IRJIF I.F. : 3.015

North Asian International Research Journal of Social Science & Humanities

ISSN: 2454-9827 Vol. 3, Issue-1 January-2017

A STUDY OF MEMORY STATUS OF SECONDARY SCHOOL LEVEL TEACHERS

ASST. PROF. VRUSHALI MATTALWAR (DETHE)

Zulekha college of Education, Nagpur

ABSTRACT

Memory plays a vital role in our daily lives, serving as a crucial tool in the process of education and personal growth. It is a defining feature of living organisms, allowing us to recall past experiences, often with the realization that our current experience is a recollection of the past. Recent research conducted over the past two decades has pointed to fundamental differences in the way memories are stored across various stages of memory. Contemporary theories of memory propose three distinct stages: immediate memory, short-term memory, and long-term memory. This study aims to investigate the various types of memory among secondary school teachers, shedding light on their memory status.

Keywords: ***Memory, secondary school level teachers.***

INTRODUCTION:

Over the years, a met theoretical perspective on memory has emerged. This viewpoint, closely related to the "modal" model introduced in the 1960s, is supported by a growing body of neuropsychological evidence and a wide range of empirical observations. It conceptualizes short-term memory as a transient, above-threshold activation of neural structures, linked in somewhat unspecified ways to various regency effects. It functions as a workspace for conducting virtually all cognitive operations crucial to human cognition and serves as the source of capacity limitations, explaining certain memory constraints and most attention-related limitations.

The primary challenge with this perspective is that it encompasses nearly all aspects of human cognition, making it almost a comprehensive model of cognition – a goal that the field has not yet fully achieved. However, this situation should not lead to discouragement. Progress is being made on multiple fronts, even though the most successful models tend to focus on specific cognitive tasks and domains. Recent advancements include a growing recognition of the need for detailed models of short-term retrieval, a theme that is reflected in several articles within the current collection.

When we perceive an event and later recall that experience after some time has passed, we refer to it as our memory. To facilitate storage and further analysis, this information is typically transferred into short-term memory, often in verbal form. However, short-term memory has limited capacity, typically accommodating no more than seven chunks of organized information. If we fail to rehearse the material in short-term memory, it is forgotten in less than 30 seconds.

It's worth noting that when new information, especially visually presented material, is initially received from sensory memory, it is encoded acoustically in short-term memory. In other words, we initially store it perfectly in sensory memory, and then briefly hold it in short-term memory before beginning rehearsal. Even if the stimulus was visual, we tend to convert it into an acoustic form through repeated self-repetition. With sufficient rehearsal, it eventually finds its way into long-term memory.

Our understanding of long-term memory remains limited. Long-term memory seems to be relatively permanent, with the possibility that nothing is truly lost from it, even though accessing specific information stored long ago can be challenging. The exact form in which information is initially stored in long-term memory remains unknown. However, it seems that memory codes in this stage are generally sensory, verbal, or conceptual in nature. To put it differently, information stored in short-term memory often employs an acoustic-phonetic code, while long-term memory tends to rely on semantic or imagery codes.

It's often assumed that information is transferred from sensory memory over time and transformed into a new code at each stage. Nevertheless, it's essential to point out that we do not always operate within a strict and precise sequence. Information can be transformed and stored in multiple memory locations during its presentation. During recall tests, individuals may access several memory locations.

Notably, there are no well-defined experimental operations that precisely demarcate the boundary between short-term memory and long-term memory. However, practical separation of these procedures is generally achievable. Information we receive from the environment briefly resides in immediate memory for a very short period, typically less than a second. It exists in a relatively unanalyzed form and is generally confined to the sensory modality of the input, such as visual, auditory, or tactile stimuli.

OBJECTIVES OF THE STUDY:

1. To study the memory status of secondary school level teachers.
2. To study the various type of memory status of aided and non-aided secondary school level teachers.

HYPOTHESIS OF THE STUDY:

1. There is no significant difference between the memory statuses of secondary school level teachers.
2. There is no significant difference between the various type of memory status of aided and non-aided secondary school level teachers.

SCOPE AND DE-LIMITATION OF THE STUDY:

This study is limited to Nagpur city in the state of Maharashtra only. This study evaluate the memory status of secondary school level teachers only.

RESEARCH METHODOLOGY:

The present study is in the area of interdisciplinary research based on survey method. The purposive sampling technique were used for this study total 100 secondary level teachers are selected for this study. Standard and valid memory status scales were used for this study for the respective data collection. Mean and SD were calculated for both the groups and t-test was applied to test the hypothesis.

ANALYSIS AND INTERPRETATION:

Table no. 1.1
Level of Frequency distribution of Memory of secondary school level teachers

Level	N & %	Aided school Teachers			Non-aided school teachers		
		Male	Female	Total	Male	Female	Total
High	%	12.00%	20.00%	16.00%	22.00%	22.00%	22.00%
Moderate	%	70.00%	64.00%	68.00%	71.00%	68.00%	69.00%
Low	%	18.00%	16.00%	16.50%	07.00%	10.00%	08.00%
Total	%	**100%**	**100%**	**100%**	**100%**	**100%**	**100%**

From the Above table shown that, level of frequency distribution of Memory for aided and non-aided secondary level teacher, 12.069% aided male Teachers, 20% aided Female teachers & 16.00% total aided teachers belongs to high level of Memory. On the other hand 22.00% non-aided male teachers, 22.00% non-aided female teachers and 22.00% total non-aided teachers belongs to high level of Memory.

The moderate level of Memory of aided school teachers indicated that, the 70% male aided teachers, 64% female aided school teachers and 68% all aided school teachers are belongs to moderate level of Memory. On the other hand 71.00% non-aided school male teachers, 68.00 % non-aided school female teachers and 69% non-aided school all teachers belongs to moderate level of Memory.

The low level of Memory of aided school teachers indicated that, the 18% male aided school teachers, 16% female aided school teachers and 16.50% all aided school teachers is belongs to moderate level of Memory. On the other hand 7.00% non-aided school male teachers, 10.00% non-aided school female teachers and 08% non-aided schools all teachers having low level of Memory.

The majority of aided school teachers (80%) having Moderate and Low level of Memory where as non-aided school teachers (91%) having High and Moderate level of Memory. Most of the non-aided school teachers are belongs to Moderate level of Memory compared to aided school teacher level of Memory. On the other hand most of the aided school teachers belong to low level of Memory compared to non-aided school teachers level of Memory.

Table no. 1.2

Memory Status of aided and non-aided secondary school level teachers.

Component of Memory	Aided school Teachers			Non-Aided school Teachers			Statistic		
	N	M	SD	N	M	SD	Df	SE. dm	't' Value
Short Term	50	13.100	3.747	50	14.125	3.790	98	.376	2.720*
Long Term	50	8.565	2.553	50	9.255	2.512	98	.253	2.724*
Immediate Memory	50	9.710	2.791	50	10.470	2.826	98	.280	2.705*
Total	50	31.375	9.080	50	33.850	9.117	98	.909	2.720*

* 0.01 Level of Significance ** 0.05 Level of Significance

From the above table shown that, the significant mean difference between the Short Term, Long Term, Immediately and Overall Memory status for the component of Cognitive Performance of aided and non-aided secondary level school teachers. The aided school Teachers mean score of Short Term memory is 13.100 & SD is 3.747, and Non-aided school Teachers mean score of Short Term Memory is 14.125 & SD is 3.790 respectively. Compare the mean score of Short Term Memory for aided and Non- aided school Teacher and calculated the SE.dm is 0.376 and calculated 't' value is 2.720. On 98 df table value is 1.96 on 0.05 level of significant and 2.58 for 0.01 level of significant. Hence the calculated't' value is greater than the table value on 0.01 level of significant. It is concluded that the mean score Short Term Memory of non- aided school teachers is effective compared to aided school Teachers. It means that, Non- aided school Teachers Short Term Memory is better compared to aided school Teacher Short Term Memory status.

The aided school Teachers mean score of Long Term memory is 8.565 & SD is 2.553, and Non- aided school Teachers mean score of Long Term Memory is 9.255 & SD is 2.512 respectively. Compare the mean score of Long Term Memory for aided and Non- aided school Teacher and calculated the SE.dm is 0.253 and calculated 't' value is 2.724, on 98 df table value is 1.96 on 0.05 level of significant and 2.58 for 0.01 level of significant. Hence the calculated't' value is greater than the table value on 0.01 level of significant. It is concluded that the mean score Long Term Memory of non- aided school Teachers is effective compared to aided school Teachers. It means that, Non- aided school Teachers Long Term Memory is better compared to aided school Teacher Long Term Memory status.

The aided school Teachers mean score of Immediately Memory is 9.710 & SD is 2.791, and Non- aided school Teachers mean score of Immediately Memory is 10.470 & SD is 2.826 respectively. Compare the mean score of Immediately Memory for aided and Non- aided school Teacher and calculated the SE.dm is 0.280 and calculated 't' value is 2.705, on 98 df table value is 1.96 on 0.05 level of significant and 2.58 for 0.01 level of significant. Hence the calculated't' value is greater than the table value on 0.01 level of significant. It is concluded that the mean score Immediate Memory of non- aided school Teachers is effective compared to aided school Teachers. It

means that, Non- aided school Teachers immediate Memory is better compared to aided school Teacher immediate Memory status.

The aided school Teachers mean score of Overall Memory is 31.375 & SD is 9.080, and Non- aided school Teachers mean score of Overall Memory is 33.850 & SD is 9.117 respectively. Compare the mean score of Overall Memory for aided and Non- aided school Teacher and calculated the SE.dm is 0.909 and calculated 't' value is 2.720, on 98 df table value is 1.96 on 0.05 level of significance and 2.58 for 0.01 level of significance. Hence the calculated't' value is greater than the table value on 0.01 level of significance. It is concluded that the mean score Overall Memory of non- aided school Teachers is effective compared to aided school Teachers. It means that, Non- aided school Teachers Overall Memory status is better compared to aided school Teacher Overall Memory status. Type of secondary school has significant effect on aided and non-aided school Teacher's Short Term Memory, Long Term Memory, Immediate Memory and Overall Memory status. The non- aided school Teachers Short Term, Long Term, Immediate Memory and Overall Memory is better as compared to aided school Teachers.

BIBLIOGRAPHY

1. Atkinson, R. C., & Shiffrin, R. M. (1968). Human memory: A pro- posed system and its control processes. In K. W. Spence (Ed.), The psychology of learning and motivation: Advances in research and the- ory (Vol. 2, pp. 89-195). New York: Academic Press.
2. Baddeley, A. D. (1986). Working memory. Oxford: Oxford Univer-
3. Sity Press. Baddeley, A., & Hitch, G. (1993). The recency effect: Implicit learning with explicit retrieval? Memory & Cognition, 21, 146-155
4. Cowan, N. (1993). Activation, attention, and short-term memory. Mem- ory & Cognition, 21, 162-167.
5. A framework for memory research. Journal of Verbal Learning & Verbal Behavior, 11, 671-684.
6. Crowder, R. (1993). Short-term memory: Where do we stand? Mem-ory & Cognition, 21, 142-145. GLENBERG, A. M., BRADLEY, M. M., STEVENSON, J. A., KRAUS, T. A.,
7. Tkachuk, M. J., Gretz, A. I., Fish, J. H., & Turpin, B. M. (1980). A two-process account of long-term serial position effects. Journal of Experimental Psychology: Human Learning & Memory, 6, 355-369.
8. Lee, C. L. (1992). The perturbation model of short-term memory: A review and some further developments. In A. F. Healy, S. M. Koss- lyn, & R. M. Shiffrin (Eds.), From learning processes to cognitive processes: Essays in honor of William K. Estes (Vol. 2, pp. 119-141).
9. Hillsdale, NJ: Erlbaum. Martin, R. (1993). Short-term memory and sentence processing: Evi- dence from neuropsychology. Memory & Cognition, 21, 176-183.
10. Mcelree, B. M., & Dosher, B. A. (1989). Serial position and set size in short-term memory: Time course of recognition. Journal of Ex- perimental Psychology: General, 118, 347-373.
11. Posner, M. I. (1969). Abstraction and the process of recognition. In G. H. Bower & J. T. Spence (Eds.), The psychology of learning and motivation (Vol. 3, pp. 44-96). New York: Academic Press.
12. Potter, M. (1993). Very short-term conceptual memory. Memory & Cognition, 21, 156-161.
13. Schneider, W. (1993). Varieties of working memory as seen in biol- ogy and in connectionist/control architectures. Memory & Cognition, 21, 184-192.
14. Schweikert, R. (1993). A multinomial processing tree model for deg-tion, 21, 168-175.

15. Hillsdale, NJ: Erlbaum. radation and redintegration in immediate recall. Memory & Cogni
16. Shiffrin, R. M. (1976). Capacity limitations in information process- ing, attention, and memory. In W. K. Estes (Ed.), Handbook of learn-
17. Shiffrin, R. M. (1988). Attention. In R. C. Atkinson, R. J. Herrn- stein, G. Lindzey, & R. D. Luce (Eds.), Stevens' handbook of ex- perimental psychology (2nd ed., pp. 811-839). New York:
18. Wiley. Sperling, G. (1960). The information available in brief visual presen- tations. Psychological Monographs, 74(Whole No. 498).