

A Study on Personality and Achievement in Botany of Higher Secondary Students

T.Sangeetha¹, P.Pachaiyappan*², Dr.D.Ushalaya Raj³

¹ Ph.D Research Scholar, Department of Education, IASE, Saidapet, Chennai -600 015, India

² Ph.D Research Scholar, Department of Education, IASE, Saidapet, Chennai -600 015, India

³ Associate Professor, Department of Education, IASE, Saidapet, Chennai -600 015, India

*Corresponding Author: P.Pachaiyappan

Email: edutechgreenfa@gmail.com

Abstract: The main objective of this study is to find out the relationship between personality and achievement in botany of higher secondary students. The study also aims to find out the difference in personality and achievement in botany of higher secondary students with respect to Gender, Residential area, Types of management, Type of family. Survey method has been used in the present study. Personality Questionnaire (1975) constructed and standardized by Eysenck.H J. and Sybil.B.G. was used to collect the data from higher secondary school students. The marks in botany obtained during the half yearly examination were taken for the investigation. Random sampling technique was used for collection of data. The sample size was 320 higher secondary school students of Chennai and kancheepuram districts. For analyzing the data, mean, standard deviation, 't' - test and correlation was used. The major findings of this study are: (1) The study reveals that there is a positive co-relation between the personality and achievement in botany among higher secondary students. (2) There is a significant difference in the mean score of achievement in botany among higher secondary students with respect to their type of management.

Keywords: Personality, Extrovert, Introvert, Academic Achievement.

INTRODUCTION

Education by all means is an attempt to mould and shape the behaviour of the pupil. It aims to produce desirable changes in the pupil for the all-round development of his personality [1-2]. This aim should take place in the process of schooling to fulfill this educational aim. Children, the citizens of tomorrow, are the future builders of the nation. Therefore it becomes essential to develop a child's logical and creative thinking optimally but in these days self-concept, thinking process and academic achievement of students have been suppressed by competitive environment of our world [1-2].

Traxler defined personality as the sum total of an individual's behaviour in social situations. Behaviour includes not only overt acts but in ward feeling tone produced by the situation as interpreted by the individual through introspection. Warren's dictionary defines personality is the integrative organization of the entire cognitive, affective, co-native and physical characteristics of an individual as it manifest itself in focal distinction from others. Academic achievement is the knowledge attained or skill developed in the subjects, usually designated by test score or by marks assigned by the teacher or both. Academic achievement has been regarded as a "judgment of the student's progress". Classrooms are organized around set activities in which a teacher assigns talks to pupils, evaluates and compares quality

of their work. Carter referred it as "The acquisition of all the behavioral changes in the cognitive, affective and psychomotor domains" [3].

REVIEW OF RELATED LITERATURE

Meenakshi, Mehta examine the personality needs and academic achievement of senior secondary students. The study revealed that need-achievement, need-dominance, need-nuturance and need-endurance are positively and significantly related to students' academic achievement while need-succorance, affiliation, abasement and aggression are significantly but negatively related to academic achievement [4].

Goodwin *et al.* conducted a study to determine the relationship between personality factors and mental health services among adults. The result indicates that neuroticism was associated significantly with increased likelihood of mental health services. Conscientiousness and extraversion were associated with decreased likelihood of use of mental health services [5].

Sing YG *et al.* studied anxiety and level of self-confidence and their relation with academic achievement. The findings of the study reveal that there is a significant correlation between self-confidence and academic achievement. There is a significant difference between anxiety level of boys and girls. There is a significant difference between self-confidence levels of boys and girls [6].

Objectives of the Study

- To find out whether there is any significant difference between the mean scores of Personality of higher secondary students with respect to gender, residential area, type of management, type of family.
- To find out whether there is any significant difference between the mean scores of Achievement in botany of higher secondary students with respect to gender, residential area, types of management, type of family.
- To find out whether there is any significant correlation between personality and academic achievement in botany of higher secondary students.

Hypotheses of the study

- There is no significant difference between the mean scores of personality of higher secondary students with respect to gender, residential area, type of management, and type of family.
- There is no significant difference between the mean scores of achievement in botany of higher secondary students with respect to gender,

residential area, type of management, and type of family.

- There is no significant relationship between personality and academic achievement among higher secondary students.

METHODOLOGY OF THE STUDY

Method: Survey method was adopted to collect the relevant data for the present study.

Sample size: The total sample size was 320 higher secondary school students of Chennai and Kancheepuram districts.

Tools used: (1) Personal data sheet developed by the investigators. (2) Personality questionnaire (1975) developed and standardized by H.J.Eysenck and Sybil.B.G was used for assessing the personality of the pupils. (3) The marks in botany obtained during the half yearly examination were taken for the investigation.

Statistical technique used : For analyzing the data, mean, standard deviation , correlation and 't'- test are used.

RESULTS AND DISCUSSION

Table 1: Mean, S.D. and t-value of higher secondary students' personality with respect to back ground variables.

Variable	Groups	N	Mean	S.D	t-value	Level of Significance
Gender	Male	158	32.91	4.07	0.389	NS
	Female	162	33.19	8.10		
Residential Area	Rural	99	32.76	3.85	0.550	NS
	Urban	221	33.19	7.29		
Type of Management	Government	163	32.88	4.04	0.478	NS
	Private	157	33.22	8.15		
Type of Family	Nuclear	261	33.03	6.85	0.154	NS
	Joint	59	33.17	4.12		

The calculated 't' value (0.389) is less than the table value at 0.05 level; the null hypothesis is accepted. Hence concluded that there is no significant difference in the mean scores of Personality among the Higher Secondary students with respect to Gender.

The calculated 't' value (0.550) is less than the table value at 0.05 level; the null hypothesis is accepted. Hence concluded that there is no significant difference in the mean scores of Personality among the Higher Secondary students with respect to their Residential Area.

The calculated 't' value (0.478) is less than the table value at 0.05 level; the null hypothesis is accepted. Hence concluded that there is no significant difference in the mean scores of Personality among the Higher Secondary students with respect to type of the School Management.

The calculated 't' value (0.154) is less than the table value at 0.05 level; the null hypothesis is accepted. Hence concluded that there is no significant difference in the mean scores of Personality among the Higher Secondary students with respect to their type of the family.

The calculated 't' value (0.017) is less than the table value at 0.05 level; the null hypothesis is accepted. Hence concluded that there is no significant difference in the mean scores of academic achievement in botany among the Higher Secondary students with reference to Gender.

The calculated 't' value (0.289) is less than the table value at 0.05 level; the null hypothesis is accepted. Hence concluded that there is no significant difference in the mean scores of academic achievement in botany among the Higher Secondary students with reference to type of their Residential Area.

Table 2: Mean, S.D. and t-value of higher secondary student's achievement in botany with respect to back ground variables.

Variable	Groups	N	Mean	S.D	t-value	LOS
Gender	Male	158	124.35	23.80	0.017	NS
	Female	162	124.31	22.50		
Residential Area	Rural	99	123.75	24.81	0.289	NS
	Urban	221	124.59	23.89		
Type of Management	Government	165	128.30	23.82	2.976	S
	Private	155	120.36	23.88		
Type of Family	Nuclear	261	124.36	24.26	0.045	NS
	Joint	59	124.2	23.81		

The calculated 't' value (2.976) is greater than the table value at 0.01 level; the null hypothesis is rejected. Hence concluded that there is significant difference in the mean scores of academic achievement in botany among the Higher Secondary students with respect to their type of the School Management. The students are highly motivated and guided in order to attain their academic progress. Thus the Government

school students show higher achievement than compared to that of Private school students.

The calculated 't' value (0.045) is less than the table value at 0.05 level; the null hypothesis is accepted. Hence concluded that there is no significant difference in the mean scores of academic achievement in botany among the Higher Secondary students with respect to their type of family.

Table 3: Relationship between Personality and Achievement in botany among higher secondary students.

Variables	N	'r' - value	Level of Significance
Personality Vs Achievement in Botany	320	0.104	S

From the above table, it is inferred that there exists significant high positive relationship between personality and achievement in Botany among higher secondary students and the null hypothesis formulated is rejected. It indicates that there exists a positive correlation between personality and academic achievement. This results shows the personality of the learners determines the academic performance of higher secondary students.

Major findings of the study

1. There is no significant difference in the mean score of personality among the higher secondary students with reference to Gender, residential area, type of management, and type of the family.
2. There is no significant difference in the mean score of achievement in botany among the higher secondary students with reference to Gender, Residential area and Types of family.
3. It was found that there is a significant difference in the mean score of academic achievement in botany among the higher secondary students with respect to type of management.
4. The study reveals that there is a positive correlation between the personality and achievement in botany among the higher secondary school students.

Suggestions for the Future Study

1. Similar study can be undertaken with the students at various educational levels.

2. This study was carried out only in the selected schools of Chennai and Kancheepuram Districts.. It can be carried out in other district too.
3. This study can be carried out for other subject like Chemistry, Mathematics, Physics and Computer Science.
4. This study can be carried out for the students of Arts, Commerce and Vocational streams.

CONCLUSION

Education is a way of development of desirable habits, skills and attitudes which make an individual a good citizen. In the process of education we try to shape the behaviour of young children in accordance with aims and goals of life. It is well known that personality plays an important role in determining not only the behavior of an individual but also his overall success and prosperity in life. Allport has rightly pointed out personality as "a dynamic organization within the individual of those psychophysical systems that determines his unique adjustment to his environment". It is concluded from the findings that there is a significant relationship between the Personality and academic achievement in botany among higher secondary first year school students. So it is in the hands of teachers, parents and society to work together for the all-round development of the personality so that their academic achievement will be boosted for the better life.

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