

Home Environment, Mental Health and Academic Achievement among Hr. Secondary School Students

Bandhana, Darshana P.Sharma
KCS College of Education (Women), Jammu
*E-mail:bandhana1@gmail.com

Abstract

The impact of home environment and academic achievement on mental health was investigated on 12th grade higher secondary school students sample consisting of 300 participants, 150 of whom were females and 150 were males. The data was collected by Home Environment Inventory developed and validated by Dr. Karuna Shankar Misra Prof. & head, department of Education, Allahabad University, Allahabad and Mental Health Battery which was developed and validated by Arun Kumar Singh and Alpana Sen Gupta. Data collected was analyzed using mean, standard deviation and Three-Way ANOVA (2x2x2 Factorial Experiment). Results revealed that mean value of mental health of girls is 74.76 and boys is 70.76. Therefore, this was revealed after analyses that the mean value of mental health of girls is more in comparison to boys.

Keywords: Home environment, mental health, higher secondary school students

Introduction

Mental health is perceived as a positive source contributing to asset development individually, socially, and economically (WHO, 2004). The World Health Organization conceptualized mental health separate from mental ill-health and defined the concept as: a state of well-being in which the individual realizes his or her own abilities, can cope with the normal stresses of life, can work productively and fruitfully, and is able to make a contribution to his or her own community. On the other hand better mental health outcomes in adolescents are characterized by greater adaptation in family, society, and school environment, improved quality of life (Hoagwood *et al.*, 1996; USDHHS, 1999). The rise in mental health issues in adolescents is a growing concern in the school and for the community counsellors, and educators. Research has revealed an increasing incidence of depression and other mental health issues among youth (U.S. Department of Health and Human Services, 1999, Cash, 2003). As the aim of education is to provide healthy personality for individuals and one of the important ingredients of education, the role of mental health is crucial not only in formal education centers but also, in informal education –such as family and societies. Various studies have been carried out in different parts of the world to identify factors that impact on students' mental health since poor mental health has been recognised as the leading cause of suicidal behaviour, a sense of helplessness (Kay, Li, Xiao, Nokkaew & Park, 2009) and lower academic achievements (Puskar & Bernardo, 2007). According to previous studies, factors that influence mental health are demographic backgrounds such as age and gender (Yen, Hsu, Liu, Huang, Ko, Yen & Cheng, 2006), academic field and academic year (Dahlin, Joneberg, & Runeson, 2005), personality traits (Goodwin & Friedman, 2006) and loneliness (Wang, Yuen & Slaney, 2009). (Turner 1971) reported that human mental health has not been a focus of attention until the beginning of the 20th century with the formation of Mental Hygiene Movement by Clifford Beers in 1908. Home environment is the most important institution for the existence and continuance of human life and the development of various personality traits. An ideal home environment is one where there is proper reward to strengthen the desired behavior, a keen interest in and love for the child, provision of opportunities to express its views freely, where parents put less restrictions to discipline the child, not preventing the child from acting independently and not continuing infantile care, optimum use of physical and affective punishment, where the children are not compelled to act according to parental

desires and expectations. Studies show that high parental involvement leads to high achievement and low parental involvement leads to low achievement (Ahuja and Goyal 2005). Family being the first and major agency of socialization plays a pivotal role in styling child's life. It has been shown that most of children who are successful and well adjusted come from families where wholesome relationships exist between children and their parents. On the other hand, Steinberg *et al.* (1992) have reported that parental involvement is much more likely to promote adolescent school success when it occurs in the context of an authoritative home environment. Lakshmi & Arora (2006) claims parental acceptance and encouragement are positively related with academic school success and competence and studied the impact of home environment on the scholastic achievement of children and found that good quality of home environment had significant positive correlation with 'high' level of scholastic achievement in boys than among girls. Shek (1997) has reported that family factors play an important role in influencing the psychosocial adjustment, particularly the positive mental health, of Chinese adolescents. Whether parents are involved in and support their adolescents' school life can directly affect their personal and social development as well as their academic success (Gecas & Schwalbe, 1986; Harris & Goodall, 2008; Jeynes, 2007). Indeed, a substantial body of literature documents the existence of such a relationship (Christenson, Rounds & Gorney, 1992; Epstein, 1992; Izzo et al., 1999; Keith et al., 1998). Kim's (2002) research findings indicate that parental involvement makes a positive contribution to children's educational achievement. Epstein (1992) argues that "students at all grade levels do better academic work and have more positive school attitudes, higher aspirations, and other positive behaviors if they have parents who are aware, knowledgeable, encouraging, and involved"

Academic achievement is defined by Crow and Crow (1969) as the extent to which a learner is profiting from instruction in a given area of learning or in other words, achievement is reflected by the extent to which skill and knowledge has been imparted to him. Academic achievement also denotes the knowledge attained and skill developed in the school subject, usually designed by test scores. The level of achieving is how far a student succeeds in a particular exam or standardized test (Reber, 1985).

Objectives of the study

1. To find significant sex differences in mental health among secondary school students.
2. To find significant differences in mental health among secondary school students with good and poor home environment.
3. To find significant differences in mental health among secondary school students with high and low academic achievement.
4. To find significant interaction between sex and home environment among secondary school students with mental health as dependent variable.
5. To find significant interaction between sex and academic achievement among secondary school students with mental health as dependent variable.
6. To find significant interaction between home environment and academic achievement among secondary school students with mental health as dependent variable.
7. To find significant interaction among sex, home environment and academic achievement among secondary school students with mental health as dependent variable.

Hypothesis of the study

1. There will be no significant sex differences in mental health among secondary school students.
2. There will be no significant differences in mental health among secondary school students with good and poor home environment.
3. There will be no significant differences in mental health among secondary school students with high and low academic achievement.

4. There will be no significant interaction between sex and home environment among secondary school students with mental health as dependent variable.
5. There will be no significant interaction between sex and academic achievement among secondary school students with mental health as dependent variable.
6. There will be no significant interaction between home environment and academic achievement among secondary school students with mental health as dependent variable.
7. There will be no significant interaction among sex, home environment and academic achievement of secondary school students with mental health as dependent variable.

Method:

Home Environment Inventory developed and validated by Dr. Karuna Shankar Misra Prof. & head, department of Education, Allahabad University, Allahabad. The Home Environment Inventory is an instrument designed to measure the psychosocial climate of home as perceived by children. It provides a measure of the quality and quantity of the cognitive, emotional and social support that has been available to the child within the home. HEI has 100 items belonging to ten dimensions of home environment. The ten dimensions are (A) control, (B) Protective (C) Punishment (D) Conformity (E) Social isolation (F) Reward (G) Deprivation of privileges (H) Nurturance (I) Rejection and (J) Permissiveness. Each dimension has ten items belonging to it. The instrument requires pupils to tell the frequency with which a particular parent – child interaction behaviour has been observed by them in their homes i.e. he/she is requested to tell whether a particular parental behavior (as mentioned in an item) occurs- ‘Mostly’, ‘often’, ‘sometimes’, ‘least’, and ‘never.’ There are five cells belong to five responses. Assign 4 marks to ‘mostly’, 3 marks to ‘often’, 2 marks to ‘sometimes’, 1 mark to ‘least’, and 0 mark to ‘never’ responses. Count the marks assigned to A, B, C, D, E, F, G, H, I and J dimension. There is no time limit for this tool, but on an average participant took 30 minutes to complete the tool.

Mental Health Battery (MHB): In the study the investigator employed English version of Mental Health Battery which was developed and validated by Arun Kumar Singh and Alpana Sen Gupta (1971). MHB intends to assess the status of mental health of persons in the age range of 13 to 22 years. As it is a battery of six tests. There are set of 130 items in the MHB with six dimensions—emotional stability (ES), overall adjustment (OA), Autonomy (AY), security – Insecurity (SI), self -concept (SC) and Intelligence (IG) this battery is satisfactorily reliable and valid.

Academic Achievement

In the present investigation academic achievement constitutes the aggregate marks obtained by the subjects in their 10th class examination.

Population

In the present study the students studying in class XII of higher secondary schools located in the Jammu City constitute the population and a representative sample from this population has been selected by the investigator. The sample of the present investigation was drawn from five schools located in Jammu city. The total sample of the students in the present research is 300 consisting of 150 boys and 150 girls.

Results

Table 1 displays the results of our comparisons

Three Way ANOVA (2x2x2) Factorial Design for Mental Health.

Source of Variation	SS	df	MS	$F = \frac{MS}{df}$	Significant
Sex (A)	320	1	320	2.8	Sig. at .01 level
Home Environment (B)	105.8	1	105.8	0.9	Insig. at 0.05 level
Academic Achievement (C)	61.25	1	61.25	0.54	Insig. at 0.05 level
Sex x Home Environment (AxB)	8.45	1	8.45	0.07	Insig. at 0.05 level
Sex x Academic Achievement (AxC)	156.8	1	156.8	1.37	Insig. at 0.05 level
Home Environment x Academic Achievement (BxC)	7.2	1	7.2	0.06	Insig. at 0.05 level
Sex x Home Environment x Academic Achievement (AxBxC)	120.02	1	120.02	1.05	Insig. at 0.05 level
Within	8227.4	72	114.27		
		79			

Combined Mean of Mental Health in Different Groups with N = 20 in each Cell.

Group	Sex		Combined Mean
	Boys	Girls	
Mental Health	70.76	74.76	72.78

Perusal of table 1 revealed that the value of F for the variable of sex is 2.8 which is significant at 0.01 level of significance for df 1 and 72. It can thus be said, that there are significant sex differences in mental health among secondary school students. Furthermore, table 2 revealed that girls are more mentally healthy in comparison to boys. The results were in line with Sanwal et. al (2006) who inferred that girls were mentally healthier than boys as they have more patience, tolerance and were better adjusted than boys in their environmental set up.

Hence the hypothesis that there will be no significant sex differences in mental health among secondary school students was rejected.

Review of table also revealed that value of F for Home Environment is 0.9 which is insignificant at 0.05 level of significance for df 1 and 72. It can thus be said, that there are insignificant differences in mental health among secondary school students with good and poor home environment. Hence the

hypothesis that there are no significant differences in mental health among secondary school students with good and poor home environment was accepted. Shrivastava and Sharma (2008) revealed that healthy and good parent child relationship in the family greatly influences the mental health of adolescents in various aspects.

Again, review of table 1 also revealed that value of F for the variable Academic Achievement is 0.54 which is insignificant at 0.05 level of significance for df 1 and 72. It can thus be said, that there are insignificant differences in mental health among secondary school students with high and low academic achievement. Hence the hypothesis that there will be no significant differences in mental health among secondary school students with high and low academic achievement was accepted. Results of the study are in contrast to the study conducted by Kasinath (2003) who revealed that there is a significant effect of mental health on academic achievement.

Furthermore, perusal of table 1 also revealed that value of F for the interaction between sex and home environment with mental health as the dependent variable is 0.07 which is insignificant at 0.05 level of significance for df 1 and 72. It means the variable of home environment and sexes are independent of each other with mental health as the dependent variable among hr.secondary school students. Hence the hypothesis that there will be no significant interaction between sex and home environment among secondary school students with mental health as dependent variable was accepted.

Again review of table 1 revealed that value of F for the interaction between sex and academic achievement is 1.37 which is insignificant at 0.05 level of significance. It means that sex and academic achievement are independent of each other with mental health as the dependent variable among hr. secondary school students. Hence the hypothesis that there will be no significant interaction between sex and academic achievement among secondary school students with mental health as dependent variable was accepted.. Thus, the results were not in conformity with Yousefi (2010) and Fergusson and Harwood (1997) who claims there is a significant impact of home environment and sex on mental health.

Furthermore, review of table 1 revealed that value of F for the interaction between home environment and academic achievement is 0.06 which is insignificant at 0.05 level of significance. It means the variable of home environment and academic achievements are independent of each other with mental health as the dependent variable among secondary school students. Hence the hypothesis that there is no significant interaction between home environment and academic achievement among secondary school students with mental health as dependent variable is accepted. Muola, reveals that academic achievement of the individual to some extent dependent on the nature of their home environment.

Review of table 1 revealed that value of F for the interaction among sex, home environment and academic achievement is 1.05, which is insignificant at 0.05 level of significance. It means the variable of home environment, sex and academic achievements are independent of one another with mental health as the dependent variable among hr. secondary school students. Hence, the hypothesis that there will be no significant interaction among sex, home environment and academic achievement among hr. secondary school students with mental health as dependent variable was accepted.

Conclusion

The main purpose of the present study was to see the impact of home environment, academic achievement on mental health of hr. secondary school students. Maintaining a healthy attitude involves not only the physical health, psychological development, the shape of the good moral character and the cultivation of the perfect personalities of majorities of students but also the overall quality of the talents, for the full realization of higher education goals and the smooth progress of modernization construction and progressive development of society. This is important since previous studies indicate that poor mental health status have a negative effect on students' academic performance (Puskar & Bernardo, 2007), and promote negative behaviour and hopelessness (Kay *et al.*, 2009). Rohner and Britner's (2002) longitudinal evidence reveals that parental rejection tends everywhere to precede the development of a variety of mental health problems, such as depression and depressed affect, conduct problems and behavior disorders, and substance abuse. Therefore, this information is important to community counsellors, teachers, school

counselors, and parents; all of whom are concerned with both the academics and social-spiritual development of children and with the climate of children's learning environment.

References:

- Ahuja M, Goyal S 2005. Study of achievement and aspirations of adolescents in relation to parental involvement. *Indian Journal of Applied Psychology*, 42: 19-26.
- Christenson, S., Rounds, T. & Gorney, D. (1992). Family factors and student achievement: An avenue to increase students' success. *School Psychology Quarterly*, 7 (3), 178-206.
- Crow, L.D., & Crow. (1969). *Adolescent development and adjustment*. Mc Graw-Hill Book Company: United States
- Dahlin, M., Joneberg, N. & Runeson, B. (2005). Stress and depression among medical students: a cross-sectional study. *Medical Education*, 39, 594-604.
- Epstein, J. (1992). School and family partnerships. In M. Alkin (Ed.), *Encyclopedia of Educational Research* (6th ed.), (pp. 1139-1151). New York: MacMillan
- Gecas, V. (1971). Parental behavior and dimensions of adolescent self-evaluation. *Sociometry*, 34, 466-482
- Goodwin, R. D. & Friedman, H. S. (2006). Health Status and the Five-factor Personality Traits in a Nationally Representative Sample. *Journal of Health Psychology*, 11(5), 643-654.
- Harris, A., & Goodall, J. (2008). Do parents know they matter? Engaging all parents in learning. *Educational Research*, 50, 277-289.
- Hoagwood, K., Jensen, P. S., Petti, T., & Burns, B. J. (1996). Outcomes of mental healthcare for children and adolescents: A comprehensive conceptual model. *Journal of the American Academy of Child & Adolescent Psychiatry*, 35 (8), 1055 -1063
- Izzo, C. V., Weissberg, R. P., Kaspro, W. J. & Fendrich, M. (1999). A longitudinal assessment of teacher perceptions and parent involvement in children's education and school performance. *American Journal of Community Psychology*, 27, 817-839.
- Jeynes, W. H. (2007). The relationship between parental involvement and urban secondary school student academic achievement: A meta-analysis. *Urban Education*, 42, 82-110.
- Kay, N., Li, K., Xiou, X., Nokkaew, N. & Park, BH. (2009). Hopelessness and Suicidal Behaviour among Chinese, Thai and Korean College Students and Predictive effects on the World Health Organization's WHOQOL-BREF. *International Electronic journal of Health Education*, 12, 16-32.
- Keith, T., Keith, P. B., Quirk, K. J., Sperduto, J., Santillo, S. & Killings, S. (1998). Longitudinal effects of parent involvement on high school grades: Similarities and differences across gender and ethnic groups. *Journal of School Psychology*, 35, 335-363.
- Kim, E. (2002). The relationship between parental involvement and children's educational achievement in the Korean Immigrant Family. *Journal of Comparative Family Studies*, 33 (4), 529-543.
- Puskar, K. R. & Bernardo, L. M. (2007). Mental Health and Academic Achievements: Role of School Nurses. *Journal for Specialists Pediatric Nursing*, 12(4), 215-223.
- Reber, A.S. (1985). *Dictionary of Psychology*. New Zealand: Penguin Books.



Rohner R.P., Britner P.A. (2002). Worldwide mental health correlates of parental acceptance rejection: Review of cross-cultural and intra-cultural evidence. *Cross- Cultural Research*, 36: 16-47.

Shek D.T.L. (1997). Family environment and adolescent psychological well-being, school adjustment, and problem behavior: A pioneer study in a Chinese context. *Journal of Genetic Psychology*, 158(4): 467- 479.

Sharma, S. (2008). Role of family environment in the development of emotional intelligence of adolescents. Unpublished M.Phil. Dissertation, Himachal Pradesh University, Shimla, India

Steinberg L., Lamborn S.D., Dornbusch S.M., & Nancy, D. (1992). Impact of parenting practices on adolescent achievement: authoritative parenting, school involvement, and encouragement to succeed. *Child Development*, 63(5): 1266-1281.

US Department of Health and Human Services (1999). *Mental health: A report of the surgeon general*. Rockville, MD: US Department of Health and Human Services, Substance Abuse and Mental Health Services Administration, Center for Mental Health Services National Institutes of Health, National Institute of Mental Health.

Wang, K. T., Yuen, M. & Slaney, R. B. (2009). Perfectionism, Depression, and Life Satisfaction: A study of High School Students in Hong Kong. *The Counseling Psychologist*, 37, 249-274.

World Health Organization (2004). *Promoting mental health: Concepts, emerging, practice* Geneva: Department of Mental Health and Substance Abuse, from, [Online] Available <http://www.aihi.unimelb.edu.au/pdf/publications/promotingMentalHealth.pdf>

Yen, CF., Hsu, CC., Liu, SC., Huang, CF., Ko, CH., Yen, JY. & Cheng, CP. (2006). Relationships among mental health status, social context, and demographic characteristics in Taiwanese aboriginal adolescents: A structural equation model. *Psychiatry and Clinical Neurosciences*, 60, 575-583.