



Study of Interrelationship of Mental Health Self Concept And Achievement in Science of Class ix Students

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ABSTRACT

In this stress torn era, mental health of individuals is very important. To succeed in life one has to remain physically and mentally healthy, otherwise fruits of success will not be enjoyed by him. Mental Health and self-concept seem to be related and effecting each other. Both these factors together and individually are affecting the achievement of the students. In this paper researcher tried to study the inter-relationship among mental health, self-concept and achievement in science of sample students. A sample of 79 girl students was taken from Convent school of Chandigarh. Survey method was used to study the correlation between Mental Health and self-concept, Mental Health and achievement in science, self-concept and achievement in science. Mental Health Inventory and Self-Concept Inventory was administered on the sample. The raw data was analysed using Pearson's Co-relation and Multiple correlation techniques. The results indicated a significant positive correlation between Mental Health and Self Concept, Self Concept and Achievement in Science. Mental Health of students did not show a significant correlation with Achievement of sample students in Science. The joint contribution of Mental Health and Self Concept did not predict significantly the Achievement in Science of sample students.

Keywords : Mental Health Self Concept and Achievement in Science

Introduction

One of the most important things in the life of a person is his health. Any achievement without sound health is meaningless. If a person is successful and is not healthy to reap the fruits of his success, then life seems to be meaningless. Even if the person is not healthy success will evade the person. According to great scholars, 'Sound Mind lies in Sound Body'. Thus it is important for students to keep good health and more so good mental health. Mental health of the learner is very important for efficient learning and proper development of personality. Complete mental health means emotional, psychological and social wellbeing and absence of illness in the individuals. Chauhan (1985) defines mental health as 'a condition which permits the maximum development of physical, intellectual and emotional states of the individuals so that he can contribute maximum to the welfare of the society and can also realize his ideas and aims in life'. John and Webster (1979) defined mental health as a positive but relative quality of life. It is a condition which is characteristics of 'the average person who meet the demands of life on the basis of his own capacities and limitations'. The World Book Encyclopaedia (1994) writes that physical and mental health is closely related. Mental health plays an important role in both the ways, 'how the people behave and the way they feel'.

Another important aspect which is important for the individual is the awareness about himself, that is, self-concept. An individual who knows himself, that is, who is aware about his strengths and weaknesses can adjust in any situation and achieve success according to his own wishes. Self-concept is an important aspect to be known by the students. It helps them to achieve better in life. Allport (1961) explained self-concept as, 'something which one is immediately aware of. An individual thinks of it as the warm, central private region of life'. Purkey (1988) defined self-concept as, 'the totality of the complex, organised and dynamic system of learned beliefs, attitudes and opinions that each person holds to be sure about his or her personal existence. Baumeister (1999) defined self-concept as 'the individual's belief about himself or herself, including the person's attributes and who and what the self-is'. Rogers (1959) believes that self-concept has

three different components, that is, self-image, self-esteem and ideal self. Fitts (1972) found a significant positive relationship of self-concept with achievement of students.

Need of the Study

Increasing stress level among the students has become a major issue these days. The high level of competition, urge to excel, exploding aspirations, peer pressure, pressure from parents, etc. are acting as catalyst in increasing stress levels. This severely affects their mental health. Fighting with all these pulls and pressures child losses his identity and forgets what actually he is. Concept about the self is lost. The outcome affects the achievement of students. Number of studies is being conducted on self-concept and achievement, mental health and achievement. Different researchers found different results. Due to inconsistency in the results, the researcher attempted to study the inter-relationship among self-concept, mental health and achievement.

Objectives of the Study

1. To study the correlation between Mental Health and Self Concept of Class IX students.
2. To study the correlation between Mental Health and Achievement in Science of Class IX students.
3. To study the correlation between Self Concept and Achievement in Science of Class IX students.
3. To study the multiple correlation among Mental Health, Self-Concept and Achievement in Science of Class IX students.

Hypotheses of the Study

1. There is no significant correlation between Mental Health and Self Concept of Class IX students.
2. There is no significant correlation between Mental Health and Achievement in Science of Class IX students.
3. There is no significant correlation between Self Concept and Achievement in Science of Class IX students.
4. There is no significant multiple correlation among Mental Health, Self-Concept and Achievement in Science of Class IX students.

Operational Definition

- Mental Health as perceived by Jagdish and A.K.Srivastava in Mental Health Inventory by Jagdish and A.K.Srivastava.
- Self-Concept as perceived by R. K. Saraswat in Self-Concept Inventory by R. K. Saraswat (1984).

Delimitation of the Study

The study was limited to

- Girls only.
- Convent Schools of Chandigarh.

Sample of the Study

The sample constituted of 79 girls taken from the Convent School of Chandigarh. The school was selected randomly and students were taken as cluster from each section.

Design of the Study

Survey method was used to conduct the study.

Tools Used

Following Tools were used by the researcher to collect the data:

- Mental Health Inventory by Jagdish and A.K.Srivastava to measure the Mental Health of the Students.
- Self-Concept Inventory by R. K. Saraswat (1984) to study the self-concept of students.

Procedure and Collection of Data

The research was conducted to study the inter-relationship among mental health self-concept and achievement of class IX students. For this, a sample of 100 students was administered Mental Health Inventory and Self Concept Inventory. Out of the total sample 21 students did not complete the process and their data were discarded. The analysis of the data is based on the scores of 79 students. The Summative Evaluation scores of the sample students were taken as Achievement Scores. The raw data were collected and subjected to statistical treatment.

Statistical Tools Used

Descriptive statistics such as, Mean, Median, Standard deviation, Skewness and Kurtosis were used to study the nature of the data and inferential statistics such as, Product Moment Correlation and Multiple Correlation were used to test the hypotheses.

Analysis and Interpretation of the Data

The first objective of the study was to study the correlation between Mental Health and Self Concept of Class IX students. The data was analyzed using product moment correlation and the results are given in table 1.

Table-1 Showing Mean, Standard Deviation and Correlation Values of the Mental Health, Self-Concept and Achievement in Science

SNo.	Variables	Mean	Standard Deviation	N	Coefficient of Correlation (r)		
					r1-2	r1-3	r2-3
1	Mental Health	129.90	12.54	79	0.285	0.081	0.204
2	Self-Concept	176.59	14.38	79			
3	Achievement	75.04	15.51	79			

Table 1 show that the coefficient of correlation between Scores Mental Health and Self Concept. Mental Health and Self Concept of the sample students is 0.285. The value is positive and significant at 0.01 level. Thus the hypothesis that there is no significant correlation between Mental Health and Self Concept of class IX students is not accepted. The alternative hypothesis that there is a significant correlation between Mental Health and Self Concept of class X students

is accepted.

The second objective of the study was to study the correlation between Mental Health and Achievement in Science of Class IX students. The data was analyzed using product moment correlation and the result is given in table 1. Table 1 show that the coefficient of correlation between Scores of Mental Health and Achievement in Science of the sample students is 0.081. The value is not significant. Thus the hypothesis that there is no significant correlation between scores of Mental Health and Achievement in Science of Class IX students is not rejected.

The third objective of the study was to study the correlation between Self Concept and Achievement in Science of Class IX students. The data was analyzed using product moment correlation and the result is given in table 1. Table 1 show that the coefficient of correlation between scores of Self Concept and Achievement in Science of the sample students is 0.204. The value is positive and significant at 0.05 level. Thus the hypothesis that there is no significant correlation between scores of Self Concept and Achievement in Science of Class IX students is not accepted. The alternative hypothesis that there is a significant correlation between Self Concept and Achievement in Science of Class IX students is accepted.

The fourth objective of the study was to study the multiple correlations among Mental Health, Self-Concept and Achievement in Science of Class IX students. The data were analyzed with help of multiple correlation and the results are given in table 2.

Table 2 Showing Multiple Co- relation among Mental health, Self-Concept and Achievement in Science

Multiple (R)= .251 Multiple (R ²)= .063 Standard Error of Estimate = 15.21				
Source of Variation	Df	Sum of Squares	Mean Squares	F-ratio
Regression	2	1182.32	591.161	2.555
Residual	76	17582.565	231.35	
Total	78	18764.886		
				.084

Going by the result presented in table 2, the two independent variables, that is, Mental Health and Self Concept when put together yielded a coefficient of multiple regression (R) value of 0.251 and a multiple correlation square (R²) of 0.063. It shows that 6.3% of the total variance in Achievement in Science of Class IX students is accounted by the joint contribution of Mental Health and Self Concept. Table 2 also indicates that the Analysis of Variance of the multiple regression data produced an F-ratio value of 2.555. The calculated value is not significant. Thus, the hypothesis that there is no significant joint contribution of Mental Health and Self Concept in predicting Achievement in Science of class IX students is not rejected. Thus, it may therefore be inferred that the joint contribution of Mental Health and Self Concept does not predict Achievement in Science of class IX students significantly.

Conclusion

It has been concluded from the above results that there is a significant positive correlation between Mental Health and Self Concept, Self Concept and Achievement in Science of Class IX girl students of Convent Schools of Chandigarh. Mental Health of students does not have a significant correlation with Achievement of sample students in Science. The joint contribution of Mental Health and Self Concept does not predict Achievement in Science of sample students.

Educational Implication

The study showed wide educational implications. The results of the study imply that better mental health of students will help them have higher levels of self-concept. Students will

be able to identify their weaknesses and strengths and work accordingly to improve themselves. Also students with higher self-concept will ultimately leads to higher achievement.

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