DEVELOPMENT OF MIND POWER AND MEMORY POWER IN SLOW LEARNERS

Dr Joju John

Assistant Professor, Mar Theophilus Training College, Nalanchira, Trivandrum

Abstract

Slow learning is a very significant issue since it affects around 10 per cent of the student population. Slow learners are students who have IQ between 70 and 85 and are just below normal learners in their achievement. They are just on the borderline but they do not have sufficient speed of learning. They can be taught with creative plans and strategies. If sufficient attention and guidance is given they would contribute to the society and national development. There are very creative strategies to boost the memory and self-confidence of such students. In this study a creative strategy that uses mnemonics and other registering and recall techniques and a method of positive psychology using self hypnosis and subconscious mind programming are used to improve self-esteem of slow learners. The experimental study reveals that these two creative strategies can help the slow learners significantly to rise to the mainstream.

Key terms- slow learners, memory models and autosuggestion

Introduction

The foundation of human resource development is nothing but quality education. Ramar[1] (2006) points out, *the size and quality of the people; the size and efficiency of the labour force and the serving cadres, the health, intelligence and diligence of the people; the sense of discipline, character and the spirit of co-operation of the people etc. are the factors that facilitate national development.* So there is a rising need to ensure the availability of quality education to all. The slow learners should also be offered quality education so that they would fulfill their responsibility to the nation. If innovative methods and strategies are developed for slow learners that would ensure their development leading to national development and realization of the dream of a developed India by 2020 since they constitute a significant part of the student community**.**

Need and Significance

Slow learners are the students just below the normal students with reagard totheir IQ level. They have plenty of educational, social and behavioural problems peculiar to them. The characteristic problems of slow learners have to be identified and behaviour modification has to be brought out. This process has to be supplemented with creative programmes for the inculcation of values. Slow learners have poor self-confidence and poor memory power. They forget the lessons very fast. The two effective methods of behaviour modification are rational persuasion and subconscious mind programming. All humans are being programmed continuously. All the advertisements and films programme the mind of human beings. Slow learners are having poor memory and low level of self-confidence. Innovative programmes for the development of the inner powers of the slow learners are essential to bring out all their potentials.

DEFINITION OF KEY TERMS

Slow learners -   *Slow learners are students who have an IQ between 70 and 85 and are just below normal learners in their achievement* (Frain[2], 1956).

OBJECTIVES OF THE STUDY

The objective of the study is to test the effectiveness of Memory Models and Autosuggestion Strategy for developing the memory power and mind power in slow learners by comparing the achievement scores of slow learners of the treatment groups (Memory Models with Autosuggestion (MMA) group, Memory Model (MM) group, and Activity Method (AM) group) for Total Sample in terms of: Pre-test Achievement, Immediate Post-test Achievement and Delayed Memory Achievement

EXPERIMENTAL HYPOTHESES

The hypotheses formulated in the present study are:

$H_{(1)}$ When the treatment groups, (MMA, MM and AM), are exposed to experimental teaching, there will be significant difference among them with regard to Immediate Post Test Achievement Scores based on Total Sample.

$H_{(2)}$ When the treatment groups, (MMA, MM and AM), are exposed to experimental teaching, there will be significant difference among them with regard to Delayed Memory Achievement Scores based on Total Sample.

Methodology of the Study

The investigator adopted Experimental Method for the present investigation.

The tools used for the study are Memory Models for Learning English (A creative strategy that uses mnemonics and other registering techniques and recall techniques), Autosuggestion Schedule (A method of positive psychology where autosuggestion, self-hypnosis and subconscious mind programming are used to improve self-esteem), Achievement Test and Kerala University Verbal Group Test of Intelligence. *The population of the study is the slow learners in Thiruvanandapuram District (State of Kerala). The sample selected for the study consists of 219 slow learners from the aided and government schools of Thiruvanandapuram District.* **Pre test – Post test Parallel group design was selected for the study. The independent variable is the method of study and the dependant variable is the achievement of the students.** *The statistical techniques for analyzing the data are Analysis of co-variance ANCOVA was used to study whether there is any significant difference among the treatment groups with regard to Pre-test and Immediate Post-test Achievement and Test of significance for difference between the means.*

The Research Procedure

The slow learners were identified using the IQ test and composite achievement of the students in their schools. Those students who had their IQ in the slow learners' category and who scored low marks in their schools were identified as the slow learners. Then experimental study was conducted after pretest. The delayed memory score was identified after as second post test after 30 days of the completion of the experimental treatment.

Analysis and Findings

The analysis and findings of the study are briefly discussed below.

1 COMPARISON OF PRE-TEST AND IMMEDIATE POST-TEST ACHIEVEMENT SCORES USING ANALYSIS OF VARIANCE

Analysis of Variance is used to determine whether there is any significant difference among the Slow Learners in the treatment groups: (MMA, MM and AM groups) by analyzing the Pre-test and Immediate Post-test Achievement Scores (Total Sample). The details are given in Table 1

2

Table 1. Summary of Analysis of Variance of Pre-test and Immediate Post-test Achievement Scores (Total Sample)

Source of variation	df	SSx	SSy	MSx	MSy	Fx	Fy
Among means	2	524.6	5749.9	262.3	2875.0		
Within groups	216	7463.8	8347.6	34.6	38.6	7.59**	74.39**
Total	218	7988.4	14097.5				

**: significant at 0.01 level   x: Pre-test   y: Immediate Post-test

The Fx value obtained is 7.59 which is greater than F value at 0.01 level (2,218). The analysis revealed that the Slow Learners in the treatment groups: MMA, MM and AM groups differ significantly with regard to Pre-test Achievement Scores.

2 COMPARISON OF IMMEDIATE POST-TEST ACHIEVEMENT SCORES AFTER CORRECTING FOR DIFFERENCE IN PRE-TEST ACHIEVEMENT SCORES OF THE SLOW LEARNERS IN THE TREATMENT GROUPS (AEMM, MM AND AOM GROUPS), USING ANALYSIS OF CO-VARIANCE (TOTAL SAMPLE)

Analysis of Co-variance is used to determine whether the groups differ in achievement at Immediate Post-test level after correcting the difference in Pre-test Achievement Scores as a result of the methods of teaching applied. The details are given in table 2.

Table 2: Comparison of Immediate Post-test Achievement Scores after correcting for difference in Pre-test Achievement Scores of slow learners in AEMM, MM and AOM groups (Total Sample) (ANCOVA Table)

Source of variation	df	SSx	SSy	SSy.x	MSy.x	SDy.x	Fy.x
Among	2	524.6	5749.9	5002.1	2501.0	3.429	212.67**
Within	215	7463.8	8347.6	2528.4	11.8		
Total	217	7988.4	14097.5	7530.5			

: significant at 0.01 level x: Pre test   **y**Immediate Post-test   **y.x:** Adjusted Immediate Post-test

After correcting the Immediate Post-test Achievement Scores for difference in Pre-test Achievement Scores, F statistics is applied to the Immediate Post-test Achievement Scores. The value of the ANCOVA (Fy.x = 212.67) is significant at 0.01 level. From Fy.x, it is clear that the mean score of Immediate Post-test Achievement, after adjusted for the Pre-test Achievement Scores difference, is high among **AEMM** (46.1) followed by **MM** (45.7) and is least among **AOM** (36.0). So we can conclude that the Analysis of Co-variance among adjusted means of the three treatment groups on Pre-test and Immediate Post-test revealed that **AEMM, MM and AOM** groups differ significantly with regard to the adjusted Immediate Post-test Achievement Scores.

3

3. THE PAIR WISE COMPARISON OF THE SLOW LEARNERS IN THE TREATMENT GROUPS WITH REGARD TO ADJUSTED IMMEDIATE POST-TEST ACHIEVEMENT SCORES

Table 3. Data for adjusted mean scores of Immediate Post-test levels of Slow Learners in MMA, MM and AM groups (Total Sample)

Treatment Groups	N	Mx	My	My.x	Pair	CR	LS
AM (A)	78	14.4	35.8	36.0	A&B	17.28	0.01
MM (B)	69	12.7	44.1	45.7	A&C	18.13	0.01
MMA (C)	72	16.6	47.9	46.1	B&C	0.63	NS

The pair wise comparison shows that MM is significantly more effective than AM (CR=17.28, p< 0.01). Therefore MM group is *superior* to AM group. The pair wise comparison shows that MMA is significantly more effective than AM (CR=18.13, p< 0.01). So MMA group is *superior* to AM group. The pair wise comparison shows that MMA and MM do not differ significantly (CR=0.63). There is no significant difference between MMA and MM groups.

Tenability of Hypothesis

Therefore the hypotheses formulated in this context viz; $H_{(1)}$ is partially accepted.

4. COMPARISON OF IMMEDIATE POST TEST AND DELAYED MEMORY ACHIEVEMENT SCORES OF THE SLOW LEARNERS IN THE TREATMENT GROUPS USING ANALYSIS OF VARIANCE

Analysis of Variance is used to determine whether there is any significant difference among the Slow Learners in MMA, MM and AM groups with regard to Immediate Post-test and Delayed Memory Achievement Scores. The details are given in table 4.

Table 4. Summary of Analysis of Variance of Immediate Post-test and Delayed Memory Achievement Scores of Slow Learners

Source of variation	df	SSx	SSy	MSx	Msy	Fx	Fy
Among means	2	5749.9	19316.5	2875	9658.3		
Within groups	216	8347.6	6951.2	38.6	32.2	74.39**	300.12**
Total	218	14097.5	26267.7				

**: significant at 0.01 level   x: Immediate Post-test   y: Delayed Memory test

The obtained value of Fy is 300.12 and is greater than F at 0.01 level (2,218). The analysis revealed that the Slow Learners in the treatment groups: MMA, MM and AM groups differ significantly with regard to Delayed Memory Achievement Scores.

5. COMPARISON OF DELAYED MEMORY ACHIEVEMENT SCORES AFTER CORRECTING FOR DIFFERENCE IN IMMEDIATE POST-TEST ACHIEVEMENT SCORES (TOTAL SAMPLE) USING ANCOVA

Analysis of Co-variance is used here to determine whether the groups differ in achievement at Delayed Memory test after correcting the difference in Immediate Post-test Achievement Scores as a result of the methods of teaching applied. The details are given in table 5.

Table 5. Summary of Analysis of Co-variance Immediate Post-test and Delayed Memory Achievement Scores

Source of variation	df	SSx	SSy	SSy.x	MSy.x	SDy.x	Fy.x
Among means	2	5749.9	19316.5	3768.7	1884.3		
Within groups	215	8347.6	6951.2	1608.0	7.5	2.735	251.95**
Total	217	14097.5	26267.7	5376.7			

**: significant at 0.01 level   y.x : Adjusted Delayed Memory

The Analysis of Co-variance among adjusted means of the treatment groups on Immediate Post-test and Delayed Memory Achievement Scores revealed that all the three treatment groups: MMA, MM and AM groups differ significantly with regard to adjusted Delayed Memory Achievement Scores.

6 . THE PAIR WISE COMPARISON OF THE SLOW LEARNERS IN THE TREATMENT GROUPS WITH REGARD TO ADJUSTED DELAYED MEMORY ACHIEVEMENT SCORES

Table 6. Data for adjusted mean scores of Delayed Memory test levels of Slow Learners in the treatment groups: MMA, MM and AM groups

Treatment Groups	N	Mx	My	My.x	Pair	CR	LS
AM (A)	78	35.8	23.9	29.2	A&B	22.72	0.01
MM (B)	69	44.1	40.8	39.4	A&C	26.43	0.01
MMA (C)	72	47.9	45.4	41.0	B&C	3.34	0.01

The pair wise comparison shows that MM is significantly more effective than AM (CR=22.72, p< 0.01). Therefore MM group is *superior* to AM group.The pair wise comparison shows that MMA is significantly more effective than AM (CR=26.43, p< 0.01). So MMA group is *superior* to AM group. The pair wise comparison shows that MMA is significantly more effective than MM (CR=3.34, p< 0.01). So MMA group is *superior* to AM group.

Tenability of Hypothesis

Therefore the hypotheses formulated in this context viz; $H_{(2)}$ is accepted.

The graphical representation of unadjusted and adjusted mean scores at Pre-test, Immediate Post-test and Delayed Memory achievement Scores of Slow Learners in MMA, MM and AM groups (Total Sample) is shown in figure 1.
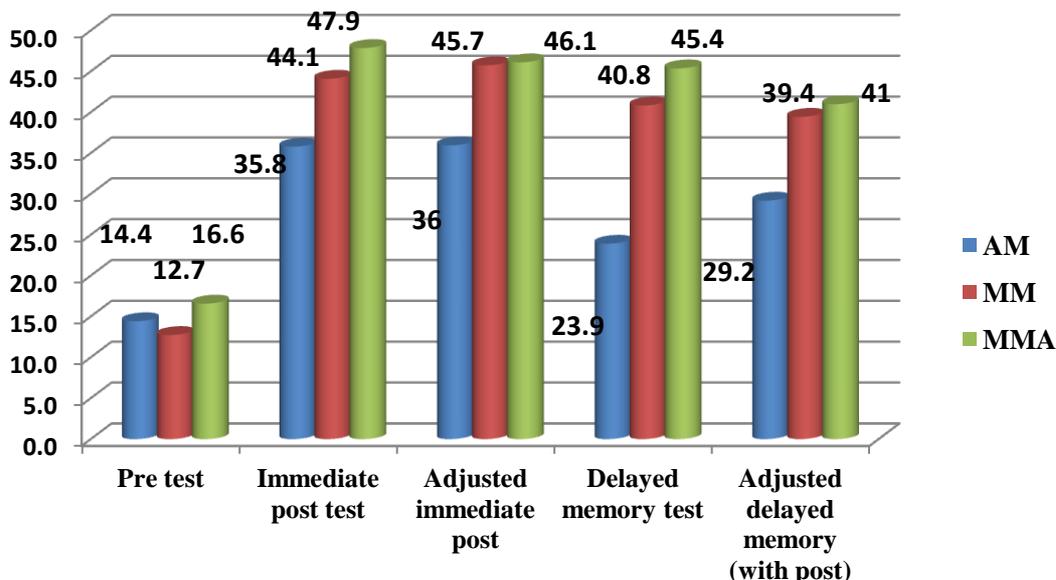
Figure 1

Unadjusted and Adjusted mean scores at Pre-test, Immediate Post- test and Delayed Memory Achievement Scores of Slow Learners in MMA, MM and AM groups (Total Sample)

Implications of the findings

The study has revealed that slow learners can be helped to overcome their slowness using creative strategies like memory models. Slow learners have low self-esteem and low self-confidence. Creative strategies like autosuggestion, self hypnosis and subconscious mind programming may be used to help them overcome this problem.

Conclusion

The investigator would feel gratified if the findings of the present study would pave the way for a better understanding of the phenomenon of the slow learning, the problems of slow learners and innovative strategies for empowering the slow learner to come to the main stream of the society. It would also be beneficial if the use of memory models and autosuggestion becomes prevalent in our classrooms.

Reference

1. R. Ramar. (2006). ***Intervention for Slow Learner.*** New Delhi: Sonali Publications, pp. 1-3.
2. Thomas. J. Frain. (1956). ***Administrative and Institutional Provisions for Rapid and Slow Learners in Catholic Secondary Schools.*** Washington: The Catholic University of America Press, p. 13.
3. Marsha Weil and Bruce Joyce. (1972). ***Models of Teaching.*** Englewood Cliffs U.S.A.: Prentice Hall Inc., p.19.