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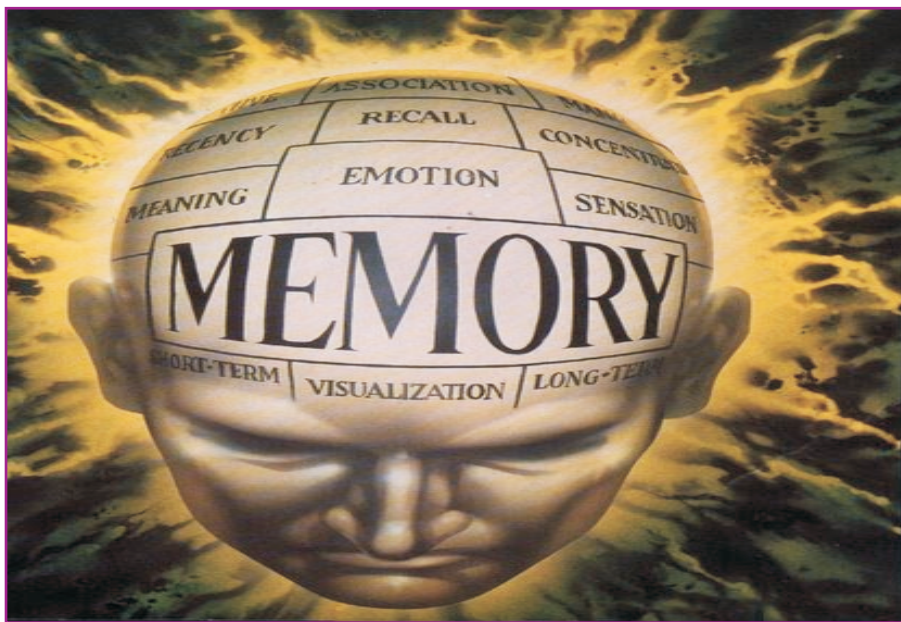


TEACHING MEMORY TRAINING PACKAGE (MTP)

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STATEMENT OF PROBLEM

A Study on the Effectiveness of a Specially Designed Memory Training Package on Enhancement of Memory of Secondary School Students

OBJECTIVES OF THE STUDY

The main aims of the study were to Develop and Validate the Memory Training Package and ensure the effectiveness of Memory Training Package on Enhancement of Memory of Secondary School Students. The specific objectives are as follows

- 1.To Study the Effectiveness of Memory Training Package among Secondary School Students.
- 2.To study the difference in the level of effectiveness of Memory Training Package among boys and girls of secondary school students.
- 3.To study the extent of retention of Secondary School Students taught by Memory Training Package.
- 4.To study the difference in the level of retention of boys and girls of Secondary School students taught by Memory Training Package.
- 5.To Study the relationship between Memory and

ABSTRACT

Our brains evolved to code and interpret complex stimuli such as images, colors, structures, sounds, smells, tastes, touch, positions, emotions and language. We use these to make sophisticated models of the world we live in. Our memories store all of these very effectively. Unfortunately, a lot of the information we have to remember in modern life is presented differently - as words printed on a page.

KEYWORDS: Memory Training Package, natural memory, artificial memory.

INTRODUCTION

While writing is a rich and sophisticated medium for conveying complex arguments, our brains do not easily encode written information, making it difficult to remember. The major assumption in antiquity was that there are two sorts of memory: the "natural" memory and the "artificial" memory. The former is inborn and is the one that everyone uses every day. The latter is trained through learning and practicing a variety of mnemonic techniques. It can also be used to perform feats of memory that are quite extraordinary or impossible to carry out using the natural memory alone.

Intelligence of secondary school students.

VARIABLES

Independent Variable – Memory Training Package.
Conventional Method
Dependent Variable - Enhancement of memory.
Secondary Independent Variable: Intelligence
Moderate Variables - Gender

HYPOTHESES

1. There exists no significant difference between the mean gain scores on enhancement of memory of experimental and control group before teaching Memory Training Package (MTP).
2. There exists significant difference between the mean gain scores on enhancement of memory of experimental and control group after teaching of Memory Training Package (MTP).
3. There exists no significant difference between the mean gain scores on the enhancement of memory of boys and girls of experimental group before teaching of Memory Training Package (MTP).
4. There exists no significant difference between the mean gain scores on the enhancement of memory of boys and girls of experimental group in their immediate posttest after teaching Memory Training Package (MTP).
5. There exists no significant difference between the mean gain scores on the enhancement of memory of boys and girls of control group before teaching of Memory Training Package (MTP).
6. There exists no significant difference between the mean gain scores on the enhancement of memory of boys and girls of control group in their immediate posttest after teaching of Memory Training Package (MTP).
7. There exists no significant difference between the mean gain scores on the enhancement of memory of boys of experimental and control group before teaching of Memory Training Package (MTP).
8. There exists no significant difference between the mean gain scores on the enhancement of memory of boys of experimental and control group in their immediate posttest after teaching of Memory Training Package (MTP).
9. There exists no significant difference between the mean gain scores on the enhancement of memory of girls of experimental and control group before teaching of Memory Training Package (MTP).
10. There exists no significant difference between the mean gain scores on the enhancement of memory of girls of experimental and control group in their immediate post-test after teaching of Memory Training Package (MTP).
11. There exists no significant difference between the mean gain scores of experimental group in immediate posttest and delayed posttest after teaching of Memory Training Package (MTP).
12. There exists no significant difference between the mean gain scores of boys and girls of experimental group in their immediate posttest.
13. There exists no significant difference between the mean gain scores of boys and girls of experimental group in their delayed posttest.
14. There exists no significant difference between the mean gain scores of boys in their immediate posttest and delayed posttest.
15. There exists no significant difference between the mean gain scores of girls in their immediate posttest and delayed posttest.
16. There exists no significant relationship between memory and intelligence of secondary school students.

METHODOLOGY

For the present study Experimental Method was used. On the other hand Methodology of present study consists of design of the study, sampling, validation of achievement tool, development and validation of Memory Training Package, tools and techniques, procedure of data collection i.e., which clears the path of the study.

DESIGN OF THE STUDY

The present study is pre-test, post-test parallel group design. In this design the effects of the treatments are judged by the difference between the pre and post-test scores. This is compared with the control group. The main steps included in the experimentation

- i. Experimental and control group were pre tested on achievement tool
- ii. Experimental group was taught by the Memory Training package and the control group was taught by the conventional method.
- iii. Both the groups were immediately post tested on their achievement
- iv. The Experimental group was delayately post tested after the gap of one month on achievement test to test whether they sustain the improvements.

SAMPLING

The sample of 100 students were tested by simple memory test of recalling 20 words from given word list, students having similar average range of marks in simple memory test were divided equally and randomly in both experimental and control groups consisting of 60 sample.

Procedure in Framing the Equivalent Groups

60 students of 9th graders were selected from two government high school of Shimoga city and sample was divided into two groups namely experimental (Government High School, Durgigudi) and control group (Government High School, B.H Road). The experimental group consisted 30 sample of 15 male and 15 female students who were taught "Memory Training Package" by investigator and the control group comprising 30 of 15 male and 15 female students were taught by the conventional method of teaching by subject teacher. To find out whether there was any significant difference between the two groups; mean, SD and t test was calculated to scores of 'Meaningful Connected Words Recall Test'. The obtained t-value was 1.68 which found insignificant at 0.05 level of significance. The mean of the both the groups were 12.83 and 12.56 than SD was 1.74 and 1.67 respectively. Hence the mean were almost same. Consequently it was assured that both the groups were equivalent to each other before beginning of the experiment.

Construction of Achievement Tool

In the present study, it was supposed to construct valid, reliable and comprehensive achievement tests to measure the achievement of the students in prescribed lessons included in the study. Those lessons were 'Delhi Sultans' and 'Mahmud Ghazni and Mohammad Ghori', from Social Science, 'The Little Martyr', and 'The Black Tuesday' from English of 9th standard state syllabus. The achievement test contained 79 items. While constructing the tests the following aspects were considered.

1. The test should adequately cover all the contents selected.
2. The test should be objective type.
3. Language of the items and instruction to respond to the items should be clear and appropriate to the level of students.
4. Items should be specific and unambiguous.

With the above consideration in mind adequate number of objective test items like 'Multiple Choice', 'fill in the blanks', 'Matching', 'answer in one sentence', 'true or false' were constructed on all the sub contents.

TOOLS USED FOR STUDY

The present study involved following tools

1. Meaningful Connected Words Recall Test: Learning does not take place without memory. In the sense the organism has to start from the scratch in each trail. It is because of retention the organism shows progressive change as training proceeds, and responds with less energy in each successive trail. This is possible because of memory traces which are technically known as neurogram of engrams. Of course anatomical and physiological details of these traces are not yet known. Recalling is also known as reproduction. The amount of material reproduced correctly of what has been learned is known as recalling or recall memory. There are several ways of recalling like method of retained members, memory span, method of anticipation and method of paired associations...etc., here the subject has to identify or recognize the items shown to him.
2. Raven's Progressive Matrices: Standard Progressive Metrics is a test of person's capacity at the time of test, to apprehend meaningless figures presented for observation. The test consists of 60 problems divided into 5 sets of 12 each. The problems become progressively more difficult. In order to sustain interest and to be free from fatigue the

figures are boldly presented accurately drawn and pleasing to look at. The scale is intended to cover the whole range of intellectual development from child hood to early old age the total scores of a person provide an index of intellectual capacity whatever his nationality of education. In the sense it is culture fair test to a great extent. Individuals' intelligence can be assessed and compared irrespective of caste, creed, culture, nationality, education and sex. Time taken is considered for the purposes of comparison it is mainly a work limit test. 1) Though the deviation in the consistency score is more than 2 and it not considered as consistency in the strict sense, for general purposes the total score can be taken as valid. 2) It is said that the people who obtain low scores have a proportionately greater number of success by pure chance. To this extent low total scores are always less consistent and reliable than high scores, 3) if the test is administered individually it appears to introduce emotional factors which are less operative. When he is allowed to work quietly at his own speed. Group test provides more reliable sample of a person's output of intellectual activity during the test. 4) (a) one in 20 may be expected to obtain a score at or above 95th percentile point. Similarly one in 20 can be expected to obtain a score at or below 5th percentile point. (b) one in 10 may be expected to obtain a score at or above 90th pp. and one in 10 may obtain score at or below 10th pp. (c) one in 4 may obtain a score at or above 75th pp and one in 4 may obtain score at or below 25th pp. (d) one in every two may be expected to fall between 25th and 75th pp. 5) RPM does not very clearly differentiate between young children or between adults of superior intellectual capacity 6) Test normally takes 45 minutes to complete.

DEVELOPMENT OF MEMORY TRAINING PACKAGE:

The four lessons were taken from the 9th standard Social Science and English (State Syllabus). The lessons were 'Delhi Sultans', 'Mahmud Ghazni and Mohammad Ghori' from Social Science, 'The Little Martyr', and 'The Black Tuesday' from English. The package developed by dividing the whole lesson into different tasks.

Development of the Memory Training Package considered following factors.

1. Flexibility for teachers to recognize the content and activities wherever necessary to suit the situation.
2. Sustenance of motivation and interest among students throughout the programme.
3. Provision to continuous and inbuilt evaluation throughout the programme.
4. Students would be able to perform the activities on their own according to the instructions by the investigator.
5. Materials required would be readily available within the local environment, preferably low cost materials.
6. Active use of process skills of observation, classification and inference was facilitated.
7. Provisions to self-learning and self-experiments.
8. The clarity should be maintained to use the package by any other teachers also.

DATA COLLECTION

The data were collected by controlling the extraneous variables and internal and external threats of the experiment. The objectivity was ensured during the data collection. The experiment was conducted for the period of 120 working days. The investigator done experiment and collected data in person by visiting two Government Secondary Schools in Shimoga city by dividing 45 minutes of time for each class for experimental and control group. There was heed given for simultaneous class by investigator to experimental group and by subject teacher to control group.

STATISTICAL TECHNIQUES USED

t-test: t-test is the test of the significance of the difference between two means. It involves the computation of the ratio between observed difference between two sample means and the sampling error factor.

Carl Pearson's Product Moment Correlation: this type of Correlation used to find the relationship of two variables, for the present study Carl Pearson's Product Moment Correlation was used to see the relationship to two variables namely Memory and Intelligence.

FINDINGS OF THE STUDY

1. The present study made known that the experimental and the control group differ significantly in the post-test when compare to pretest. Experimental group were scored high in posttest than control group. Study exposed that

there was immense enhance in total marks of experimental group during posttest compare to control group. Conclusions cleared that the students who were taught by Memory Training Package memorized events more and show higher achievement than those who were taught with conventional method of teaching. Therefore Memory Training Package found effectiveness in memorizing and in teaching.

2. Boys and girls of experimental group were scored high compare to boys and girls of control group after teaching of Memory Training Package, that to girls were scored little well again compare to boys thus it can be concluded that Memory Training Package have significant impact on gender.

3. The study inculcates mnemonics for memorization and helps for longer retention, Hence the delayed posttest was given after one month of immediate posttest. The result revealed that the Memory Training Package helped students in longer retention.

4. Interesting finding was that the girls were retained unerringly same in immediate and delayed posttest.

5. To distinguish the relationship between memory and intelligence the r was calculated. Study revealed that there was a slight and negligible relationship between memory and intelligence. So it can be said that memory has slight relationship with intelligence but it can be said insignificant to take into consideration.

LIMITATIONS OF THE STUDY

1. This study confined to two Government secondary schools.
2. This study restricted to Shimoga city only.
3. This study limited to 9th Standard Students.
4. Package included only English and Social Science lessons of English Medium
5. The Memory Training Package includes only 7 mnemonics.

DISCUSSION

Robert Kail and Christine Vereb Marshall conducted the study on reading skill and memory scanning. In this study they found the scanning memory of less skilled and skilled readers and found that skilled readers were answered quickly to be learnt material. But the present study entirely different, tried to enhance the memory of average level students.

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