography,
Panjab University,
Chandigarh



Dipti Batra

Assistant Professor,
Chandigarh Group of Colleges,
Landran, Punjab

Abstract

Economic status affects the factors determining mental health (WHO 2011). It is an important factor that influences the purchasing power as well as the quality of life of the people. Economic hardship adversely affects both mental and physical health and daily functioning of the individual. Large differences are observed in income of urban and rural areas. Per capita income for 2011-12 in the country for urban areas was around one lakh where as it was only forty thousand in rural (TOI, 2016). So it will be intrusting to understand how status of mental health varies among rural and urban area. Students being representatives of the family's economic status provide opportunity to study the relationship among the both. So, present study is designed to investigate mental health, well-being, and perceived stress to understand how status of mental health varies amongst students residing in rural and urban area. For this purpose 120 students were randomly selected from various schools of Chandigarh. Of which, 60 belonged to rural areas and 60 students were from within the city. Both the groups consist of equal number of male (N=30) and female (N=30) students. Their age range was 15-17 years. Mental health of students was accessed by GHQ-12 (Goldberg & Williams, 1988) to assess well-being and perceived stress P.G.I wellbeing scale and Perceived Stress Scale by Cohen and Williamson (1988) were used respectively. The results indicate that there are significant differences on mental health and wellbeing among two groups of students.

Keywords: Mental Health, Well-Being, And Perceived Stress

Introduction

The perception of urban varies from one place to other, with time and from country to country. An area can be defined as urban based on administrative criteria, political boundaries, population size, population density, economic functions or the presence of urban characteristics (UNICEF, 2012). At present almost half of the world population lives in urban areas, time is coming when majority of the world's children will live in urban areas (UNICEF, 2012). On the other hand all the other areas which are not covered under urban are termed as rural areas. Large differences are observed in income of urban and rural areas. Per capita income for 2011-12 in the country for urban areas was rupee one lakh whereas same was only forty thousand for rural areas (Times of India, 2016).

Student hood is an important phase of life for an individual. It is the critical period when people gain knowledge, acquire different skills and learn to become capable of leading a respectable life. At this stage an individual may realize his full potential and explore more and more to satisfy her/his curiosity. For the fuller utilization of this stage a good mental health plays a very important role. A good mental health at this stage may serve as a bridge to reach the expectations of self as well as society. The World Health Organization (WHO) constitution says that health is a state of complete physical, mental and social well-being and not merely the absence of disorders or infirmity (WHO, 2014). Some psychologists suggested that mental health is the absence of illness which means a state of wellbeing free from mental health issues, while some suggested that mental health is a state of positive feeling, attitude, behavior, thought processes and active life style.

Mental Health is a fundamental indicator of quality of life. It is a state of wellbeing in which an individual realizes his/her own capabilities, can cope with normal stressors of life, can work productively and fruitfully, and is able to make a contribution to his/her community (WHO, 2004). It is well known that mental health problems are related to deprivation, poverty, inequality and other social and economic determinants of health (WHO, 2014).

Economic hardship is one of the major factors which adversely affect the mental health of the student. Williams & Cheadle (2016) defined economic hardship as the inability to meet expenses. Inability to attain education, to buy study material, and other commodities may lead to a stressful period, low wellbeing and poor mental health. Mental health is accepted as an important indicator of all round growth and development of students (Nanda, 1999).

A mentally healthy student accepts himself with his strong points and his shortcomings. He makes the best use of what he has. He does not allow his personal weakness to interfere with his daily activities and his pursuit of long range goals.

Review of Literature

The study of available literature on the theme indicates that there is a strong impact of economic hardship and mental health of students. Dahiya (2013) reported that students from high income families possess good mental health as compared to the low income families. Roberts et al. (1999) reported that economic difficulties cause poor mental health among students.

The theory known as "good parent" theories (Mayer, 2002) holds that low income hurts children's health not only because poor families have less money to invest in their children, but because low income reduces parents' ability to be "good" parents. Poor parenting hurts the social and emotional development of children, which limits their educational and social opportunities.

Roberts et al. (2010) studied three-hundred sixty British university students and reported that poor mental health was related to financial difficulties among students. Lipman et al. (1994) found that probability of having psychiatric disorders among very low-income children were more than twice than that of higher-income children.

Financial hardship creates a context of stress in which stressors build on one another and contribute to mental health problems for adults and children (Wadsworth et al, 2008). Sometimes perception of stress is more harmful than actual stress. Stress refers to the perceived or actual threat on physical and/or psychological homeostasis of the human body.

Ross et al. (1999) found that seventy percent of the sample in his study reported stress due to financial difficulty. Rates of psychopathology and various types of mental disorders (e.g. depression, anxiety, and stress) are also higher among individuals from low-income families than among individuals from middle and high-income families (Santiago et al., 2012). Number of other researches indicates that

economic factor is one of the major determinants of stress (e.g. Mills & Grasmick, 1992; Boschen, 1996; Moller, 1996; Kelley & Stack, 2000; Shek, 2003; Suhail & Chaudhry, 2004; Tong & Song, 2004).

Well-being among students is one of the important factors for their positive mental health. Subjective well-being refers to how people evaluate their lives, and includes variable such as life-satisfaction and marital satisfaction, lack of depression and anxiety, and positive moods and emotions (Diener, Sub & Oishi, 1997).

Nagpal and Sell (1985) have been reported subjective well-being as a composite measure of independent feelings about a variety of life concerns, in addition to an overall feeling about life in positive and in negative terms, i.e. general well-being and ill-being.

Rashmita et al. (2009) in their study found that youth's perceptions of family economic strain predicts depressive symptoms during later, as compared to earlier, adolescence. Some of the major consequences of economic hardship in student life can be the low subjective wellbeing as well as stress and these can be the strong contributing factor for poor mental health.

Joshua et al. (2014) in his study on mental health presented a comparative analysis of urban and rural areas found that there are few studies focused on finding out evidence of relationship between the place of residence and depression or mental health. Author further found that these are differences in the mental health and depression among rural and urban areas, urban areas being high on mental health.

Lars et al. (2009) also stressed on the fact that although there are ample studies on the mental health but very less is known about associations between features of the context in which individuals live and their mental health. Study suggested that Lack of overlap in contextual associations that contextual influence operates differently in rural and urban settings and those interventions to improve mental health may not translate across settings.

Keran et al. (2013) through their study tried to link mental health with the place of residence of the people. The study found that more urban living environments are associated with higher rates of prescription for psychotropic medication for anxiety, depression and psychosis.

Kalpna (2009) investigated the impact of urbanisation on the mental health of people living in urban areas as well as those left in rural areas. The study points out advantages and disadvantages of urbanisation on mental health of people. She added that urbanization is associated with an increase in mental disorders.

Naomar (2004) reported that psychiatric disorders anxiety and depression are more prevalent among urban women than men and, are believed to be more prevalent in poor than in non-poor urban neighbourhoods.

Kaczmarek et al. (2017) studied the mental health of women living in rural and urban areas. Study compared the mental health status of women and

Asian Resonance

concluded that the educational attainment and employment status were the most powerful independent risk factors for health-related quality of life in both rural and urban women.

Objectives of the Study

The present study is focused on the following research objectives:

1. To study the differences on mental health, well-being and perceived stress among students belonging to rural and urban areas.
2. To study the gender differences on mental health, well-being and perceived stress, among students.
3. To study the correlates of mental health among students.
4. To study the predictors of mental health among students.

Methodology

Sample

The sample for the present research was confined from various schools of Chandigarh city. The data consisted of 120 students, 60 belonged to families which resided in the villages located in the periphery of Chandigarh and 60 students belonged to families that have permanent residence within the city. Both the groups consist of equal number of male (N=30) and female (N=30) students. Their age range was 15-17 years.

Tools Used

1. To assess the mental health: **GHQ-12** (Goldberg & Williams, 1988) was used. It is a highly standardized scale which is being widely used across different cultures. This 12 item scale is a short (takes 5-10 minutes) scale. It is a straightforward tool to assess general and psychological health during the past one month. Each question had 4 responses which were scored as 3, 2, 1 and 0. The higher score is the indicator of poor general and psychological health.
2. To measure Well-being: **PGI General Well-Being Scale** (Verma & Verma, 1989) was used to measure the psychological well-being of the participants. This is a 20 item scale and the subjects are required to tick mark the items applicable to them as they feel 'these days and in the past one month'. The total number of items ticked by the participants makes the total number of well-being score. Thus, the range of score on the scale is 0 to 20. The split-half and test-retest reliability were found to be 0.98 and 0.91 respectively.
3. To measure Perceived stress: Perceived stress Scale

Perceived Stress Scale (Cohen & Williamson, 1988) was used. In this 10 item scale scores range from 0-40. The reliability of the scale is Cronbach alpha 0.78. Scale show correlations with PSS and Stress Measures, Self-Reported Health and Health Services Measures, Health Behavior Measures, Help Seeking Behavior.

Design

The variables were measured using standardized scales. Statistical analysis was

conducted using SPSS 20. t-test was calculated to access the differences between the groups on all the variables. Correlations among the variables were calculated with the help of Pearson product moment method. Further, step wise regression was also used to find out predictors of mental health. Mean and standard deviation was also calculated for the present research.

Procedure

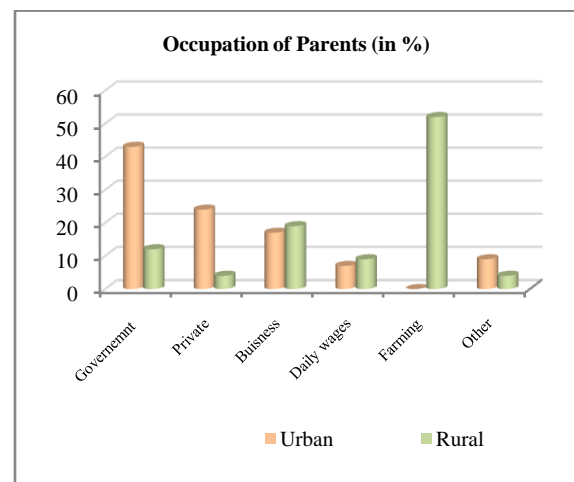
The course of procedure for this research was duly planned before the data collection could be started. The questionnaires were administered and instructions were made clear and it was made sure that the subjects had no doubts. The subjects were given enough time to give their responses. After the data collection scoring was done and Mean, SD and t-value, correlation were calculated. Stepwise regression analysis was applied to find out the predictors of mental health.

Results and Discussion

For the present study one hundred and twenty students belonging to rural and urban areas were examined. Analysis of the data shows that majority of the students from urban areas have parents working in either government or private sector, followed by having some type of their own business. On the other side parents of students from rural areas were mainly engaged in agricultural activities, followed by running small business and working in government sector.

Table-1
Occupation of Parents (in %)

Activity	Government	Private	Business	Daily wages	Farming	Other
Urban	43	24	17	7	0	9
Rural	12	4	19	9	52	4



In table -2, the descriptive findings showed mean (\bar{X}) \pm S.D. values of mental health as 17.53 \pm 6.72, stress as 24.75 \pm 6.38, and well-being as 15.20 \pm 6.28, Minimum and maximum mental health scores were 0.00 and 35.00 respectively. Minimum and maximum stress scores were 10.00 and 36.00 respectively. And scores on mental-health were 5.00 and 20.00.

Table -2
Group statistics

	Mean	Standard Deviation	Minimum	Maximum
Mental health	17.53	6.72	0.00	35.00
Stress	24.75	6.38	10.00	36.00
Well-being	15.20	6.28	5.00	20.00

Table-3
t-ratios of Students Belonging to Urban and Rural Areas

Variables	N	Mean	Std. Deviation	t
Mental health:				
Urban	60	10.00	4.96	15.69**
Rural	60	23.98	4.77	
Subjective well-being:				
Urban	60	14.65	3.56	9.01**
Rural	60	9.18	3.07	
Perceived Stress:				
Urban	60	15.38	5.17	8.83**
Rural	60	25.13	6.82	

*t value significant at 0.05 level, ** t value significant at 0.01 level

The obtained results as shown in table-3 indicate that significant difference emerged on mental health, Subjective wellbeing and perceived stress among students belonging to the urban and rural areas. Those belonging to the urban group possess lower scores on mental health as compared to those belonging to the rural groups (t=15.69**, M Urban=10.00, M Rural= 23.98). A high score is indicative of poor mental health. Thereby, suggesting that the students in rural areas suffer poor mental health. Significant results are also emerged on subjective wellbeing for the students belonging to rural and urban areas. Those belonging to the urban areas possess higher scores on subjective wellbeing as compared to those belonging to the rural areas (t=9.01**, M Urban= 14.65, M Rural= 9.18). Significant results emerged on perceived stress. Students belonging to the urban areas report lower scores on perceived stress as compared to those belonging to the rural areas (t=8.83**, M Urban= 15.38, M Rural= 25.13).

Table-4
t-ratios of Males and Females Belonging To Urban area Families

Variables	N	Mean	Std. Deviation	t
Mental health:				
Males	30	9.40	4.69	0.99
Females	30	10.67	5.22	
Subjective well-being:				
Males	30	15.83	3.22	.71*
Females	30	13.47	3.54	
Perceived Stress:				
Males	30	14.00	4.92	2.13*
Females	30	16.77	5.13	

*t value significant at 0.05 level, ** t value significant at 0.01 level

Table-4 reflects no significant results on mental health among males and females belonging to urban areas (t=0.99, M males= 9.40, M females = 10.67). Significant results emerged on subjective wellbeing among students belonging to the urban areas. Males are higher on subjective wellbeing as compared to the females (t=2.71*, M males=15.83, M females=13.47). Significant results are also emerged on perceived stress dimension among students belonging to urban areas. Males possess lower scores on perceived stress as compared to females (t=2.13*, M males=14.00, M females =16.77).

Table-5
t-ratios of Students Belonging To Rural Area Families

Variables	N	Mean	Std. Deviation	t
Mental health:				
Males	30	24.73	4.95	1.22*
Females	30	23.23	4.55	
Subjective well-being:				
Males	30	8.83	3.46	0.88
Females	30	9.53	2.64	
Perceived Stress:				
Males	30	25.50	6.42	0.41
Females	30	24.77	7.28	

*t value significant at 0.05 level, ** t value significant at 0.01 level

In table-5 significant results emerged on mental health dimension among students belonging to rural areas. Males possess higher scores on mental health as compared to females (t=1.22*, M males=24.73, M females = 23.23). No significant results emerged on the subjective wellbeing dimension among students belonging rural areas (t=.88, Males = 8.83, M females= 9.53) as well as on the perceived stress dimension among students belonging to rural areas (t=.41, M males= 25.50, M females= 24.77).

Table-6
Correlation between Mental Health, Stress, Well-Being

Pearson Correlation between variables	Mental health	Stress	Well-being
Mental Health	1	0.56**	-0.46**
Stress	-	1	-0.55**
Well-being	-	-	1

*t value significant at 0.05 level, ** t value significant at 0.01 level

Table-6 shows the correlation coefficients between mental health, stress and well-being scores. Results indicate that there were significant relationship between mental health and stress (r= 0.56**), mental health and well-being (r= -0.46**) and stress and well-being (r=-0.55**).

Table-7
Showing F Value

Model		F	Sig.
1	Regression	51.60	0.00 ^b
	Residual		
	Total		
2	Regression	30.55	0.00 ^c
	Residual		
	Total		

a. Dependent variable: mental health

b. Predictors: (constant), Perceived stress

c. Predictors: (constant) Perceived stress, well-being

Table-7 showing F value significant for stress and well-being (F= 30.55, P <0.01). In other words it can be stated with a confidence of 99% well-being and perceived stress can be the predictors of mental health among students.

Table-8
Showing Model Summary

Model	Multiple R	R Square	Adjusted R Square	Std. Error of the Estimate	Square Change	Sig. F Change
1	0.56 ^a	0.31	0.28	5.67	0.29	0.00
2	0.58 ^b	0.33	0.31	5.54	0.05	0.01

a. Predictors: (constant), Perceived stress

b. Predictors: (constant), Perceived stress, well-being

In table-8 the coefficient of determination (R) in 2nd model comes out to be 0.58, R² = 0.33, adjusted R² =0.31 and significant F change = 0.01. Thus, it can be concluded that 33.0% of mental health prediction among students can be made by stress and well-being.

Table-9
Showing Regression Coefficients

Model		Un-standardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	β ₀	3.29	2.05		1.56	0.12
	Perceived stress	0.55	0.07	.56	7.09	0.00
2	β ₀	3.41	2.04		1.64	0.10
	Perceived stress	0.44	0.08	.41	4.69	0.00
	Well-being	0.25	0.09	.25	2.55	0.01

Dependent variable: mental health

Likewise table-9 reveals that the beta coefficient (β) represents perceived stress (0.44) and well-being (0.25) both are good predictors of mental health among students.

The research indicates that students from rural areas suffer poor mental health; they are lower on subjective well-being and higher on perceived stress than those who belong to urban areas. Results

also revealed that males from urban areas are higher on subjective well-being and lower on perceived stress. Males from rural areas suffer from poor mental health. No significant differences emerged on mental health among males and females from urban areas also on subjective wellbeing among males and females from rural areas. Results also found that there is no significant difference on perceived stress among males and females from rural areas.

Conclusion

The present study concludes that students' progress is affected if there is unavailability of goods and services and also if they are unable to fulfill the monetary requirements of their life. There is a need to monitor students' mental health and to facilitate them so that they are able to cope with stress and ensure wellbeing. The study also supports the fact that economic hardship adversely affects the mental health and wellbeing among students. It is one of the major precipitant factors for perception of stress also.

References

1. Boschen, K. A. (1996). *Correlates of life satisfaction, residential satisfaction and locus of control among adults with spinalcordinjuries. Rehabilitation Counseling Bulletin*, 39, (4), 120-244.
2. Breslau, J. Marshall, G. N., Pincus, H. A., & Brown, R. A. (2014). *Are mental disorders more common in urban than rural areas of the United States?, Journal of Psychiatric Research*, 56, 50-55.
3. Cohen, S. & Williamson, G. (1988). *Perceived Stress in a Probability Sample of the United States. Spacapan, S. and Oskamp, S. (Eds.) the Social Psychology of Health. Newbury Park, CA: Sage.*
4. Dahiya, R.L. (2013). *A study of mental health and socioeconomic status among youth. Journal of Social Science and Management*, 3(6).
5. Diener, E. Suh, E.M., Lucas, R.E., & Smith H.L. (1999). *Subjective well-being: Three decades of progress. Psychological Bulletin*, 125, 276-302.
6. Diener, E., Sub, E., & Oishi, S. (1997). *Recent findings on subjective well-being. Indian*
7. Dimple & Singh, R. (2014). *Land Use and Land Cover Change along Shivaliks Between River Ghagghar and Yamuna. Climate Change and Biodiversity, Proceedings of IGU Rohtak Conference*, 1, 139.
8. Filho, N.A. (2004). *Social Inequality and Depressive Disorders in Bahia, Brazil: Interactions of Gender, Ethnicity, and Social Class. Social Science and Medicine*, 59 (7), 1339-53.
9. Goldberg, D. P., & Williams, P. (1988). *A Users' Guide to the General Health Questionnaire. Nfer-Nelson, Basingstoke.*
10. Kaczmareka, M., Bogalskab, J.P., Kwa ´sniewskic, W., Kotarskic, J., Nowakowskad, H. & Józefiakea, A.G. (2017). *The association between socioeconomic status and health-related quality of life among Polish postmenopausal women from urban and rural communities.*

- HOMO - Journal of Comparative Human Biology* 68, 42–50.
11. Kelley, T. M. & Stack, S. A. (2000). Thought recognition, locus of control and adolescent well-being. *Adolescence*, 35 (139), 531-551.
 12. Lazarus, R. S., & Folkman, S. (1984). *Stress, Appraisal, and Coping*. New York: Springer
 13. Lipman, E.L., Offord, D.R. and Boyle, M.H. (1994). Economic Disadvantage and Child Psychosocial Morbidity. *Canadian Medical Association Journal*, 151(4), 431–37.
 14. Mayer, S.E. (2002). The influence of Parental Income on Children Outcomes. Knowledge Management Group, Ministry of Social Development, TeMantuWharahiatoOra. Retrieved from World Wide Web: <https://www.msd.govt.nz/documents/about-msd-and-our-work/publications-resources/research/influence-parental-income/influence-of-parental-income.pdf>
 15. McKenzie, K., Murray, A., & Booth, T. (2013). Do urban environments increase the risk of anxiety, depression and psychosis? An epidemiological study. *Journal of Affective Disorders* 150, 1019–1024.
 16. Mills, R. J. & Grasmick, H. G. (1992). The effects of gender, family satisfaction and economic strain on psychological wellbeing. *Family Relations*, 41(4), 440-446.
 17. Moller, V. (1996). Life satisfaction and expectations for the future in sample of university students: A research note. *South African Journal of Sociology*, 27(1), 109-125.
 18. Nagpal, R. & Sell, H. (1985). Subjective Well-being, SEARO Regional Health Paper.
 19. Nanda, A.K. (1999). Mental health: Conceptual Frame-work, *Darshana International*, 29(4), 56-61.
 20. Peterson, L.E., Tsai, A.C., Petterson, S. & Litaker, D.G. (2009). Rural– urban comparison of contextual associations with self-reported mental health status. *Health & Place* 15, 125– 132.
 21. Rashmita, S. M., Aprile, D. B., Connie, S.T. & Su, Y.K. (2009). Family Economic Stress and Academic Well-being among Chinese-American Youth: The influence of adolescence' perception of economic strain. *Journal of Family Psychology*, 23(3), 279-290,
 22. Roberts, R., Golding, J., Towell, T., & Weinerb, I., (1999). The Effect of Economic Circumstances on British Students' Mental and Physical Health. *Journal of American College Health*, 48 (3).
 23. Ross, S.E., Niebling, B.C., & Heckert, T.M. (1999). Sources of Stress among College Students. *College Student Journal*, 33 (2).
 24. Santiago, C.D., Etter, E.M., Wadsworth, M.E., Raviv, T. (2012). Predictors of responses to stress among families coping with poverty-related stress. *Anxiety Stress Coping*, 25 (3),
 25. Schneider, A.A. (1991). *Personal Development and Mental Health*. *Psychological Studies*, 36 (3).
 26. Shek, D. T. L. (2003). Economic stress, psychological well-being and problem behavior in Chinese adolescents with economic disadvantage. *Journal of Youth and Adolescence*, 32(4), 259-266
 27. Singh, R. (2016). Land Transformation on the Northern Periphery of Planned City of Chandigarh: A Study Based On Remote Sensing and GIS Technology. *Online International Interdisciplinary Research Journal*, 4(4), 86-100.
 28. Srivastava, K. (2009). Urbanization and mental health. *Industrial Psychiatry Journal*, 18 (2), 75–76.
 29. Suhail, K. & Chaudhry, H. R. (2004). Predictors of subjective well-being in an eastern Muslim culture. *Journal of Social and Clinical Psychology*, 23 (3), 359-376.
 30. Tong, Y. & Song, S. (2004). A study on general self-efficacy and subjective well-being of low SES college students in a Chinese university. *College Student Journal*, 38 (4), 637-643.
 31. UNICEF (2012), *The State of the World's Children, 2012, Children in an Urban World*. Retrieved from world wide web: https://www.unicef.org/sowc2012/pdfs/SOWC%202012-Main%20Report_EN_13Mar2012.pdf
 32. Verma, S.K. & Verma, A. (1989). PGI General Wellbeing Measure. Lucknow: Ankur Psychological Agency.
 33. Wadsworth M.E., Raviv, T., Reinhard, C., Wolff, B., Santiago, C.D., & Einhorn, L. (2008). An indirect effects model of the association between poverty and child functioning: the role of children's poverty-related stress. *J Loss Trauma*. 13, 2-3,
 34. WHO (2004). *Promoting mental health: concepts, emerging evidence, practice: summary report No. 7*, World Health Organisation, New Delhi. Retrieved from: http://www.who.int/mental_health/evidence/en/promoting_mhh.pdf
 35. WHO (repeated 2014). *Mental Health: Strengthening our response (Fact sheet N^o 220)*.
 36. Williams, D. T., & Cheadle, J. E. (2016). Economic Hardship, Parents' Depression, and Relationship Distress among Couples With Young Children. *Society and mental health*, 6 (2), 73-89.