



# The Impact of Gender, Area, School Environment and Personality on Mental Health

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## Abstract:

*The impact of the gender, area, school environment and personality on mental health was investigated on 9<sup>th</sup> secondary school students sample consisting of 265 participants. Use stratified random sampling, stratum urban having 144 (118 boys, 26 girls) and rural 121 (86 boys, 35 girls) participants. The data were collected by school environment inventory developed by Dr. K.S. Likhia and mental health inventory Gita R. Gida and personality inventory by K.G. Desai. Data was analyzed by ANOVA, t-test and correlation technique. Findings revealed that gender differences were significantly related to mental health while types of area were not significantly related to mental health. The interaction effect of gender and area on mental health was not significant. Personality factors extroversion and neuroticism were no correlation with mental health, but the lie factor was significantly correlated.*

**Keywords:** *Mental health, Personality, School environment*

## 1. Mental Health

The thing, which is mostly desired in all the societies of the world, is the need of preserving the mental health of the individual. Mental health is a potent determinant of one's integrated personality and balanced behavior identified on the basis of the level of his/her adjustment to own self, others and environment. The acquisition of such personality is indeed essential for a normal individual. Only then, an individual can be able to actualize his/her self, live his/her life to his/her satisfaction in the perfect tune of talking and giving something to the society.

The concept of being healthy is extended beyond the proper functioning of the body. It means the body and the mind is working efficiently and harmoniously. Human behavior is determined by both physical and mental factors. Mental health is a basic factor that contributes to the maintenance of physical health as well as social effectiveness.

In recent years, clinical psychologists as well as educationalists have started giving proper attention to the study of mental health. Mental health connotes those behaviors, perceptions and feelings that determine a person's overall level of personal effectiveness, success, happiness, and excellence of functioning as a person (Kornhauser, 1965). Mental Health depends on the development and retention of goals that are neither too high nor too low to permit realistic successful maintenance of belief in one's self as a worthy and effective human being (Lakshminarayanan et al., 1993). Mentally healthy person is firm in his/her intentions and is least disturbed by strains and stresses of day to day life. The concept of mental health has taken „Gestalt“ view of the individual. It incorporates the concepts of personality characteristics and behaviour all in one. It may also be understood as the behavioral characteristic of the person. Over the years, a continuing matter of debate has been there on the question of how best to define mental health. The expression „Mental Health“ consists of two words; 'Mental' and 'Health'. Mental health, therefore, may refer to a sound mental condition or a state of psychological well-being or freedom from mental diseases. It is said that a sound body determines a sound mind and a sound mind exists in a sound body. Hammen and Padesky (1977) found that there is

no significant gender difference in mental health. Gove (1978) results revealed that women have higher rates of mental illness than men and this difference is due primarily to their sex and marital roles. Sharma (1979) studied the results reported that boys and girls had better mental health during early adolescence (13years), while boys in late adolescence showed better mental health than girls. Srivastava et al. (1987) studied the mental health of postgraduate students. The results indicated that there was no significant difference between male and female students on mental health. Urban areas have poorer mental health status with increased substance use (Schwinn et al., 2009). Rural children faced more problems than urban children (Jha, 2005). This is in congruence with (Nanda, 2001) who reported that urban students had better mental health than the rural students.

## 2. School Environment

The schools wherein the individual classroom teachers and students interact constitute the core of the education system. Classrooms play a major role in determining what an individual learns. It follows that if one identifiable group of people is not learning as well as another group, and then the educational environment can and should be modified to ensure that these group differences are eliminated.

A school provides students coming from different backgrounds with similar opportunities for learning. Traub et al (1972) was of the opinion that if children are to develop their intellectual potential they must be provided with an intellectually stimulating environment. Today all formal education takes place in the man-made environment of schools and classrooms. The buildings should thus be conducive to the teaching and learning process. Lack of proper infrastructure has been a major concern area for many years. Quality standards of schools in terms of infrastructure, often do not meet the parameters laid down in the Education Bill of the government.

The impact of the teacher-student ratio on student performance is another factor that has been explored in this chapter. When the classrooms are crowded, they present a particular burden to teachers who are not able to relate to individual pupils. In order to develop effective programs and initiatives for mental health prevention and promotion, more information is needed about the extent to which mental health and its accompanying attitudes are associated with various aspects of the school environment. Several researchers have suggested the importance of considering the hierarchical structure of data when analyzing the effect of school environment on pupils' outcomes Zhu W (1997) & Sellstrom E, Bremberg S (2006).

To a large extent by the underlying personality. Individual differences in personality influence the occurrence, reporting and outcome of mental health problems across the life course, personality is the totality of behavior of an individual with a given tendency system interacting with a sequence of situations. The relationship between two personality characteristics (neuroticism, extraversion), three type of supportive transactions (emotional support, social championship, instrumental support) satisfaction with these transactions and two aspects of mental health (feeling of anxiety & depressive mood) were studied. Extroversion is a positive correlate of happiness and better mental health (Furnham and Cheng, 1999). Goodwin and Friedman (2006) found that personality traits were associated with mental health. The researchers revealed that a higher level in conscientiousness would significantly decrease the probability of mental disorders as well as extraversion and agreeableness. Nonetheless, a higher level in neuroticism was found to significantly contribute to mental disorders. In this study, the respondents were young adults in the United States. Researches done across the world on mental health reveals that it has various effects on Personality. Therefore, the present study aims to compare personality and mental health of professional and non-professional students of Aligarh Muslim University (India). Recently another study conducted by Zarei, Zeinalipour, Sough, Adli, and Sough on personality traits and general health among students, and found a positive and significant relationship between personality traits of extraversion, openness (flexibility), agreeableness,

conscientiousness and general health, while a negative relationship between neuroticism and general health. Further, they also found neuroticism predicts 0.45 % of variance of general health among students. There is no relationship between openness and neuroticism, or any other measure of psychological wellbeing. Being open and closed to experience are simply two different ways of relating to the world (Butler 2000). Mental health has a significant and positive correlation with the neuroticism personality trait (Amini L.; Heidary M., 2015) Kohlberg's theory of morality justified the obtained result. Neuroticism ab-initio represents irrational & violation dispositions & it is not expected to correlate positively with the dimensions of mental health. Conscientiousness increases mental health, but neuroticism decreases mental health in male and female hostellers and day scholars.

### 3. Objectives of the study

1. To Study the level of mental health of the students.
2. To Study the level of school environment and of the students.
3. To Study the interaction effect of sex and area on the mental health of the students.
4. To Study the mental health in relation to the school environment of the students.
5. To study the correlation between mental health and personality factors.

### 4. Hypothesis of the study

**H<sub>01</sub>:** There will be no significant interaction effect of sex and area on mental health.

**H<sub>02</sub>:** There will be no significant difference between mean scores of mental health of good school environment and the poor school environment.

**H<sub>03</sub>:** There is no significant correlation between mental health and personality factors.

### 5. Method

#### 5.1 Participants

The sample for the present study consisted of 265 adolescents (of which 204 were boys and 61 were girls) studying in IX standard. The data for the present study was collected from eight Gujarati medium high schools of urban and rural area school of Anand district Gujarat, India.

#### 5.2 Measure

Dr. D.J. Bhatt and Miss Geeta Gida standardized this mental hygiene Inventory in 1992. There are total 40 statements in this inventory besides five elements are contained these 40 statements analyze all these five elements. This inventory is of two – point scale. The respondent has to select either “agree or disagree” against every statement from this. The two types of score achieved are, 1) Part Score and 2) Total Score by adding the marks for every item, we can get a mental health score. The reliability of MHI was obtained by the Spear Brown method. Which is significant at the level 0.01 its validity was seen 0.63 which is significant at the level 0.01. School Environment Inventory (developed by Prof.K.S.Likhia) is an instrument designed to measure the psychosocial climate of the schools perceived by the pupils. It contains 70 items related to the six dimensions of the school environment. The split-half reliability for various dimensions of the school environment was established. The tool used for the study was personality inventory developed by Dr. K.G. Desai. Dr. K.G. Desai has developed and standardized a personality inventory based on Sybil B. G. Eysenck's junior personality inventory. The personality inventory consists of 60 items of which 24 for extroversion, 24 of neuroticism and 12 for lie. Each statement is assigned a weighted of one mark. The students are asked to encircle 'yes' or 'no' after reading each statement carefully. The test-retest reliability of the inventory was 0.63 for E, 0.84 for N and 0.61 for L.

#### 5.4 Procedure

For collecting the data questionnaire such as mental health inventory, school environment inventory and personality inventory were administered in the classroom situation. Before administering the test rapport was established, then subject were requested to read the instruction carefully and then respond

to the questionnaire in true spirit. When the questionnaire was completed, the researcher collected the questionnaire from the subjects, and thanked for their participation and cooperation.

### 5.5 Statistical Analysis

The obtained data were computed by using SPSS-16 version, explore the data of mental health and school environment of total sample. Use two way ANOVA for interaction effect between sex, area and mental health, also use compare means between mental health and school environment while Pearson's correlation coefficient was used to find out the significance relationship of personality factors and with mental health.

### 5.6 Result and discussion

**Table 1. Descriptive of mental health**

Mental Health	Statistic	Std. Error
Mean	22.99	.314
95% Confidence Interval for Mean	Lower Bound	22.38
	Upper Bound	23.61
5% Trimmed Mean	23.03	
Median	23.00	
Variance	26.045	
Std. Deviation	5.103	
Minimum	11	
Maximum	36	
Range	25	
Interquartile Range	7	
Skewness	-.138	.150
Kurtosis	-.349	.298

Here for the mental health mean is less than median so it is negative skewness also skewness value was - .138 which is nearer to 0. So data is probably normal distributed. Here mean, median, variance and std. deviation was respectively 22.99, 23.00, 26.045 and 5.103.

**Table 2. Descriptive school environment**

School environment	Statistic	Std. Error
Mean	182.32	1.662
95% Confidence Interval for Mean	Lower Bound	179.05
	Upper Bound	185.60
5% Trimmed Mean	182.39	
Median	184.00	
Variance	732.349	
Std. Deviation	27.062	
Minimum	102	
Maximum	268	
Range	166	
Interquartile Range	36	
Skewness	-.145	.150
Kurtosis	.082	.298

Here for the mental health mean is less than median so it is negative skewness also skewness value was - .145 which is nearer to 0. So data is probably normal distributed. Here mean, median, variance and std.deviation was respectively 182.32, 184.00, 732.349, and 27.062.

**Table 3. Tests of Between-Subjects Effects**

Dependent Variable: Mental Health

Source	Type III Sum of Squares	df	Mean Square	F	Sig.	Partial Eta Squared
Gender	201.170	1	201.170	7.871	.005	.029
Region	7.227	1	7.227	.283	.595	.001
Gender * Region	.035	1	.035	.001	.971	.000
Error	6670.936	261	25.559			
Total	146969.00	265				
Corrected Total	6875.985	264				

R Squared = .030 (Adjusted R Squared = .019)

From table 3 we observed that, **Effect of gender on mental health of the students:** Obtained p-value of gender is .005 which is lower than 0.01 level of confidence. The Mean score of boys of being 22.52 and that of girls is 24.56. The Mean score of girls is significantly higher than that of boys. And **Effect of area on mental health of the students:** Obtained p-value of gender is 0.595 which is greater than the 0.05 level of confidence. The Mean score of the urban area of is 23.08 and that of rural areas is 22.89. The Mean score of urban area is significantly equal that of rural area.

**Interaction Effect of gender and area on mental health.** Obtained p-value interaction effect of gender and area is 0.971 which is greater than the 0.05 level of confidence. Therefore  $H_{01}$  is accepted. It means no any interaction of gender and area on mental health.

**Table 4. N, M, SD, SE<sub>D</sub> and c.r. value, score on the mental health of Good school environment and poor school environment students**

Level of school environment	N	M	SD.	SE <sub>D</sub>	C.R. value
Good school environment	66	23.58	5.20	0.88	0.73
Poor school environment	66	22.62	4.85		

There was no significant difference between the mean scores of mental health of good school environment and the poor school environment students.  $H_{02}$  accepted. It means good school environment and poor school environment student's equal in mental health.

**Table 5. Correlations**

	Mental Health	Extroversion	Neuroticism	Lie
Mental Health Pearson Correlation	1	.063	-.085	.133(*)
Sig. (2-tailed)		.310	.170	.030
N	265	265	265	265

\* Correlation is significant at the 0.05 level (2-tailed).

\*\* Correlation is significant at the 0.01 level (2-tailed).

From the table 5, we observed that

The correlation between mental health and personality factor extroversion is 0.063 which is not significant relation. The correlation between mental health and personality factor neuroticism is -- 0.085 which is not significant relation. The correlation between mental health and personality factors lie is 0.133 which is significant relation. Also it is a positive correlation.

## 6. Findings of the study

- Gender differences were significantly related to mental health.
- Types of area were not significantly related to mental health.
- The interaction effect of gender and area on mental health was not significant.
- Good school environment and poor school environment, students equal in mental health
- Personality factors extroversion and neuroticism were no correlation with mental health, but the lie factor was significantly correlated.

## 7. Discussion

Present research findings about gender differences on mental health , favoring the past result of Hammen and Padesky (1977), Sharma(1979) Srivastava et al. (1987) and Gove(1978).Present research findings about area on mental health confirmed to the past research results of Schwinn et al.(2009), Jha (2005) and Nanda(2001). Another finding was the interaction effect of gender and area on mental health was not significant. The findings about the correlation between extroversion and mental health not support the findings of Furham and Cheng (1999), butler (200) and Zarei, E., Zeinalipour, H., Sough, M. T., Adli, M., & Sough, A.T. (2013). Past research finding of Amini L. and Heidary M.(2015) associated with present finding about the correlation between neuroticism and mental health and contradict of Zeinalipour, H., Sough, M. T., Adli, M., & Sough, A.T. (2013).

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