



AN INVESTIGATIVE STUDY ON THE LEVEL OF AWARENESS OF MEMORY AMONG SECONDARY SCHOOL STUDENTS.

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Abstract: Memory is ‘the ability to retain information or a representation of past experience, based on the mental processes of learning or encoding, retention across some interval of time, and retrieval or reactivation of the memory’ (APA Dictionary of Psychology). Memory is an active, subjective, intelligent reflection process of our previous experiences (Savage, 2018). Human memory is working based on three primary processes: encoding, storing, and retrieving. There are four types of memory: sensory memory, short-term memory, working memory, and long-term memory. The process of learning is a dynamic process in which the brain is continually changing, reorganizing, and integrating the acquired information with new data, and experiences that we are about to acquire. The relationship between learning and memory is incredibly close and intertwined (APA,2000). The various teaching-learning strategies and methodologies employed by the teacher play a vital role in the development of the educational process, ensuring improved coding, storage, and retrieval of information. These activities prove there is a direct impact on the student's memory and process of learning. Here the researcher investigated the level of awareness of memory among secondary school students by employing percentage analysis. The findings are secondary school students have a satisfactory level of awareness of sensory memory, an unsatisfactory level of awareness of working memory, a very good level of awareness of long-term memory and memory in general and they have an unsatisfactory level of awareness of memory techniques.

Key Terms – Learning, Long-term memory, Memory strategies, Sensory memory, Short-term memory, Working memory

I. INTRODUCTION

Memory is ‘the ability to retain information or a representation of past experience, based on the mental processes of learning or encoding, retention across some interval of time, and retrieval or reactivation of the memory’ (APA Dictionary of Psychology). Memory has a fundamental role in life, reflecting the past as the past, and offering the possibility of reusing all past and present experiences, as well as helping to ensure continuity between what was and what was going to be. Memory is an active, subjective, intelligent reflection process of our previous experiences (Savage, 2018).

Human memory is working based on three primary processes; Encoding is the process of converting data into a format that can be stored in memory. Storing is the act of retaining encoded data in memory. Finally, retrieving is the process of regaining access to previously encoded and stored information. Most scientists believe that there are four types of memory: sensory memory, short-term memory, working memory, and long-term memory. Sensory memory stores sensory information for a relatively short duration, usually less than a second. The processing of memories and other information begins in this type of memory. If a person pays attention to sensory input, then the information may move into short-term and then long-term memory. Short-term memory allows a person to recall a limited string of information for a short period. These memories disappear quickly, after about 30 seconds. Working memory is where a person manipulates information. Long-term memory stores a wide range of memories and experiences. Most memories that people recall, especially those older than about 30 seconds, are part of long-term memory. (Villines, 2020).

While speaking about the limitation of memory; Since sensory memory, short-term memory and working memory can hold information only for a short period, they have limited capacity. For long-term memory, there is no specific limit on the capacity.

II. NEED AND SIGNIFICANCE OF THE STUDY

The process of learning is a dynamic process in which the brain is continually changing, reorganizing, and integrating the acquired information with new data, and experiences that we are about to acquire. In cognitive activities, memory is an active participant. As a result, it is impossible to separate memory from learning and vice versa. The relationship between learning and memory is incredibly close and intertwined (APA,2000). Learning and memory are closely related concepts. Learning is the acquisition of skill or knowledge, while memory is the expression of what you've acquired. (Kazdin, 2000) Memory relates to how the mind stores and recalls information. It is almost impossible for an individual to truly learn something without also having the memory to retain what they have learned. In many ways, learning and memory maintain a very interdependent relationship (Puskar, 2022)

The various teaching-learning strategies and methodologies employed by the teacher play a vital role in the development of the educational process, ensuring improved coding, storage, and retrieval of information. These activities prove there is a direct impact on the student's memory and process of learning. Here the researcher investigated the level of awareness of memory among secondary school students.

III. STATEMENT OF THE STUDY.

The present study intends to analyze the awareness of memory and memory techniques among students at secondary school and hence the study entitled **AN INVESTIGATIVE STUDY ON THE LEVEL OF AWARENESS OF MEMORY AMONG SECONDARY SCHOOL STUDENTS.**

IV. OBJECTIVES OF THE STUDY.

- Ob₁:** To find out the level of awareness of Sensory memory techniques among students at the secondary school level.
- Ob₂:** To find out the level of awareness of Working memory techniques among students at the secondary school level.
- Ob₃:** To find out the level of awareness of Long-Term memory techniques among students at the secondary school level.
- Ob₄:** To find out the level of awareness of Memory techniques among students at the secondary school level.

V. HYPOTHESIS OF THE STUDY

- HY₁:** Secondary school students have a certain level of awareness on Sensory memory.
- HY₂:** Secondary school students have a certain level of awareness on Working memory.
- HY₃:** Secondary school students have a certain level of awareness on Long-Term memory.
- HY₄:** Secondary school students have a certain level of awareness on Memory techniques.

VI. METHODOLOGY IN BRIEF

Type of Study:

Normative Survey Method is used for collecting the data for this study.

Sample:

For this study, the samples to be selected are secondary school students in the Thiruvananthapuram district of Kerala. The sample is selected by employing stratified random sampling technique, so as to obtain an adequate sample with randomness and representativeness.

Size of sample:

A sample of 200 secondary school students was selected from the Trivandrum district. For secondary school students, the researcher opted students in class nine.

Location:

Schools in the Thiruvananthapuram district of Kerala

Tool:

Standardized "AWARENESS TEST" on MEMORY.

Statistical Techniques to be used:

Percentage analysis

VII. ANALYSIS AND INTERPRETATION**7.1. Secondary school students have a certain level of awareness of Sensory memory.**

Table 7.1. Awareness of sensory memory among secondary school students

Category	Criteria	Secured Percentage	Grade
Excellent (S)	Above 80%	8.2	-
Very Good (A)	80% - 60%	5.3	-
Good (B)	60% - 50%	15.8	-
Satisfactory(C)	50% - 35%	49.4	C
Unsatisfactory(U)	Below 35%	21.3	-

From table 7.1, it is clear that the highest percentage of the level of awareness of sensory memory among secondary school students (that is 49.4 %) lies in between 50% and 35% which comes under the criteria 'satisfactory'. Therefore, *the researcher strongly accepts secondary school students have a satisfactory level of awareness of sensory memory.*

7.2. Secondary school students have a certain level of awareness of working memory.

Table 7.2. Awareness of working memory among secondary school students

Category	Criteria	Secured Percentage	Grade
Excellent (S)	Above 80%	5.6	-
Very Good (A)	80% - 60%	9.4	-
Good (B)	60% - 50%	13.1	-
Satisfactory(C)	50% - 35%	28.6	-
Unsatisfactory(U)	Below 35%	43.3	U

From table 7.2, it is clear that the highest percentage of the level of awareness of working memory among secondary school students (that is 43.3 %) lies in below 35% which comes under the criteria 'unsatisfactory'. Therefore, *the researcher strongly accepts secondary school students have an unsatisfactory level of awareness of working memory.*

7.3. Secondary school students have a certain level of awareness of long-term memory.

Table 7.3. Awareness of long-term memory among secondary school students

Category	Criteria	Secured Percentage	Grade
Excellent (S)	Above 80%	20.8	-
Very Good (A)	80% - 60%	33.4	A
Good (B)	60% - 50%	20.2	-
Satisfactory(C)	50% - 35%	18.1	-
Unsatisfactory(U)	Below 35%	7.5	-

From table 7.3, it is clear that the highest percentage of the level of awareness of long-term memory among secondary school students (that is 33.4 %) lies in between 80% and 60% which comes under the criteria 'very good'. Therefore, *the researcher strongly accepts secondary school students have a very good level of awareness of long-term memory.*

7.4. Secondary school students have a certain level of awareness of memory.

Table 7.4. Awareness of memory among secondary school students

Category	Criteria	Secured Percentage	Grade
Excellent (S)	Above 80%	23.4	-
Very Good (A)	80% - 60%	42.3	A
Good (B)	60% - 50%	15.2	-
Satisfactory(C)	50% - 35%	10.8	-
Unsatisfactory(U)	Below 35%	8.3	-

From table 7.4, it is clear that the highest percentage of the level of awareness of long-term memory among secondary school students (that is 33.4 %) lies in between 80% and 60% which comes under the criteria 'very good'. Therefore, *the researcher strongly accepts secondary school students have a very good level of awareness of memory.*

7.5. Secondary school students have a certain level of awareness of memory techniques.

Table 7.5. Awareness of memory techniques among secondary school students

Category	Criteria	Secured Percentage	Grade
Excellent (S)	Above 80%	9.3	-
Very Good (A)	80% - 60%	11.9	-
Good (B)	60% - 50%	17.3	-
Satisfactory(C)	50% - 35%	23.7	-
Unsatisfactory(U)	Below 35%	37.8	U

From table 7.5, it is clear that the highest percentage of the level of awareness of memory techniques among secondary school students (that is 37.8%) lies in below 35% which comes under the criteria ‘**unsatisfactory**’. Therefore, *the researcher strongly accepts secondary school students have an unsatisfactory level of awareness of memory techniques.*

EDUCATIONAL IMPLICATIONS OF STUDY

Learning and memory are closely related concepts. It is almost impossible for an individual to truly learn something without having the memory to retain what they have learned. In many ways, learning and memory maintain a very interdependent relationship (Puskar, 2022). The various teaching-learning strategies and methodologies employed by the teacher play a vital role in the development of the educational process, ensuring improved coding, storage, and retrieval of information. The study shows that learners have a very good awareness of long-term memory and memory in general. However, their awareness of strategies for improving memory and working memory is unsatisfactory. Secondary school students must be aware of the various memory techniques they have to adopt in their learning strategies. These techniques will act as a catalyst while adopting their techniques in their self-learning processes. There is an impact of memory techniques on the memory of students and the process of learning. Therefore, they should conduct more memory-improving strategy sessions to get an awareness of memory strategies, thereby improving their learning and cognitive activities.

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