



A Study on Creativity of Engineering Students in Rural and Urban areas of Telangana state

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Abstract:

The present study investigated the creativity of engineering students in Telangana State. The study was conducted on two (200) hundred engineering students by giving due representation to boys (100) and girls (100) as well as rural and urban localities of the Telangana State. The 08 Government and Private engineering colleges were selected using stratified random sampling technique, and students were selected using simple random sampling technique. The descriptive survey method is used for data collection using creativity test developed by Baqer Mehdi. This study reported that there was no significant mean difference between male/female; rural/urban; and government/private in creativity of students of the Telangana State.

Keywords: Creativity and engineering students.

Introduction

Creativity is the ability to discover new solutions to problems or to produce new ideas, inventions or works of art. It is a special form of thinking, a way of viewing the world and interacting with it in a manner different from that of the general population. The importance of creativity has been felt so strongly as in the modern time. Along with the progress of human civilization, new and still newer problems are to be encountered in daily life, which directly challenge our creative ability in every walk of life. There is certainly need for a different kind of thinking which can smoothen the life style. This could only be attained only if children with creative ability are identified earlier and these talents could be developed. It is evident that in our modern and rapidly developing civilization the spontaneity of our creative ability should be the most desired quality of every human beings, creativity is one of the most highly valued qualities of human beings because creative acts affect enormously not only scientific progress but also society in general. The nation which learn best how to identify, develop and encourage creativity in their people, may find themselves in a very advantageous position.

Review of Related Study

Ogletree (1971) found that private schools followed a less restrictive and less intellectual approach in that the outdoor activity and active involvement took precedence over academic intellectual learning. Private school pupils obtained significantly higher verbal and figural scores on the creativity test than state school pupils.

Sharma (1977) reported that males were superior in creativity than females. The high creative male students were high in intelligence and scholastic achievement, but low in risk talking. They were also better in home, health, emotional and overall adjustment. In case of females, the background factors, like parents' education, and socio-economic factors were more significantly associated to their creative thinking ability. High creative females were high in intelligence and scholastic achievement than the low creative females.

Sharma, K. (1982) studied the factors related to creativity. The main objective of the study was to explore the relationship of creativity with certain background, psychological and organizational factor of a student of higher secondary school of Delhi. The major findings were:

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(i) Boys was more creative as compared to girls. (ii) Number of siblings was found to be negatively related to creativity. (iii) Creativity was higher in nuclear families and families with higher SES. (iv) Birth order did not have any effect on the creative performance of the students; however, interrelation patterns between background variable and creativity were significantly different amongst students at different birth orders. (v) Scholastic achievement was found to be positively related to the measures of creativity. (vi) Creativity was significantly higher in the high I.Q. group in comparison to middle and low I.Q. groups, further, the middle I.Q. was found to be significantly higher than the low I.Q. group. (vii) Perception of teacher behavior by students was found to be related to creativity in students. (viii) Attitudes of the towards School, were not significantly related to creativity. (x) Parental preference for conforming behavior in the children was negatively related to creative behavior whereas parental preference for independent self-assertion was positively related to creativity. (xi) Parental preference for extraverted and sociable orientation among their children was not found to be related to creativity. (xii) Central School students were found to be most creative; next in order were public, private-aided and government schools respectively. (xiii) Organizational climate of the school was not found to be creativity in students.

Madhu (1987) reported findings in favour of the rural students, who were found to be more field independent than the urban students who were field dependent. The rural students had better elaboration ability, and were more fluent producing new ideas than the urban students. The urban students had higher mean values on originality. There was no significant difference between the two groups in their mean values on flexibility and total creativity thinking, although the rural group had higher mean scores.

Prema and Alphonse Raj (2008) conducted a study on creativity among High School students in relation to their attitude towards science. The findings of the study were: (i) rural and urban high school students in relation to its various dimensions fluency, flexibility and originality and in to is moderate. (ii) there was a significant difference observed between male and female high school students in the creativity (iii) there was a significant relationship between creativity and attitude of high school students with respect to background variables sex and locality.

Need of the study

Creativity refers to having inventive, productive and imaginative qualities. A creative person is able to link the existing information with new information in productive ways. Students who are creative may often be referred to as gifted or talented. Creative students, for example have a keenly observe a situation and have a desire to improve their abilities, produce variety of possible solutions to problem, are curious, original, comfortable with ambiguity, able to work independently, able to analyse and synthesise information, demonstrate compulsivity and an urgency to complete a task or execute an idea and have multiple latent abilities and characteristics of persistence. Thus, creative one plays with the existing knowledge and information and combines in a unique ways that a creative product or idea is formed. This motivates the investigators to conduct a study on creativity of engineering students in TS.

Statement of the Problem

The problem of the present study has been stated as follows:

“A Study on Creativity of Engineering Students in Rural and Urban areas of Telangana State”

Objectives of the Study. The study is designed with the following objective: 1. To test the significance of the mean differences on Creativity of (a) male and female (b) rural and urban (c) government and private engineering students in Telangana State.

Hypotheses of the Study

- There is no significant difference in the mean scores of creativity between male and female engineering students in



Telangana State.

- There is no significant difference in the mean scores of creativity between urban and rural engineering students in Telangana State.
- There is no significant difference in the mean scores of creativity between government and private engineering students in Telangana State.

Methodology of the Study

The Descriptive survey approach is used in the study.

Population of the Study

The population of the present study constitutes all the engineering students studying B.Tech who are the creative.

Sample of the Study

The sample is of small number of representative individuals from the population. This study is conducted on a sample of 200 Students, 100 boys and 100 girls selected randomly from 08 Government and Private engineering students in Telangana State. The colleges were selected using stratified random sampling technique.

Tool Used

The researcher used the verbal creativity test developed by Baqer Mehdi. This test has four activities. First three activities have three questions or problems, each problem related to three factors namely; fluency, flexibility and originality and last activity are descriptive type. Only 1hour were given to administer it to the students.

Statistical Techniques Used

In this study various statistical measures such as Mean, SD and t-test are used.

Result and Discussion

Collected data through above mentioned inventories were analyzed in terms of mean, standard deviation and t-test method. The results have been presented in the tables.

Hypothesis-1: There is no significant difference in the mean scores of creativity between male and female engineering students in Telangana State

Table -1

Showing the mean, standard deviation and t-value of the creativity between male and female engineering students in Telangana State

Variable	Group	N	Mean	Standard Deviation	t- value	Remark
Creativity	Male	100	28.65	20.89	-0.38	Not significant
	Female	100	29.73	19.81		

From the above **Table**, it can be observed that the mean scores of both male and female students were 28.65 and 29.73 respectively. When the t-test was applied to compare the mean scores of both the groups, it was found that the calculated t-



value (-0.38) is less than the table value 1.96 at 0.05 level of significance. Hence, hypothesis is accepted. This means that there was no significant difference in creativity of male and female engineering students in Telangana State. **Finding:** There was no significant mean difference on creativity between male and female engineering students in Telangana State.

Hypothesis-2: There is no significant difference in the mean scores of creativity between urban and rural engineering students in Telangana State.

Table -2

Showing the mean, standard deviation and t-value of the creativity between urban and rural engineering students in Telangana State

Variable	Group	N	Mean	Standard Deviation	t- value	Remark
Creativity	Rural	100	28.7	22.12	-0.34	Not significant
	Urban	100	29.68	18.45		

The mean scores on creativity of both rural and urban students were 28.7 and 29.68 respectively. The computed t-value between their mean differences was -0.34. This was not found significant at 0.05 level. Hence hypothesis is accepted. Therefore, rural and urban engineering students in Telangana State were found similar on creativity.

Finding: There was no significant mean difference on creativity between rural and urban engineering students in Telangana State.

Hypothesis-3: There is no significant difference in the mean scores of creativity between government and private engineering students in Telangana State

Table -3

Showing the mean, standard deviation and t-value of the creativity between government and private engineering students in Telangana State

Variable	Group	N	Mean	Standard Deviation	t- value	Remark
Creativity	Government	150	29.2	20.72	0.01	Not significant
	Private	50	29.16	19.25		

The mean scores on creativity of both government and private students were 29.2 and 29.16 respectively. The computed CR (t) between their mean differences was 0.01. This was not found significant at 0.05 level. Hence, hypothesis is accepted. This means that there was no difference in creativity of government and private engineering students in Telangana State.

Finding: There was no significant mean difference on creativity between government and private engineering students in Telangana State.

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Conclusion

The present study was mainly concerned with the creativity of engineering students in Telangana State. From analysis and interpretations of this study the researcher found that there was no significant mean difference between male/female; rural/urban; and government/private in creativity of engineering students in Telangana State. The present researcher tried to figure out reason for the low creative ability of engineering students in Telangana State. Most of the people live in a rural area. They are economically poor, most of the parents are uneducated, government cannot provide sufficient fund for the college development, lack of infrastructural facilities, no proper guidance and counseling center etc.

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