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Effectiveness of Memory Model in Terms of Long Term Memory of Class IX Students

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Abstract: *Memory is the ability to remember past experiences, previously learned facts, skills, habits etc. it helps to retrieve the stored information in our brain whenever we need that particular part of information for our current activity. Without memorization the life is impossible and it is a known fact that people with good memory are more successful people. Thus memory plays an important role in day to day life of an individual. As we know that memory is the most important and fundamental aspect of teaching learning process. In the teaching learning process, the learners have to remember the information, knowledge and wisdom gathered by self and others. There is a definite purpose through which all this is stored in the brain. Memory is the process by which information is encoded, stored and retrieved. In today's scenario we see that our whole examination system is based on memorization of facts, skills, experience etc. thus there is a need to find the way/ technique to improve the memory system and help us to learn meaningful language. Memory model can be one of the model by which Short term Memory and Long term Memory can be enhanced. Memorization helps to train the mind to focus and help students and teachers to obtain pre determined goals confirmed by the behavioral action of students.*

Keywords: Memory model

I. Models of Teaching

Rathi (1980) define model of teaching as a "Systematically developed outline where in the activities for teachers and students are spelt out, arranged in a particular sequence and carried in an appropriate environment for attaining well defined objectives".

Models of teaching are really models of learning as it help students acquire information, ideas, skills, values, way of thinking and means of expressing themselves.

1.1 Characteristics of good Models of Teaching

There are certain characteristics which are to be possessed by good Models of teaching which are as follows:

- Scientific procedure: A Model of teaching is not haphazard combination of facts but on the other hand it is a systematic procedure to modify the behavior of learners they are based on certain assumptions.
- Specification of certain learning outcomes: All the Models of teaching specify in detail the learning outcomes that are observable in student's performance as how students will perform after completing an instructional sequence which is specified in detail.
- Specification of environment: This means that every Model of teaching specified certain definite environmental conditions under which response of students must be observed.
- Criterion performance: A Model specifies the criteria of acceptable performance which is expected from the students. The Models of teaching delineated the behavior outcomes which the learner would demonstrate after completing specific instructional sequence. Specification of operations: All models of teaching specify certain types of mechanism that must be provided for student's reaction interaction with the environment.

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A. Families of Models of Teaching

There a large number of models of teaching. They are broadly categorized in four different families.

- Personal Models
- Social Interaction Models
- Behaviour Modification Models
- Information Processing Model

Information Processing Model

These types of models usually focus on Cognitive capacity. They are usually concerned with the ability of the learners as how he observe and organize data and try to understand information and form required concepts related to verbal and nonverbal symbols and solve problems. The models which researcher has chosen for her study from this family is Memory Model

Memory Model

MEMORY: Memory has been defined by many psychologist, some important definitions are as follows:

Stout (1930): "Memory is the ideal revival, so far as ideal revival is merely reproductive. This productive aspect of ideal revival requires the object of past experiences to be reinstated as far as possible in order and manner of their original occurrence".

Ryburn (1956): "The power that we have to store our experience and to bring them into field of consciousness sometime after the experiences have occurred is termed as memory". In psychology, Memory is the process in which information is encoded, stored and retrieved.

Memory is the term given to the structures and processes involved in the storage and subsequent retrieval of information. Memory refers to the process that is used to acquire, store, retail and later retrieve information.

Memory consists in remembering what has previously been acquired and learned by an individual. Memory help us in forcing the past experiences and previous knowledge to come into a state of consciousness in the shape of images and ideas etc. Memory is not simple process that consists of learning, retaining, recalling and recognizing ability of an individual.

Concepts about Memory

There are 6 concepts best essential principles and techniques for increasing our memory of learning material as under:

- Awareness
- Association
- Link system
- Ridiculous Association
- Substitute word system

Elements of Memory

According to Wordsworth poem in elements of memory and learning retention recall and recognition

Learning Retention

Recall: Recall is of two types:

- Spontaneous
- Deliberate

Recognition

- Encoding
- Storage
- Retrieval

Mnemonics Techniques for Improving Memory

The word Mnemonic comes from the Greek word Mnemonics. This refers to the memory or past experience Mnemonics are defined as schemes of Strategies for assisting memory they use days back to the ancient Greek Civilization very effective

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memorization was a highly valued skill actors and orators who needed to remember large bodies of information used these memories assisting techniques to ensure effective retention.

These devices help learners recall larger pieces of information, especially in the form of list like characters, step, stages, parts, phases etc. According to Congos Dennis, there are 9 types of Mnemonics which improve the memory of learners, these are:

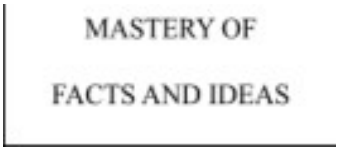
- Music Mnemonics
- Name Mnemonics
- Expression or Word Mnemonics
- Model Mnemonics
- Ode or Rhyme Mnemonics
- Note Organization Mnemonics
- Note Cards
- Image Mnemonics
- Connection Mnemonics
- Spelling Mnemonics

Memory Model

Memory Model falls under Information Processing Family. Memory model of teaching developed from the work of Pressley, Lenin and their Associates includes four phases: Attending to the material, Developing Connections, Expanding Sensory Images and Practicing Recall. These phases are based on the principles of attention and the technique of enhancing recall.

Syntax of Memory Model

1. PHASE I: Attending to the Material: It includes all those activities that help learner to concentrate on the learning material and organize it in the way that helps that learner remember it like underlining, listing, reflecting etc.
2. PHASE II: Developing Connections: It includes activities that make material familiar and develop connections using keywords, substitute word and link word system technique.
3. PHASE III: Expanding Sensory Images: it includes using of such techniques of ridiculous association and exaggeration like revise images for greater recall power.
4. PHASE IV: Practicing Recall: This phase includes practicing recall of material until it is completely learned.



Social System

The social system is cooperative; the students and teacher work as a team to shape the new material for commitment to memory.

Principles of Reaction

The teacher's role in this model is to help the student work the material. Working from the student's frame of reference, the teacher helps him or her identify key items, pairs, and images.

Support System

Pictures, concrete aids, films, and other audio visual materials are especially useful for increasing the sensory richness of the associations. However, no special support system is required for this model.

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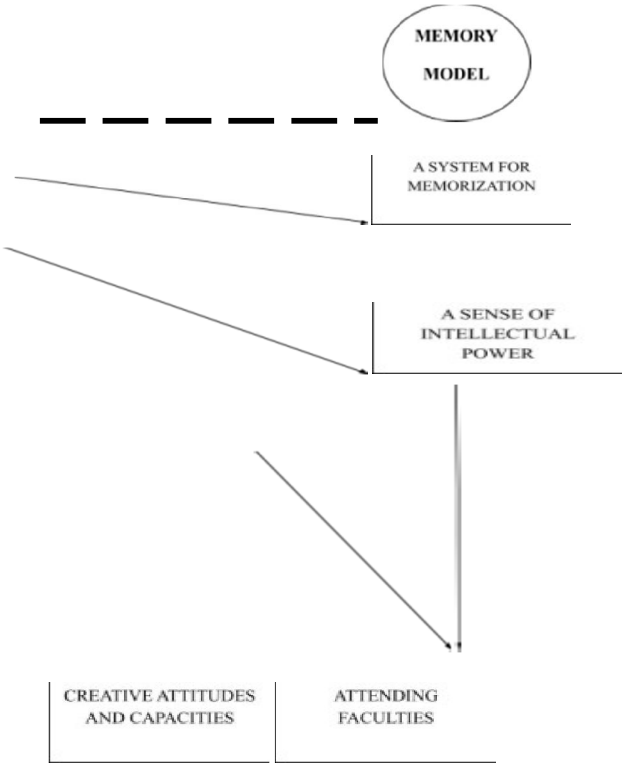
Effects of the Model

Each model results in two types of effects Instructional and Nurturant.

- Instructional effects are the direct effects of the model which results from the content and skills on which the activities are based.
- Nurturant effects are which implicit in the learning environment. They are the indirect effect of the Model. The nurturant effect comes from experience, environments created by the model. Every teacher faces a wide variety of problems in classrooms. An effective teacher can apply these models, resourcefully and creatively so as to solve the problems. The model of teaching gives ample opportunities to the teacher to adapt them to suit the classroom requirement. Only creative flexible and resourceful teachers will achieve the maximum benefits from the Models of Teaching



…….. NURUTURANT

▬ ▬ ▬ ▪ INSTRUCTIONAL

The Information Processing Approach includes Cognition. Cognition is the act or process of knowing. There are three basic approaches to understanding cognition. One is the psychometric approach which measures quantitative changes in intelligence as people mature. The second approach is Piagetian approach, which emphasis the qualitative change in the way people think as they develop. The third approach is the information processing view which examines the progressive steps, actions and operation that take place when people receive, perceive, remember, and use information.

II. Variable Considered Under Study

2.1 Cognitive Domain

The cognitive domain involves the development of our mental/ intellectual skills, acquisition or memorization of facts and knowledge and recall or recognition of facts and concept.. The six categories under this domain are: Knowledge: the ability to recall data and/or information. The variables based on such domain that are undertaken by the researcher are Long term Memory

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Long Term Memory

Long-term memory is defined as memory that can last anywhere from a few days to a lifetime. In terms of structure and function, it differs from working memory or short term memory which last anywhere from a quarter of a second to 30 seconds. Long-term memory refers to the continuing storage of information. This information is largely outside of awareness but can be called into working memory to be used when needed. Some of this information is fairly easy to recall, while other memories are much more difficult to access. Long-term memory is a system of permanently storing, managing and retrieving information for later use. Items of information stored is long term memory may be available for a lifetime. Long term memory is contrast to short term memory. It involves the storage and recall of information over a long period of time as days, weeks or years. Through the process of association and rehearsal, the content of short term memory can become long term memory.

Types of Long Term Memory

Long-term memory is usually divided into two types: declarative (explicit) memory and non declarative (implicit) memory

- Declarative includes all the memories that are available in consciousness. It can further divided into episodic memory (specific events) and semantic memory (knowledge about the world)
- Implicit memories are those that are largely unconscious. This type of memory includes procedural memory, which involves memories of body movement and how to use objects in the environment. How to drive a car or use a computer are examples of procedural memories.

III. Review Of Related Literature

3.1 Studies Related to Information Processing Model

Sharma, V. (1987).“The Effectiveness of combination of Information processing method and Lecture Method on achievement of students of Science of class IX”. Researcher compared the achievement in Science of class IX students taught through combination of Information processing method and Lecture Method with those taught through Traditional Method by taking separately intelligence, attitude towards Science and previous year achievement in Science as covariates. The sample consisted of 104 eighth and ninth class students of Science. Tools used were Intelligence test by Prayag Mehta, Science attitude scale by Avinash Grewal, anxiety inventory by Prayag Mehta. Statistical techniques analysis of covariance correlation, equation and multiple Correlation Coefficient were utilize. Researcher found that the combination of Memory Model with lecture method was significantly superior to traditional method in teaching Science. The intelligence was found to be contributing to the extent of 53 percent to the achievement in Science.

3.2 Studies Related to Memory Model

Kayathri, A. (1989). “Effectiveness of Jerry Lucas Memory Model in learning English”. Problem undertaken by the researcher was to study effectiveness of Memory Model in learning English in Higher Secondary School. The objectives of the study was to develop and test effectiveness of Memory Model in studying English along the lines of Jerry Lucas Memory Model, and to assess the effectiveness of Memory training Model in improving the achievement of student in English and also effectiveness of Lucas memory training model over the traditional memory training techniques. The sample of the study comprised of 60 students studying English in Higher Secondary School. They were compared on sex, social economic status, study habits, IQ measure and achievement. The data were analyzed using Statistical Techniques such as mean, SD and t test. The finding of the study was that students who had been trained through Jerry Lucas memory training model differed significantly in their achievement in English from those students who had been trained through the traditional Technique.

Nivedita.L. (2004). “Comparative study of effectiveness of memory and mastery learning models on student’s achievement in English grammar and their self concept”. The problem undertaken by the researcher was to study effectiveness of memory and mastery learning models on student’s achievement in English grammar and the concept of self of students of 9th class of 40 students. Objectives undertaken were to compare the mean scores on criteria achievement test in English grammar of two groups of students to be taught English grammar with the uses of Memory Model and Conventional Method after experimental treatment. The sample consisted of 120 students studying in 3 sections of 9th class of Dash Senior Secondary School, Charkhi Dadri. Each section comprised 40 students one section from the control group and the other two sections form the two experimental groups. The tools used by English grammar achievement as developed by investigator herself,

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Cattles Culture Fair intelligence test develop by Cattle and Cattle, social economic status scale by Dr. Kulshreshtha. Analysis was done with the help of ANOVA followed by t test. The findings of the study was that the group of students taught English grammar through Memory Model have scored high on criteria achievement then the group of students taught English grammar through conventional method.

Mastropieri . M.A. and Scruggs .T.I. (1990). "Learning Mnemonically the Mnemonic interventions under Memory Model for students with behavior disorder memory for learning and behavior". The problem undertaken by the researcher was the study dealt with teaching students way to remember. The objectives of the study were: to prove that Mnemonics help to increase the learning power of students who are even with behavior disorder. Two points of that the keyword method works best when the words that student learn are unfamiliar to them. The sample of 40 students of public schools were taken under study of which 20 in experimental group and 20 in control group. This adjusted Strategies for learning Mnemonically the Mnemonic interventions for students with behavior disorder memory for learning and behavior. The findings of the study were: Mnemonic strategy have been seen to impact very positively on potential problem areas for students with behavior disorder like academic deficit, attention, concentration deficit and poor motivation. It pointed out that the keyword method of Mnemonics under Memory Model works best when student learn words that are unfamiliar to them example, to help students remember that the Italian word "rana", means "frog" a picture of a frog sitting in the rain could be shown.

3.3 Studies Related to Memory

Naidu.L.(1973). "Conducted Research to find relationship between perception, learning and memory." The problem undertaken by the researcher was related to the study and investigation of the relationship between perception, learning and memory as they occur within the same individual. The objective was to investigate the relationship between perception, learning and memory as declared within the same individual. 100 students participated in the study. The design of the study included three conditions: a) high Taboo condition. b) The subject was assigned to condition randomly, and was tested individually. The recognition threshold for each of the 12 years was measured with the help of a specifically designed device. c). The method of minimal changes was used after the perception experimental; the subject was made to learn 12 paired Association. These were formed by associating those words which the subject has seen the recognition task with 12 homosense syllabus. The nonsense trigrams were used as response terms. The anticipation method in altering study test sequence was used. After learning, a distracter task was given for 10 minutes and then recall was tested. Finally, conformity was measured using the ambiguous stimulus technique and induction of an arbitrary group name through instructions. The data were analyzed through percentiles and correlation. The findings of the study were: a). High degree of consistency in the reaction of subjects towards Taboo stimuli was found in perception, learning and memory. It has higher threshold for tablets compared to non taboo words. Then he made more errors in learning the taboo paired associates and forgot them more readily. b). Consistency existed in the case of those who perceived Taboo words more readily and those who did not show any difference in the perception of Taboo and non Taboo words.

Paul, T. Sindelar (1992). "Use of Mnemonics under Memory Model to learn and remember information for students with learning problem". This study was related with the use of Mnemonics under Memory Model to learn and remember information for students with learning problems. The objectives of the study were: teaching strategy increase student's opportunities for independent success in content curriculum as well as active involvement of student in the learning process. The sample of 400 students was taken under study out of which 200 were experimental and 200 were control group and Mnemonics was used for learning and memorization for overcoming learning problems. It was found that Mnemonics were used in 2 of 3 instructional procedures taught to student with minimal handicaps in this study. Students were required to learn and remember definitions of unfamiliar Science terms that they have come across previously. Systematic teaching, an induced keyword method were compared. Favorable results from imposed and induced keyword methods were obtained. Implications for teaching strategies increased student's opportunities for independent success in content curricula as well as active involvement of students in the learning process.

IV. Review Of Related Literature Related To Long Term Memory

XiaoYan (2002) points "Long term memory in information processing model provides us with clear basic steps in interpreting and transfer of information from source to target language". The focus of this relatively new approach is the information transfer between source language and target language. The process involves the transfer of receiving, storing,

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processing and transmitting information and each part in the whole system is interrelated and interactive. From modern cognitive psychological perspective, human beings are compared to computers in the information processing. Human beings are regarded as an active information processor and they can perceive, encode, store and retrieve information like machines during the whole processing phase. In the first phase, interpreters receive and try to comprehend incoming information. When entering the second phase, they analyze and encode information in target language. Then the next expressing phase including evaluation process will have an effect on the second analysis and encoding process. It is clear that this information processing model provides us with clear basic steps in interpreting.

4.1 Need and Importance of the Study

In present scenario we see that the purpose of English language teaching is to develop students' ability in order to get richer knowledge through English. Most of the teachers focus more on the explanation, and students focus more on memory. Although this teaching mode has the advantage of passing on a lot of knowledge, spending less time but single teaching mode still hinders the cultivation of the students' listening and speaking skills and restricts the improvement. For a long time, most of the school students are learning the "deaf-mute" English. They can only answer questions and memorize grammar, and their communication with others is almost blank at the same time their comprehension of English is also very low. Therefore, how to develop the skills of understanding and fluency rather than rote memorization is an urgent problem in school's English language teaching. So Memory Model under Models of teaching is very important strategy for teachers to use while teaching English that help students to learn large quantities of words and connect them to objects, events, actions and qualities that they represent, thus Memory Model is one that help to learn meaningful language that transfer to Long term Memory.

According to Thornbury (2002),Plotnik and Kouyoumdjian (2014) found that the information must be first stored in the short-term memory as to be transformed into the long-term memory. As in comparison to short-term, long-term memory has excessive capacity, and its elements are persistent over time. Due to the long-term storage learners may recall objects, words, or any data days, weeks, or even years after the first input. There are some research principles that may help to locate words into long-term storage

There are studies related to effectiveness of memory model on different academic subjects done by Kayathri (2001), Deshmukh (2006), Kumar (2004), Gautam (2004) Sushila (2008) Rathi (2010), Namjoshi (2015) who found Memory Model provides opportunity to students to think logically, carefully attending to the content, expressing their own ideas, viewpoints and think and diversified aspects.

Levin and Joel.R.(1990), Scruggs and Masropieri (1992), Weiss (2000), Winters (2001), Prigg (2002), Konecki (2003), Prakash (2003), Sharma (2004) and Wells (2007) found that when mental abilities selected like numerical ability, reasoning ability, memory and symbolic representation learned with the Mnemonics method showed that students outperformed taxonomy students and it had an positive influence on the student's achievement and verbal instructions.

Few studies were conducted on effectiveness of Memory model in terms of long term memory in Abroad. XiaoYan (2002) point's long term memory in information processing model provides us with clear basic steps in interpreting and transfer of information from source to target language.

V. OBJECTIVES

To compare the adjusted means scores of Long term Memory of group taught through Memory Model and group taught through traditional method of teaching by considering pre Long term Memory scores as covariate

5.1 Hypothesis

There is no significant difference in the adjusted means scores of Long term Memory of group taught through Memory Model and group taught through traditional method of teaching by considering pre Long term Memory scores as covariate

5.2 Methodology

A. Sample

The sample for the study will be class IX students from secondary schools of Indore city (M.P.) will be selected randomly. The sample will represent Gender.

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B. Tools

For assessing long term memory the standardized tool is used.

Tools Selected for Accessing the Variables of the Study are

In experimental studies, two things are very important. They are the nature of the sample and the measurement of desirable behavior changes in the sample because of treatment. In order to measure the changes, good instruments are required for collecting the data which are selected according to the objectives of the study. So the selection of tool is an important aspect of research activity. Following tool is selected for the present study:

Long Term Memory: Long Term Memory will be accessed with the help of standardized Long Term Memory tool developed by the B.B.Asthana. and published by Agra Psychological Research Cell. The medium of instruction will be in English. The items in this tool are as per the requirement of class IX students. It is verbal test. In this tool there are five columns in first and in second column 16 stimulus trigrams are given, third column show the number of times letter is to be practiced and in last column researcher will put right or wrong tick against pronunciation of each trigram letters.

VI. DESIGN

The present study is experimental in nature. The study is designed on the basis of Non-Equivalent Control Group Design. According to Campbell and Stanely (1963), the layout of this design is as follows:

There will be two groups. One group will be designated as Experimental Group and the other as Control Group. Only the sections will be randomly selected but not the subjects within each section. Both the groups will be pretested by administrating long term memory.

The students of Experimental Group will be given treatment by Memory Model and Control group will be taught through lecture method. At the end of the Treatment, both the groups will be post tested with the help of tools that are used for pre testing.

6.1 Procedure of Data Collection

The experimental group students and control group students will be taken from school of Indore city. The permission will be taken from the principal. For the treatment in experimental group first of all the repo will be established with the students. The students will be explained the objectives of the study. To begin pre testing will be done by administering the long term memory. After that they will be explained the procedure of Memory Model and the topics of English subject would be taught to them according to the Memory Model for prescribed days.

The stories of the control group would be continued with the routine activities. The same pre test will be administered on control group students. After this the control group will be continued with lecture method of teaching for prescribed days. Then the post test will be conducted.

6.2 Data Analysis

On the basis of objective following will be the methods of data analysis:

For comparing the adjusted mean scores of Long Term Memory of group taught through Memory Model and group taught through Traditional Method of teaching by considering pre Long term Memory scores as covariate One Way ANCOVA will be used.

6.3 Delimitations

- The data will be collected from the sample of 9th class students of Indore city only.
- The sample will be from urban area only

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- Only English subject will be considered for the study.

Comparison of the adjusted mean scores of Long Term Memory of group taught through Memory Model and group taught through Traditional method of teaching by considering pre Long Term Memory as covariate.

The Third objective was to compare the adjusted mean scores of Long Term Memory of group taught through Memory Model and group taught through Traditional method of teaching by considering pre Long Term Memory as covariate. In this objective the levels of Treatment were Traditional teaching and Memory Model based teaching. The scores of Long Term Memory were assessed with the help of Long Term Memory standardized inventory developed by the Agra Psychological Research cell in the year (1978). The data obtained from the two groups were analyzed with the help of One Way Analysis of Covariance (ANCOVA).

Normal distribution of Dependent Variable at all levels of Independent variable This assumption was tested with the help of Kolmogorov- Smirnov Test as the sample size was greater than 50. In order to test whether the assumption of normality of scores holds good or not, test of normality was performed on the Long term Memory. The results of the Kolmogorov-Smirnov Test have been summarized below in Table.

Ho: The given distribution for Long Term Memory scores of Experimental and Traditional Group do not deviate significantly from Normality.

Table: Summary of Kolmogorov-Smirnov test of Normality for Long Term Memory of students of Experimental and Traditional Group.

Kolmogorov-Smirnova

Type Treatment

Experimental .104 60 .171 Traditional .114 60 .051

Long term Memory Statistic df Sig.

From Table above it is clear that the value of the Kolmogorov-Smirnov statistic for Experimental and Traditional Group are 0.104 and 0.114 whose significance value with df 60 is 0.171and 0.051. These values are greater than 0.05 and thus is not significant at 0.05 level of significance. In the light of this the null hypothesis "The given distribution for Long Term Memory scores of Traditional Group do not deviate significantly from Normality" is not rejected. Thus it can be concluded that the scores of Long Term Memory for Experimental and Traditional group are distributed normally.

Homogeneity of Variance of Dependent Variable on all groups:

This assumption was tested with the help of Levene's test using SPSS. The results have been summarized below in Table.

Ho: The Error Variance of Long Term Memory scores is not significantly different across all the groups. Table : Summary of Levene's test of equality of Error Variance for Long Term Memory of students of Experimental and Traditional Group.

Levene's Test of Equality of Error Variances Dependent Variable: Long term Memory

F df1 df2 Sig.

.139 1 118 .710

From the Table above it is clear that the F value is .139 whose significance value with df (1,118) is 0.710. This value is greater than 0.05 and hence is not significant at 0.05 level of significance. In the light of this that null hypothesis that "The Error Variance of Long Term Memory scores is not significantly different across all the groups" is not rejected. Thus it can be concluded that the Variance of Long Term Memory scores is equal across all the groups.

Summary of One Way ANCOVA for Long Term Memory of students of Experimental and Traditional Group by taking pre Long Term Memory as Covariate

Test of Between-subjects Effects

Dependent Variable: Long Term Memory

Type III Sum

Source of Squares df Mean Square F Sig.

Treatment 1.360 1 1.360 .279 .049 Error 569.552 117 4.868

Total 12078.000 120

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From Table above it is evident that the adjusted F value for Treatment is .279 whose significance value with df (1,117) is 0.049. This value is less than 0.05 and hence it is significant at 0.05 level of significance. It indicate that the Adjusted Mean score of Long Term Memory of students taught through Memory Model and Traditional Method differ significantly when Pre Long Term Memory was taken as Covariate. In the light of this the null hypothesis that "There is no significant difference in adjusted mean scores of Long Term Memory of students belonging to Experimental Group and Traditional Group while pre Long Term Memory is taken as Covariate" is rejected. For further analysis comparison of adjusted mean scores of Achievement in English of both the groups i.e. Traditional and Experimental is necessary which s given in Table below:

Adjusted Mean Long Term Memory scores of Experimental and Traditional Group.

Treatment	Mean	Std. Error
Exp	9.890	.285
Cntrl	8.070	.285

From the Table above it is evident that the Mean Scores of Long Term Memory of the students taught through Memory Model is 9.890 which is higher than the corresponding Mean Scores of 8.070 of students taught through Traditional Method when their mean scores were adjusted with respect to pre Long term Memory. It may therefore be concluded that Memory Model was found to be significantly effective than the Traditional Method in enhancing Long Term Memory of class IX students.

VII. Findings And Conclusion

Memory Model of Teaching was found to be significantly superior to Traditional Method of Teaching in enhancing Long term Memory of students when groups were matched with respect to pre Long term Memory: On the basis of the analysis of the data it was found that the Memory Model was found to be effective in terms of Long term Memory. The result is consistent with the study of Gautam (2004), who found that Long term Memory is increased by using the Memory Model. Namjoshi (2015) found that the learning became more permanent by the Memory Model. It might be due to process and steps of Memory Model through which one can generate powerful association for remembering by using different sense organs. The instructional effects of Memory Model increases growing consciousness of the ability to master unfamiliar materials, therefore retention becomes easier for students with high Long term Memory. The students remember those ideas more easily that are presented through their sensory channel. Sometimes for the students, the Short term Memory can become Long term Memory through the process of association and storage of information semantically. Sometimes forgetting occurs in the Long term Memory but by using Memory Model (like association, linking the previous knowledge) the forgetfulness can be reduced. It was found that the association between new material and things that have previously being learnt by the students, senses are involved and attentiveness helped a lot in increasing memorization. Repetition and recalling the study material through Memory Model helped the students to memorize effectively.

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