



Cognitive Style and Self Confidence among College Students

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Abstract

The cognitive process has faced deliberate changes among the common man, most notably among the college students, thereby influencing the confidence levels in their activities. This study was conducted among 120 college students from various colleges in one district. Cognitive Style Inventory and Self Confidence Scale was used in this study. The data obtained were subjected to analysis using statistical tool t-test. The study points out Post graduate students were found to use systematic cognitive style more in comparison to that of the undergraduate students, on the other hand, there is no difference in the use of intuitive cognitive style between undergraduate and postgraduate students. Students should be encouraged to use both systematic cognitive style and intuitive cognitive style for optimum results in decision making in student- learning process. So, they can plan various learning strategies to enhance learning effectiveness. Through the cognitive styles, the students' self – confidence should be encouraged for the maximum performance.

Key words: Cognitive Style, Self -Confidence, College Students

Introduction

Cognition is a collection of mental process that includes awareness, perception, reasoning and judgement. The root of cognitive style originate from Gestalt psychology of Max Wertheimer, Wolfgang Kohler and Kurt Koffa (Ash, 1998). Cognitive style is the perception of information from the surroundings which thereby influence the thought patterns in a person about the world around them. (Martens, 2020). It is for this reason that research in this area is important and it is critical to train parents and educational professionals in methods to address these differences in Class rooms and their daily activities. Individual-based simulations show that, under just slightly different environmental conditions, different cognitive styles exist and under a variety of conditions, can also co-exist. Co-existences are based on individual specialization on different resources, or, more generally speaking, on individuals adopting different niches or microhabitats (Liedtke & Fromhage, 2019).

Self-confidence is an attitude which will allow you to have , positive, realistic views of yourself and your situation (Febrianta, 2019). Lack of Self Confidence is a pessimist passivity, distrust, perfectionist, sensitive to criticism, and failure , inferior, isolated, self-doubt and depressed (Mitchell et al., 2007). Beliefs about ourselves and others are at the heart of many economic and social decisions, with large consequences for welfare. One critical area where such beliefs are often found to be biased is abilities of men and women. Holding performance constant, women have been found to be less confident about their own ability in math and science than men, contributing to economically consequential differences in financial decision-making, academic performance, and career choices

(Barber & Odean 2001; Bordalo et al., 2019). The findings of the study conducted by Albaity and Rahman (2012) also yielded evidence that was in accordance with the findings of the current study Females tend to be luckier, happier, trusting and more risk taker in general terms compared to males while they are also less risk averse with income and portfolio less overconfidence, less regretful, low maximizers than males.

The findings of Shaukat and Bashir's (2015) study was arts students have higher confidence than science students which hereby do not agree with the study, The results indicated that female students held significantly higher levels of academic confidence than their male counterparts. Students enrolled in the Masters' Education programs and students of public universities following Arts disciplines held significantly higher academic confidence.

Female nursing students were significantly less self-confident than male students. (Kukulu et al., 2013). self-confidence levels of nursing students and the factors related to such self-confidence. Data were obtained via a questionnaire for socio-demographic characteristics and a 'Self-Confidence Scale' prepared by the researchers. High self-confidence levels were noted in 78.6% of female students and 92.3% of male students. While 84.5% of second-year students had high self-confidence levels, this rate was 76% in fourth-year students. Female nursing students were significantly less self-confident than male students. The findings of (Hooda & Devi, 2018) do support the findings in the study. the study points the main effect of cognitive style and gender on the self-confidence of secondary school students was found to be significant. On the other side, the double interaction effect of cognitive style and gender on the self-confidence of secondary school students was also found to be significant. The findings of the present study have an implication for the teachers that they should plan their teaching accordingly by adopting effective teaching methods, proper teaching strategies and by guiding students for promoting their academic excellence and self-confidence (Allinson & Hayes, 1996). The objectives of the study were, first, to produce a psychometrically sound instrument suitable for application in large-scale organizational studies, and second, through its development, to confirm empirically the generic intuition-analysis dimension of cognitive style. Findings suggest that each objective was largely fulfilled. At a time when there is a burgeoning interest in intuition as a basis for decision making and problem solving in organizations, the CSI would appear to be a notable addition to the small collection of measures appropriate for survey research.

Literature Review

The findings of the study conducted by Albaity and Rahman (2012) also yielded evidence that was in accordance with the findings of the current study Females tend to be luckier, happier, trusting and more risk taker in general terms compared to males while they are also less risk averse with income and portfolio less overconfidence, less regretful, low maximizers than males. The findings of this study conducted (Shaukat & Bashir, 2015) was arts students have higher confidence than science students which hereby do not agree with the study, The results indicated that female students held significantly higher levels of academic confidence than their male counterparts. Students enrolled in the Masters Education programs and students of public universities following Arts disciplines held significantly higher academic confidence.

Sarasin and Celli (1999) also indicate there is no significant difference in self-esteem levels among male and female offspring from divorced families. They can gain self-esteem, motivation and feel more confident about themselves. Another study of Ellis (2005), examined gender differences in self-confidence among working managers in two situations (work and social/family) as well as relationships between self-confidence, personal adjustment, and gender identity, showing Results showed that contrary to commonly held beliefs, the women and men managers were not significantly different in self-confidence in either situation, but both were higher in self-confidence at work than the same gender was in the social/family environment.

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rate was 76% in fourth-year students. Female nursing students were significantly less self-confident than male students.

The findings of Hooda and Devi (2018) points the main effect of cognitive style and gender on the self-confidence of secondary school students was found to be significant (Allinson & Hayes, 1996), the objectives of the study were, first, to produce a psychometrically sound instrument suitable for application in large-scale organizational studies, and second, through its development, to confirm empirically the generic intuition-analysis dimension of cognitive style. Findings suggest that each objective was largely fulfilled. At a time when there is a burgeoning interest in intuition as a basis for decision making and problem solving in organizations, the CSI would appear to be a notable addition to the small collection of measures appropriate for survey research. (Beri & Kumar, 2016) inspected the cognitive style of secondary school students on the basis of adversity quotient. Cognitive Style has a significant effect on mathematics achievement (Idika, 2017). Parashar (2013) found that cognitive style had a significant predictor of self-confidence.

Methods

Descriptive research design is used to describe systematically facts and characteristics of a given population, also it help to project the exact character or group of a population , and also helps to find out the frequency of a phenomenon (Dulock, 1993). Descriptive research design was used for this study. Descriptive research designs help provide answers to the questions of who, what, when, where, and how associated with a particular research problem; a descriptive study cannot conclusively ascertain answers to why. Descriptive research is used to obtain information concerning the current status of the phenomena and to describe “what exists” with respect to variables or conditions in a situation.

Instrumentation

Cognitive Style Inventory (CSI) The students’ cognitive style was measure by using Cognitive Style Inventory (CSI) which was developed by Dr. Praveen Kumar Jha. CSI is a self – report measure of the ways of thinking, judging, remembering, storing information, decision making and believing in interpersonal relationship.

Self – Confidence Inventory (SCI) The students’ self -confidence was measured by using Self Confidence Inventory (SCI) which was developed by Dr. Rekha Gupta. SCI consists of 56 statements related with different situations.

Data analysis

The data collected from the participants are scored systematically. For the Cognitive Style Inventory, there are 5 ratings totally disagree scored as 1 and disagree as 2, undecided as 3, agree as 4 and totally agree as 5. The responses of each statement as scored as per the ratings. In, Self- confidence scale consisting some statements have positive and some are negative. The 67 scoring was done as per the manual. The relevant data obtained from the subjects were consolidated in a coding sheet. The personal information like that of college, age, sex, stream, education was included and the scores of variables were also entered. After completion of scoring, the data were organized and tabulated for further analysis and interpretation. Statistical Techniques: The statistical techniques used in the present study was t- test

Results

Table 1.

Comparison of Males and Females on the basis of Self – Confidence

Sl. No	Variables	Male		Female		t- value
		M1	SD1	M2	SD2	
1	Self-Confidence	26.25	6.461	26.77	7.26	-.411

The results in table indicate that there exists no significant difference between male and female college students in self-confidence. The mean score obtained by male students on self – confidence was 26.25, the female students score was 26.77 with corresponding deviations of 6.461 and 7.26 respectively. The t- value was ($t = -.411$) found to be not significant. This indicates that no sex wise differences exist on self – confidence.

Table 2.

Comparison of arts and science students on the basis of self – confidence

Sl. No	Variables	Arts		Science		t- value
		M1	SD1	M2	SD2	
1	Self-Confidence	26.67	6.30	26.34	7.50	.264

The results in table indicate that there exists no significant difference in self -confidence between arts and science students. The mean score obtained by the arts students on self – confidence was 26.67 and the female students score was 26.34 with corresponding deviation of 6.30 and 7.50 respectively. The t-value was ($t = .264$) found to be not significant. This indicates there were no differences in self – confidence between arts and science students. The reason for this may be due to the environment provided by the respected college is same to both arts and science students, there may be nothing special to arts or science students for promoting high self -confidence level. Thus this hypothesis is rejected.

Table 3

Comparison of male and female on the basis of intuitive cognitive style

Sl. No	Variables	Male		Female		t- value
		M1	SD1	M2	SD2	
1	Intuitive Cognitive Style	62.08	14.55	62.82	11.64	-.306

The results in table indicate that there exists no significant difference between male and female in the use of intuitive cognitive style. The mean score obtained by the male students on intuitive cognitive style was 62.08 and the female students score was 62.82 with corresponding deviation of 14.545 and 11.637 respectively. The t- value was ($t = -.306$) found to be not significant. This indicates there were no sex wise differences in the use of intuitive cognitive style. The findings of the study though not significant difference were noted when compared to the studies in (Kukulu et al., 2013).

Table 4.

Comparison of male and female on the basis of systematic cognitive style

Sl. No	Variables	Male		Female		t- value
		M1	SD1	M2	SD2	
1	Systematic Cognitive Style	64.61	14.444	63.48	13.28	.448

The results in table indicate that there exists no significant difference in the use of systematic cognitive style between male and female college students. The mean score obtained by the male students in systematic cognitive style was 64.61 and the female students score was 63.48 with corresponding deviation of 14.444 and 13.28 respectively. The t- value was ($t = .448$) not significant. This indicates there were no sex differences in the use of systematic cognitive style. The findings of the study conducted by Sally and Baron also yielded evidence that was in accordance with the findings of the current study, and the hypothesis which states that “There will be significant differences in 74 the use of systematic cognitive style between male and female college students” is not accepted.

Table 5.

Comparison of education on the basis of systematic style

Sl. No	Variables	U G		P G		t- value
		M1	SD1	M2	SD2	
1	Systematic Cognitive Style	61.28	14.804	68.46	10.805	-2.85

The results in table indicate that there exists a significant difference between undergraduate and postgraduate students on their systematic cognitive style. The mean score obtained by the UG students on systematic cognitive style was 61.28 and the PG students score was 68.46 with corresponding deviation of 14.804 and 10.805 respectively. The t- value was ($t = -2.85$) is significant at 0.01 level. This indicates there were a significant difference in systematic cognitive style between UG and PG students. The reason for this is may be PG students are mature than UG students. The findings of the study conducted by (Hooda & Devi, 2018) also yielded evidence that was in accordance with the findings of the current study, and the hypothesis which states that “There will be significant difference in the use of systematic cognitive style between undergraduate and postgraduate students” is accepted.

Conclusions

From the findings of the study, it is evident that no significant difference was found between male and female college students regarding systematic and intuitive cognitive style. It is important to consider cognitive styles as the central goal of instructions therefore; an environment should be created by the college, by the respected authorities that nurtures the capabilities of the students and develop teachers’ potentials to the fittest. Students should be encouraged to use both systematic cognitive style and intuitive cognitive style for optimum results in decision making in student- learning process. So, they can plan various learning strategies to enhance learning effectiveness. Through the cognitive styles, the students’ self – confidence should be encouraged for the maximum performance

Recommendations

For further study it is recommended to increase the sample size. It is recommended to include participants from more college • Different demographic variables like socio economic status, area, mother’s education, father’s education should be included.

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