

# An Experimental Study on Effectiveness of Cooperative Learning Strategy on Achievement in Economics Among the Higher Secondary School Students

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## Abstract

*The research article focuses its attention on the effectiveness of cooperative learning strategies on the achievement of higher secondary school students in Economics. For this, the investigator used experimental method of research. The students are classified into two equated groups one is for control group and another one is for experimental group, and among which, 50 are selected for control group and 50 are selected for experimental group. In every group equal representation of male and female categories of students. Moreover, they are further classified into three, namely low, average and high achievers. The control group is treated with traditional teaching procedure and the experimental group is treated with three cooperative learning strategies namely, JIGSAW, Group Investigation and Think-Pair-Share. For data collection, the investigator prepared and validated an achievement test in Economics. For data analysis, the investigator used 't' test. The findings of the experimental study revealed that the experimental group students are significantly higher than the control group students in their achievement in Economics.*

**Keywords:** *jigsaw, group investigation, think-pair-share.*

## Introduction

Co-operative learning is a novel method in teaching-learning process where the students are learning in groups usually to achieve a specific task. This innovative idea of learning can help the students to develop certain psychological skills like adjustment, patience, competitive spirit, overcoming fear and anxiety, comprehension skills etc. It also develops the ability to work with others as a team. Since the 17th century, co-operative learning has existed. “Co-operative learning can be defined as a structured, systematic, instructional strategy in which small groups work together towards a common goal” (Bolukbas et al., 2011).

According to Drakeford and William (2012), “Co-operative learning is the instructional use of small groups through which students work together to maximize their own and each other’s learning”. It is a strategy where the students don’t take information in passively. It allows the students to become interdependent. It also offers face-to-face interaction and gives the students an appropriate usage of interpersonal and group skills. Furthermore, this strategy gives the students responsibility for their learning. Some other benefits of co-operative learning strategy are: improvement of cognition, long-term retention, self-esteem, peer acceptance, and positive relationships between students and teachers. In this

strategy, the teacher acts as a coach or facilitator and is not present to be a teacher alone. It also provides a social setting where in which the learning can take place. In simple, it is more than just a group study. One of the important distinctions is that in traditional groups, the students are asked to learn with little attention paid to group functioning, whereas in co-operative learning, group study is carefully prepared, planned and monitored (Ebrahim and Ali, 2012).

## Need And Significance of The Study

The significance of the present problem is to find out the influence of cooperative learning strategies on the achievement of the higher secondary school students in Economics. One of the problems of learning Economics is to master the conceptual matters of the subject. The major aim of learning Economics is to

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enable the higher secondary school students to inhale the effective side of economical concepts correctly and this requires proficiency in knowing the subject content.

Even though there are many strategies to develop the learning skills, the students struggle a lot in knowing the subject matter. The efforts should be taken in learning Economics in a right manner. In order to attain the mastery over the subject, the learner needs to have a command over the subject or competence in the subject. Therefore, learning Economics in the higher secondary schools is very important one to achieve a better score in the final public examinations.

The investigator's experience as a teacher educator made her realization that the students have a very low capacity in learning the subject for which they need a good subject base. In order to avoid the tediousness of the lessons in Economics, the investigator intends to adapt the cooperative learning strategies with the help of the respective subject teachers to avoid the monotony of teaching and learning the subject. Students will learn important concepts, elements and its applications in the real life situations, without knowing the deeper understanding of the subject matter. The present study is an attempt to study the effectiveness of cooperative learning strategies on the achievement of higher secondary students in Economics. Hence, the present study is the need of the hour.

### **Title Of the Study**

An Experimental Study on Effectiveness of Cooperative Learning Strategy on Achievement in Economics among the Higher Secondary School Students.

### **Definition Of the Key Terms**

#### *Effectiveness*

By this, the investigator refers to the degree to which particular thing or action is successful in producing a desired output or result towards success.

#### *Cooperative Learning Strategy*

By this, the investigator refers to the learning method or ways to help the learner learn together to learn a particular concept.

#### *Achievement In Economics*

By this, the investigator refers to the score obtained by the students in a test prepared and validated by the investigator.

### **Objectives**

1. To find the significant difference between the pre-test and post-test mean scores of the control group students in their Achievement in Economics.
2. To find the significant difference between the pre-test and post-test mean scores of the control group students in their Achievement in Economics with regard to gender.
3. To find the significant difference between the pre-test and post-test mean scores of the experimental group students in their Achievement in Economics.
4. To find the significant difference between the pre-test and post-test mean scores of the experimental group students in their Achievement in Economics with regard to gender.

## Method And Procedure

The investigator used experimental method of research. The researcher took 100 students studying Economics as one of their subjects, among which, 50 students are for control group and the remaining 50 are for experimental group. In every group equal representation of male and female categories of students. Moreover, they are further classified into three, namely low, average and high achievers. The control group students were taught with traditional method of teaching and the experimental group students were treated with three cooperative learning strategies namely, JIGSAW, Group Investigation and Think-Pair-Share. For data collection, the investigator prepared and validated an achievement test in Economics. For data analysis, the investigator used 't' test.

## Data Analysis and Findings

There is no significant difference between the pre-test and post-test mean scores of the control group students in their Achievement in Economics.

**Table – 1:** Difference between the pre-test and post-test means scores of Control Group Students in their Achievement in Economics

	N	Mean	SD	Calculated 't' value	Table Value	Remark
Pre-test	50	27.26	11.122	5.135	1.96	S
Post-test	50	29.86	11.637			

From the above table, it is inferred that the calculated 't' value (5.135) is greater than the table value at 5% level of significance, the null hypothesis is rejected. Hence, significant difference is found between the pre-test and post-test mean scores of the control group students in their achievement in Economics. The post-test means scores of control group students are found better in their achievement in Economics.

There is no significant difference between the pre-test and post-test mean scores of the control group students in their Achievement in Economics with regard to gender.

**Table – 2:** Difference between the pre-test and post-test means scores of Control Group Students in their Achievement in Economics with regard to Gender

Gender		N	Mean	SD	Calculated 't' value	Table value	Remark
Male	Pre-test	26	26.77	11.010	3.778	1.96	S
	Post-test	26	29.35	11.485			
Female	Pre-test	24	27.79	11.455	3.418	1.96	S
	Post-test	24	30.42	12.021			

From the above table, it is inferred that the calculated 't' values (male - 3.778; female - 3.418) are greater than the table value at 5% level of significance, the null hypothesis is rejected. Hence, significant difference is found between the pre-test and post-test mean scores of the control group students in their achievement in Economics with regard to gender. In both the male and female categories of students, the post-test means scores of control group students are found better in their achievement in Economics.

There is no significant difference between the pre-test and post-test mean scores of the experimental group students in their Achievement in Economics.

**Table – 3:** Difference between the pre-test and post-test means scores of Experimental Group Students in their Achievement in Economics

	N	Mean	SD	Calculated 't' value	Table Value	Remark
Pre-test	50	30.38	10.885	6.326	1.96	S
Post-test	50	32.72	11.542			

From the above table, it is inferred that the calculated 't' value (6.326) is greater than the table value at 5% level of significance, the null hypothesis is rejected. Hence, significant difference is found between the pre-test and post-test mean scores of experimental group students in their achievement in Economics. The post-test means scores of experimental group students are found better in their achievement in Economics.

There is no significant difference between the pre-test and post-test mean scores of the experimental group students in their Achievement in Economics with regard to gender.

**Table – 4:** Difference between the pre-test and post-test means scores of Experimental Group Students in their Achievement in Economics with regard to Gender

Gender		N	Mean	SD	Calculated 't' value	Table value	Remark
Male	Pre-test	26	30.69	11.070	4.778	1.96	S
	Post-test	26	32.35	11.485			
Female	Pre-test	24	30.04	10.909	4.758	1.96	S
	Post-test	24	33.13	11.837			

From the above table, it is inferred that the calculated 't' values (male - 4.778; female - 4.758) are greater than the table value at 5% level of significance, the null hypothesis is rejected. Hence, significant difference is found between the pre-test and post-test mean scores of experimental group students in their achievement in Economics with regard to gender. In both male and female categories of students, the post-test means scores of experimental group students are found better in their achievement in Economics.

## Results And Discussion

From the findings of the study, it is observed that the post-test means scores of control group students are found superior in their achievement in Economics. In both the male and female categories of students, the same noteworthy difference is found. This clearly revealed that there may be some importance of teacher behaviour or teacher competence in teaching the subject matter in the control group students.

Similarly, the post-test means scores of experimental group students are found superior in their achievement in Economics. In both male and female categories of students, the same significant difference is found. It is obvious that the chosen experimental variable - cooperative learning strategies have a concrete influence on their learning of the subject matter which is inevitable one that the researcher believes that the experimentation adapted for the present study.

## Conclusions

On the completion of this experimental study on the effectiveness of cooperative learning strategies on the achievement of higher secondary school students in Economics, the researcher would like to conclude that the chosen experimental variable has its own significant influence on the determination of the academic performance of the chosen population. On the whole, it is strongly believed that the cooperative learning strategy should be stressed for enhancing the scholastic performance of the future generation..

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