

A Study of Correlation between Self Confidence and Cognitive Style of Students of Secondary Level Science Stream



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Abstract

Presented research study was conducted to underline correlation between self confidence and cognitive style of students of secondary level science stream. The objective of the study was to study the correlation between self confidence and cognitive style of students of secondary level science stream. Hypotheses were formulated based on the objective. In the presented study, survey method was used under descriptive research method. The sample was 100 male students and 100 female students, who were randomly selected for the study. Thus 200 students were selected for the study as sample. Self-confidence inventory, constructed and standardized by Dr. Rekha Gupta, was used to measure self confidence and Cognitive style inventory, Structured and standardized by Dr. Praveen Kumar Jha, was used for measurement of cognitive style. Data was collected after going to various selected secondary schools and Mean and product moment correlation were used for the analysis of data. It was concluded that there was very low negative and insignificant correlation between self confidence and cognitive style of students of secondary level science stream.

Keywords: Self Confidence, Cognitive Style, Science Stream Students, Secondary School.

Introduction

Human behavior is a complex concept. This behavior is influenced by many factors. According to Bandura (1986) self confidence is the regulator and catalyst of behavior. Geeta and Vijayalakshmi (2006) propounded significance difference in the self confidence of boys and girls. According to Rani (1990), social and economic degradation significantly affects students' self confidence whereas according to Subrahmanyam and Mathew (2004) no significance interactive relationship between self confidence and mental health was found.

According to Anthonyraj and Amalraj (2011) significance correlation between students' cognitive style and academic performance was found. According to Witkin and others (1977), cognitive style refers to the articulation influenced by the broader structural characteristics of different situations in the individual. Banerjee and Debashree (2007) propounded that there existed a positive correlation between creativity and cognitive style. According to Manivannam (2006) and Bagchi (2004) no significant difference was found between the cognitive style of male and female students. According to Gakhar and Manhas (2005) significant correlation between cognitive style and emotional intelligence was found.

In this way, human behavior and its multi-faceted multidimensional interaction in various situations continue to influence the education process of students. After a proper study of the variables that affect student education, it is concluded that self confidence and cognitive style are two important variables that affect student education. There is a lack of studies that explain the relationship between male and female student's self confidence and their cognitive style, so this study has been done with the aim of finding correlation between male and female student's self confidence and their cognitive style.

Statement of Problem

A study of correlation between self confidence and cognitive style of students of secondary level science stream.

Objectives of study

1. To study the correlation between self confidence and cognitive style of students of secondary level science stream.
2. To study the correlation between self confidence and cognitive style of male students of secondary level science stream.
3. To study the correlation between self confidence and cognitive style of female students of secondary level science stream.

Hypotheses of Study

1. There is no significant correlation between self confidence and cognitive style of the students of secondary level science stream.
2. There is no significant correlation between self confidence and cognitive style of the male students of secondary level science stream.
3. There is no significant correlation between self confidence and cognitive style of the female students of secondary level science stream.

Limitation of the study

1. Only secondary level science students (male and female) were selected in the study.
2. Study was done only on the students of Sultanpur district.

Research Methodology of the Study

In the present study, survey method was used under descriptive research method.

Sample and Sampling method of the study

100 male students and 100 female students were randomly selected for the study. Thus 200 students were selected for the study.

Tools of the study

1. Self-confidence inventory, constructed and standardized by Dr. Rekha Gupta, was used to measure self confidence.
2. Cognitive style inventory, Structured and standardized by Dr. Praveen Kumar Jha, was used for measurement of cognitive style.

Analysis and interpretation of results

Data was collected after going to various selected secondary schools and data was arranged properly after administration of tools of the study on 100 male and 100 female students (total 200 students) of science streams of selected schools. Mean and product moment correlation for the analysis of data was used. The values of mean of self confidence and cognitive style and the correlation coefficient between self confidence and cognitive style of secondary level science stream students are given in the table.

Table-1
Mean of Self Confidence and Cognitive Style and Correlation Coefficient between Self Confidence and Cognitive Style

Group	Variables	Mean (M)	df	Correlation coefficient (r)	Level of correlation	Significance
Total students (N=200)	Self confidence (X)	27.19	198	-.020	Very low negative correlation	Not significant at .05 level
	Cognitive style (Y)	152.47				
Male students (N=100)	Self confidence (X)	25.58	98	-.12	Very low negative correlation	Not significant at .05 level
	Cognitive style (Y)	153.03				
Female students (N=100)	Self confidence (X)	29.13	98	+.114	Very low positive correlation	Not significant at .05 level
	Cognitive style (Y)	154.48				

It is clear from the above table that the mean of self confidence scores of total students (N=200) of secondary level science stream was 27.19 and the mean of cognitive style scores was 152.47 and the value of correlation coefficient (r) between these two variables was -.020, Which was less than the table value .138 at .05 level of significance and at df 198 and showed no significant relationship between students' self confidence and cognitive style. On this basis the null hypothesis stating "There is no significant correlation between self confidence and cognitive style of the students of secondary level science stream" was accepted.

It is also clear from the table that the mean of self confidence scores of male students of secondary level science stream was 25.58 and the mean of cognitive style scores was 153.03 and the value of correlation coefficient (r) between these two variables was -.12, which was less than table value at .05 level of significance and 98 degree of freedom. This showed no significant relationship between self

confidence and cognitive style of male students of science stream. On this basis the null hypothesis stating "There is no significant correlation between self confidence and cognitive style of the male students of secondary level science stream" was accepted.

It is also clear from the table that the mean of self confidence scores of female students of secondary level science stream was 29.13 and the mean of cognitive style scores was 154.48 and the value of correlation coefficient (r) between these two variables was +.114, which was less than table value at .05 level of significance and 98 degree of freedom. This showed no significant relationship between self confidence and cognitive style of female students of science stream. On this basis the null hypothesis stating "There is no significant correlation between self confidence and cognitive style of the female students of secondary level science stream" was accepted.

Conclusion

The research study provides following conclusions:

1. There is very low negative and insignificant correlation between self confidence and cognitive style of students of secondary level science stream.
2. There is very low negative and insignificant correlation between self confidence and cognitive style of male students of secondary level science stream.
3. There is very low positive and insignificant correlation between self confidence and cognitive style of female students of secondary level science stream.

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