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## INVESTIGATE THE EFFECT OF MAXIMUM AND MINIMUM EXPERIENCED TEACHERS PERSONALITY ON ACADEMIC ACHIEVEMENT OF STUDENTS IN SCIENCE

**Suresha H. S.**

**Assistant Professor of Education,**

**Sri Siddeshwara Government First Grade College, Nargund, Gadag District, Karnataka.**

### ABSTRACT

The purpose of the study is to **INVESTIGATE THE EFFECT OF MAXIMUM AND MINIMUM EXPERIENCED TEACHERS PERSONALITY ON ACADEMIC ACHIEVEMENT OF STUDENTS IN SCIENCE**. 30 high schools, 60 Teachers and 180 students were drawn randomly among the Government, Private-aided and Private unaided secondary schools. The study adopts Descriptive survey method for investigation and it is concluded that i) There is no significant difference between higher & minimum educational qualification of teachers personality type on academic achievement of students; ii) Higher teaching experienced teachers with introversion personality will influence more on academic achievement of students than the higher teaching experience teachers with extraversion personality; iii) Minimum teaching experienced teachers with introversion personality will influence more on academic achievement of students than that of extraversion personality type teachers.



**KEYWORDS:** Teacher Personality, Introvert and Extrovert, Personality types.

### INTRODUCTION

The term personality is derived from the Latin word persona, which means mask. Among the Greeks. Actors used a mask to hide their identity on stage. This dramatic technique was later adopted by the Romans to whom persona denoted as one appears to others not as one actually is.

The popular nonscientific definition of personality as the effect one has on others has two defects. First it emphasizes only the manifest aspects of the intricate pattern of personality the expressiveness of the individual. Second, in emphasizing only the objective aspects of personality, it does not indicate what the real personality is, the subjective or interior organization which is responsible for the expressive aspects. As Hall and Lindsey have pointed out. Few words in the English language have a greater fascination for the general public than personality.

### Definitions :

According to **Allport** personality is the dynamic organization within the individual of those psychophysical system that determine characteristic behavior and thought (in his book, pattern and Growth in personality published in 1961)

In short personality is the whole of man the integration and synthesis of the characteristic behavior patterns which is the result of one's inherited aptitudes, capacities, past learning, ideals values and expectations.

### Extraversion

*Extraversion* is the act, state, or habit of being predominantly concerned with the obtaining gratification from what is outside the self. Extraverts tend to enjoy human interactions and to be enthusiastic, talkative, assertive, and gregarious. They take pleasure in activities that involve large social gatherings, such as parties, community activities, public demonstrations, and business or political groups. Politics, teaching, sales, managing, brokering, and acting are fields that favor extraversion. An extraverted person is likely to enjoy time spent with people and find less reward in time spent alone. They tend to be energized when around other people, and they are more prone to boredom when they are by themselves.

### Introversion

*Introversion* is the state of or tendency toward being wholly or predominantly concerned with and interested in one's own mental life. Introverts tend to be more reserved and less outspoken in large groups. They often take pleasure in solitary activities such as reading, writing, drawing, and using computers. The archetypal artist, writer, sculptor, engineer, composer, and inventor are all highly introverted. An introvert is likely to enjoy time spent alone and find less reward in time spent with large groups of people, though they tend to enjoy interactions with close friends. They prefer to concentrate on a single activity at a time and like to observe situations before they participate. Introverts are easily overwhelmed by too much stimulation from social gatherings and engagement. They are more analytical before speaking.

Introversion is not the same as shyness or the social outcast. Introverts choose solitary over social activities by preference, whereas shy people avoid social encounters out of fear and whereas the social outcast fact solitary, but not by choice.

### Academic Achievement

The elementary school science programme should develop in pupils scientific knowledge, scientific vocabulary, history, philosophy, and nature of science facts, generalizations, concepts, principles and laws.

### Need and Importance of the Study

Research on teacher personality is based on assumption that a teacher as a person is a significant variable in the teaching-learning process. Personality influences the behavior of the teacher in diverse ways, such as interaction with student, methods selected, and learning experiences chosen. (Murray, 1972)

The effective use of a teacher's personality is essential in conducting instructional activity. Personality aids teaching, for communication takes place between the teacher and the learner even in the absence of the spoken word (nonverbal communication). The teacher whose personality helps create and maintain a classroom or learning environment in which student feel comfortable and in which they are motivated to learn is said to have a desirable teaching personality. (Callahan, 1996)

### Objectives of the Study

- To study the effect of higher educational qualification teacher personality type on achievement in science
- To study the effect of minimum educational qualification teacher personality type on achievement in science
- To study the effect of maximum experienced teacher personality type on achievement in science

- To study the effect of minimum experienced teacher personality type on achievement in science

### Hypotheses

1. Effect of higher educational qualification teachers extraversion and introversion personality types differs significantly in terms of their influence on achievement in science.
2. Effect of minimum educational qualification teachers extraversion and introversion personality types differs significantly in terms of their influence on achievement in science.
3. Effect of maximum experienced teachers extraversion and introversion personality types differs significantly in terms of their influence on achievement in science.
4. Effect of minimum experienced teachers extraversion and introversion personality types differs significantly in terms of their influence on achievement in science.

### Methodology

The study adopts Descriptive survey method for investigation

### Population of the Sample

One of the important steps in any research is to draw a sample, which would truly represents the characteristics of the population in which the inferences are intended to be made. In this sense a sample is the population in a miniature form. Generally, the sample for using random sampling technique draws a research, stratified random sampling techniques and so on depending on the purpose of the study.

The population for the present study was all those teachers who were teaching science subject at the secondary schools in Navalagund Taluka. Sampling was done in order to get school representation, teacher representation and also the students. 30 high schools were drawn randomly among the Government, Private-aided and Private unaided secondary schools. The teachers were drawn in such a way that the teachers teaching science along could be included in the sample. Thus 60 teachers teaching science subject in higher schools were drawn as the sample.

In addition to the above, in order to get the ratings of the teaching personality of teachers, students studying in VIII standard taught by the same teacher were involved in the present study. From each class, 3 students (Above Average, average, Below average) were selected to rate each teacher. Thus, from a school 6 students were involved to rate 2 teachers and soon. Thus the present study included 60 teachers who were rated by the total number of 180 students.

### Tools

1. **Kundu Introversion Extraversion Inventory (KIEI):** by developed by Ramanath Kundu (1976)
2. A test for the assessment of academic achievement in science based on Karnataka state syllabus of IX standard is conspicuous by its absence. Hence, it was decided to construct a suitable test for the assessment of academic achievement of students in science.

### Statistical Techniques

The purpose of the study was to investigate the main effects and interaction effects of independent variables, viz, Teachers personality, on the dependent variable, i.e. academic achievement of students in science. As there were three independent variables, it was decided to use 2-way Analysis of Variance technique (ANOVA) in order to find out the Main and Interaction effects.

### Analysis and Interpretation

**Hypothesis 1:** There is no significant difference between the Higher Educational Qualification of teachers personality type on the achievement of the students.

**Table- 1 Summary Table of ANOVA with respect to Teachers Higher Educational Qualification**

Sources of Variation	df	sum of squares	mean of sum of squares	F-value	P value	significance
Higher Educational Qualification of Teachers	1	100.5494	100.5494	1.1480	>0.05	NS

**Interpretation :** The obtained F-ratio in respect of the factor (HEQPT) is 1.1480 and corresponding tabled F-ratio is 7.17. Since the obtained F-ratio is less than the tabled F-ratio at 0.05 level. The difference is significant. Therefore the null Hypothesis (H0<sub>4</sub>) is accepted.

**Findings :** The above table and interpretation indicates that there is a no significant difference between teachers higher educational qualification of teachers personality type on academic achievement of students.

**Hypothesis -2:** There is no significant difference between the minimum Educational Qualification of teachers personality on the achievement of the students.

**Table -2 Summary Table of ANOVA with respect to minimum qualification of teachers:**

Sources of Variation	df	sum of squares	mean of sum of squares	F-value	P value	significance
Minimum Educational Qualification of teachers personality	1	700.0675	700.0775	3.45649	>0.05	NS

**Interpretation :** The obtained F-ratio in respect of the factor (MEQTP) is 3.45649 and corresponding tabled F-ratio is 6.96. Since the obtained F-ratio is less than the tabled F-ratio at 0.05 level. The difference is significant. Therefore the null Hypothesis (H0<sub>5</sub>) is accepted.

**Findings :** The above table and interpretation indicates that there is a no significant difference between minimum educational qualification of teachers personality on academic achievement of students.

**Hypothesis -3 :** There is no significant difference between the higher teaching experience of teachers personality on the achievement of the students.

**Table 3 : Summary Table of ANOVA with respect to higher teaching experience of teachers:**

Sources of Variation	df	Sum of squares	Mean of sum of squares	F-value	P value	Significance
Higher teaching experience of teachers personality	1	954.9254	945.9253	4.8676	<0.05	S

**Interpretation :** The obtained F-ratio in respect of the factor higher teaching experience is 4.8676 . Since the obtained F-ratio is greater than the tabled F-ratio at 0.05 level. The difference is significant. Therefore the null Hypothesis (H0<sub>6</sub>) is rejected.

**Findings :** The above table reveals that there is a no significant difference between higher teaching experience of teachers personality on academic achievement of students.

**Hypothesis-4 :** There is no significant difference between the minimum teaching experience of teachers personality on the achievement of the students.

**Table-4 Summary Table of ANOVA with respect to minimum teaching experience of teachers:**

Sources of Variation	df	sum of squares	mean of sum of squares	F-value	P value	significance
Teachers personality with minimum teaching experience	1	1054.8359	1054.8359	5.3614	<0.05	S

**Interpretation:** The obtained F-ratio in respect of the factor minimum teaching experience of teachers is 5.3614 and corresponding tabled F-ratio is 6.96. Since the obtained F-ratio is greater than the tabled F-ratio at 0.05 level. The difference is significant. Therefore the null Hypothesis ( $H_0$ ) is rejected.

**Findings :** The above table reveals that there is a no significant difference between minimum teaching experience of teachers personality on academic achievement of students.

**DISCUSSION AND CONCLUSION**

- (1) There is no significant difference between higher educational qualification of teachers personality type on academic achievement of students.
- (2) There is no significant difference between minimum educational qualification of teachers personality type on academic achievement of students.
- (3) Higher teaching experienced teachers with introversion personality will influence more on academic achievement of students than the higher teaching experience teachers with extraversion personality.
- (4) Minimum teaching experienced teachers with introversion personality will influence more on academic achievement of students than that of extraversion personality type teachers

**EDUCATIONAL IMPLICATIONS**

**Teachers Personality:**

Research studies concerning school achievement have employed both kinds of achievement scores. However, educational researchers have recently become more interested in looking at scores for specific subjects separately. Most of researches on school achievement have sought to identify the factors responsible for different levels and types of accomplishment among individuals. The method generally used to solve this problem is to relate achievement scores to some selected variables such as intelligence or aspects of personality.

In the present study, the researcher hypothesized that extravert and introvert teachers differ significantly in terms of their effects on academic achievement in mathematics. Findings of the study clearly reveal that introvert personality type of teachers has more influence on the achievement in mathematics than the extravert personality type. This may be ascribed to the following reasons.

Introvert teachers are the individuals with a predominantly subjective outlook, have higher degree of cerebral activity than he extraverts. They generally appear cold, aloof, silent and hard to understand. They tend to be socially inept. It is assumed hat this kind of introvert tendency may lead to positive and significant influence on academic achievement in mathematics. The findings of the previous studies though not completely consistent, have tended to indicate that these two personality variables are important in predicting school achievement. Suppose, if the finding of the present study is not in tune with the logic employed, this needs cross validation by further investigation.

Personality is not a collection of intrapsychic structures and events. It is rather a pattern of behavior in relation to other people. This means that a person cannot find his personality by sitting in meditation. Personality emerges only when a person is actually doing something with, against, away from, for to in spite of, or in some other relationship with other people. Personality is developed out of interaction with others. Jung (1964) regards the introvert as someone whose energies and interests are directed towards his own inner mental state, while the extravert directs his energies and interests more towards the outside world. The extravert tendency, which leads to ineffective influence on achievement in mathematics in the present study may be modified through appropriate behavior modification techniques. Individual guidance and counseling therapeutic continuum may be more suitable.

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