

# The study of effect of Treatment, Study habits and their interaction on Tolerance of Ambiguity by taking pre-test scores of Tolerance of Ambiguity as covariate on Commerce students of Class XI

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**Abstract** - With the fast advancement of technology in the final part of the 20th century, the scientific management side of company received increasing attention. Government enacted a number of legislation, which led to a perceived demand for experts in the subject. As a result, there is a need for professionalized business education. Due to the following factors, business education is now utterly disconnected from the reality of the industrial world. Lack of current teaching techniques, the use of teaching aids, inadequate training for lecturers, and the employment of various teaching approaches. The following improvements are recommended in order to address the aforementioned issues and help create in commerce students analytical tools that may be used and used in the changing business and industrial environment. It is necessary to examine educational standards, curricula, and other components on a regular basis and to consider innovative teaching approaches and teacher preparation programs. The improvement of commerce education depends not only on the right curriculum and the caliber of the students, but also on the teaching staff and methodologies.

**Keywords** - Ambiguity, Study, commerce , education

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## INTRODUCTION

Although teaching and learning are mutually beneficial processes, it is often held that effective teaching emanates from a teacher's actions and must be assessed in terms of student learning gains. "Lifelong learning" is more than simply a catchphrase. It refers to a method of instruction that instructors must master in order to personalize their lessons for each student. An essential part of any successful teaching endeavor is the two-way exchange of information, ideas, and perspectives between a teacher or instructors and their students. The goals of the lesson, the characteristics of the student being taught, and the characteristics of the material being taught should all inform the teacher's approach to the classroom. All of this is contingent upon having the proper education in order to be a good educator.

The effectiveness of a teacher's methods may be gauged by the quality of the lessons their students take away from them. In this setting, both teaching and learning need more than just words and ears. Active manipulation of the system of objects and for organism of interest by both teacher and student is required to uncover the experience's intrinsic control.

A teaching model is an approach that may be used to form curriculum, provide resources for teaching, and direct teachers in the classroom and beyond.

## NEED AND SIGNIFICANCE OF THE STUDY

Our current business education system does not prepare students for either generalist positions or those needing technical or specialized expertise. The state of business schooling in the United States today is dismal. Teaching materials, strategies, and techniques, as well as course content, faculty development, and technology all need careful examination. Few studies have examined the effectiveness of Models of Teaching in business.

An adequate approach or technique and setting are necessary for effective communication. There has been a lack of data supporting the use of the Concept Attainment Model in the teaching of commerce, specifically with regards to the variables of students' study habits and Tolerance of Ambiguity. As a result, the researcher set out to identify the links between study habits and performance and ambivalence tolerance.

## STATEMENT OF THE PROBLEM

- The Problem of the study was word as:
- Pre-test scores for the ability to tolerate ambiguity were used as a covariate in the investigation evaluating the impact of treatment, study habits, and their interaction on this ability in Class XI Commerce students.

## REVIEW OF LITERATURE

These are some research on the relationship between studying regularly and academic success.

**Ansari (1980)** revealed that students' study routines and study habits are major factors in determining their grades.

**Ngailiankim (1988)** pupils in Shillong's ninth grade were surveyed on their motivation and study habits as they linked to their math grades. The purpose of this research was to compare the study habits of high, medium, and poor achievers in mathematics. Key results included the following:

1. The study habits of high, medium, and poor math achievers did not vary much.
2. There was no statistically significant difference in the attitude and study habit scores of male and female students from high, moderate, and poor accomplishment groups in mathematics.
3. Although there was no statistically significant difference between the two groups in terms of study habits, non-tribal children scored much better on measures of attitude and mathematical performance.

**Deb and Grewal (1990)** analyzed senior year undergraduate home science students' study habits and performance. Academic success was directly correlated with his students' study habits, he discovered. Academic performance was also affected by students' routines and pursuits outside of the classroom. Study habits were associated with the college setting..

**Sorenson (1991)** One must study with the goal of comprehension in mind, as was stressed in outlining effective fundamental study practices. To go through this successfully, you need slow down and focus intently.

**Sen and Barat (1992)** examined the mental make-up, IQ, and study routines of high and poor performers. Study patterns, IQ, and many personality traits were investigated for their possible impact on academic performance in secondary school. The results indicated a statistically significant difference in study routines between the two accomplishment groups.

**Rusell and Petrie (1992)** have referenced a study that examined the correlation between college students' study habits, student behavior, and overall academic success (as measured by GPA). The results of this

research support the idea that regular study habits directly impact educational success.

**Armstrong (1956)** states that study habits are the link between learning readiness and an activity. Most of the time, it's for bragging rights after completing a set of requirements.

**Patel (1996)** conducted research on students' study habits and their effect on academic performance. Students with strong study habits were shown to have much higher performance scores than their less disciplined peers. Results showed a robust interaction between sex and study habits in determining final grades.

**Azikiwe (1998)** "the accepted approach and manner a student arranges his private readings, following classroom learning, in order to gain mastery of the topic," defines the study habit. She claims that "good study habits are beneficial assets to learners" because they help students become experts in their fields, leading to high-quality work. Poor study habits, on the other hand, act as "constraints to learning and accomplishment," resulting in a negative educational outcome.

**Verma and Kumar (1999)** conducted research into five distinct subject areas to see how students' study habits correlated with their grades. What we found was as follows:

- i. Students' study habits were shown to be positively and substantially connected with their performance in English, Hindi, mathematics, general science, and social studies.
- ii. Students' study habits were favorably and strongly associated with their overall performance. Study habits are one of the learner characteristics that contribute to success.

**Onwuegbuzie (2001)** performed many studies to determine the connection between success in school and study habits, and found a good one. There is a substantial body of research linking diligent study with increased performance in school.

## STUDIES RELATED TO TOLERANCE OF AMBIGUITY

The following studies are included because of their relevance to the current study.

**Rani (1986)** investigated the cognitive and affective components of female creative school subjects. Four hundred students in grades XI and XII made up the sample. The data was gathered using the Tolerance of Ambiguity Scale developed by Bhawalkar (1992) and the Wallach Kogan's Battery of creative tools. Creativity and Tolerance for Ambiguity were shown

to have a positive and statistically significant relationship.

**Bhawalkar (1992)** examined the connection between Openness to Uncertainty and Innovation in the Sciences. Six hundred sixty-three children from grades nine and ten made up the sample. The Majumdar Scientific Creativity Test and the Bhawalkar Tolerance of Ambiguity were used (1992). The data was analyzed using a partial correlation method. Taking into account only Scientific Creativity and Tolerance of Ambiguity and ignoring other factors such as Dependence, Self-Confidence, Intelligence, Scientific Attitude, Academic Motivation, Mathematical Achievement, and Science Achievement yielded a non-significant partial correlation coefficient of 0.016. Another investigation revealed that students' Scientific Creativity increased along with their Tolerance of Ambiguity.

**Singh (2001)** examined the facets of Verbal Creativity and their connection to Tolerance of Ambiguity. Seventy-five pupils from the tenth grade made up the sample. Both verbal creativity (as measured by the Passi Test) and ambiguity tolerance (as measured by Bhawalkar, 1992) were evaluated. There was little to no correlation between the Tolerance of Ambiguity and any measure of Verbal Creativity.

When students' pre-test scores on Intelligence, Achievement in Peace Education, Tolerance of Ambiguity, and Self-Concept were included in the analysis, the Personality variable did not significantly affect the Tolerance of Ambiguity of students taught through the Instructional Strategy and the Traditional Method.

Research on the topic of ambiguity tolerance has shown a positive and statistically significant relationship between the two concepts of creativity and ambiguity tolerance (Rani, 1986). Partialling out the effect of self-confidence, Intelligence, scientific attitude, academic motivation, achievement in mathematics, achievement in science, academic achievement, and dependency, Bhawalkar (1992) found that the correlation between Scientific Creativity and Tolerance of Ambiguity was 0.016, which was not significant. She also discovered that students' levels of Scientific Creativity increased with their Tolerance of Ambiguity. Dimensions of Verbal Creativity were not substantially affected by Tolerance of Ambiguity (Singh, 2001). Tolerance of Ambiguity was shown to be significantly affected by treatment and gender, but not by personality, according to research by Jaiswal (2014).

## OBJECTIVES OF THE STUDY

To study the effect of Treatment, study habits and their interaction on tolerance of ambiguity by taking pre-test scores of tolerance of ambiguity as covariate .

## HYPOTHESIS

There is no significant effect of study habits on tolerance of ambiguity when the pre-test scores of tolerance of ambiguity are taken as covariate.

## SAMPLE

The present study was conducted at two stages-

- Try-out stage
- Final Stage
- There were 50 students in control group and 40 students in experimental group.

## METHOD

The researcher employed the experimental method for the study.

## DESIGN

Non-Equivalent Control Group design was employed for the study.

## TOOLS

- Study Habits Inventory by Patel (1995)
- Tolerance of Ambiguity by Bhawalkar 1992
- Statistical Techniques used for the Analysis of Data
- In the present study, percentage, Mean, Standard Deviation, Coefficient of Variation and Analysis of Covariance were used for the analysis of the data.

## ANALYSIS AND INTERPRETATION

Using pre-test scores on the Tolerance of Ambiguity scale as a covariate, the research aimed to examine the impact of Therapy, Study Habits, and their interaction on ambiguity processing. Both groups' tolerance of ambiguity was tested by giving them the Tolerance of Ambiguity Test at the start and finish of therapy. Ambiguity tolerance was the dependent variable. There were two free variables in this research: treatment and study routines. There were two levels to the treatment: complementary and alternative medicine (CAM) education and the conventional approach. High, medium, and low levels were available for Study Habits. For the aim of this investigation, only high and low levels of study habits were considered. No mean was used in the calculation. Business Success was the dependent variable in this study. Covariates included Tolerance of ambiguity test scores from before the study began. The ambiguity tolerance data was analyzed using an ANOVA with unequal cell sizes in a 2 x 2 factorial design. The findings are shown in tables 1 and 2

Table 1

Sources of Variance	Df	Ssy.x	Mssy.x	F-Value
Treatment	1	275.23	275.23	88.53**
Study Habit	1	38.73	38.73	12.46**
Treat X Study Habit	1	26.87	26.87	8.64
Error	60	186.53	3.10	
Total	63			

\*\*Significance at 0.01 level

Table 2: Mean and S.D. for Tolerance of Ambiguity of Experimental and Control Group

Group	Experimental			Control		
	N	Mean	S.D.	N	Mean	S.D.
High	21	39.81	4.41	25	33.63	3.58
Low	9	31.44	4.58	10	27.00	4.44
Total	30	37.30	75.86	35	31.71	4.84

### FINDING

In the table above, the F-value for Tolerance of Ambiguity is shown to be 88.53. For  $df = 1/60$ , this value is statistically significant at the 0.01 level. The degree to which people can tolerate ambiguity seems to have been affected by the Treatment. Hence, using pre-test scores of Tolerance of ambiguity as a covariate, we reject the null hypothesis that "There is no significant impact of Treatment on Treatment on Tolerance of Ambiguity."

Table 2 also reveals that students who were taught ambiguity tolerance through CAM had better average test results than their peers who had been taught using more conventional means. The Tolerance of Ambiguity of CAM Students was shown to be much higher than that of Conventional Method Students.

Therapy has a considerable impact on pupils' tolerance ambiguity.

### CONCLUSION

Concept development is the goal of the CAM approach. This method gives students a chance to learn how to recognize patterns within the samples given and how to discriminate between them to establish a hierarchy. The ability to generalize based on established principles is made possible by CAM.

Students in the CAM group reaped much more benefits than their colleagues in the TMT group.

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