



A COMPARATIVE STUDY ON ATTITUDES OF SOCIAL SCIENCE TEACHERS OF KOPPAL DISTRICT TOWARDS PROGRAMMED INSTRUCTIONS

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ABSTRACT

Generally speaking the instructions provided by a teaching machine or programmed textbook is referred to as programmed instruction or programmed learning. Programmed learning involves instruction with carefully specified goals and skillfully arranged learning experiences which are self-instructional and self corrective. Thus programmed instruction is a new path towards automation and individual learning/instruction. Smith and More (1962) "Programmed instruction is the process of arranging the material to be learned into a series of sequential steps, usually it moves the student from a familiar background into a complex and new set of concepts, principles and understanding". Leith (1966) "A programme is a sequence of small steps of institutional material (called frames), most of which requires a response to be made by completing a blank space in a sentence. To ensure that required responses are given, a system of cuing is applied, and each response is verified by the provision of immediate knowledge of results. Such a sequence is intended to be worked at the learners 'own pace as individualized self-instruction"

KEYWORDS: teaching machine , institutional material , personalized instructional techniques and technologies.

1. INTRODUCTION:

A variety of personalized instructional techniques and technologies were developed in the 1950's viz., programmed learning, teaching machines, cybernetics, personalized an effective strategy in the teaching learning process. It is a highly individualized strategy which has been found to be quite useful for classroom institution as well as self-learning or auto-instruction. Programmed Learning! Instruction emerged out of experimental research on operant conditioning which was formulated by Skinner (1968) and law of effect which was proposed by Thorndike (1912). In present study investigator collected attitudes of social study teachers towards the programme instruction in the class room.

2. TEACHING OF SOCIAL SCIENCES

In order to accomplish the task of teaching Social science, it is essential for us to understand clearly the purpose of teaching Social science. This clarity of purpose could be helpful to teach any prescribed course and also in measuring the effectiveness of teaching that course. Many educational reform committees have emphasized spelling out aims and objectives of teaching a particular subject. The purpose of Social science teaching in secondary schools is to enable students to grasp systematically the basic knowledge of Social science needed for the further study. For clarity of purpose of Social science teaching an emphasis has been placed by many educational reform committees to spell out the aims and objectives of a

course of study. This study analyzed the attitudes of social study teachers towards the programme instruction in the class room.

3. SIGNIFICANCE OF THE STUDY:

Since the recommendations of the secondary Education Commission report of 1952-53 we are teaching general science on compulsory basis throughout the school stages (from primary to secondary level) because of its multifarious and many sided values to human being. National Policy of Education (1986) remarkably suggests that —“science should be visualized as the vehicle to train the child to think, reason, analyze and articulate logically.” Attainment or achievement in science is based on mastery of fundamental skills. The new curriculum in science at secondary school level demands for rapid learning and clear understanding of new curriculum (bisemester system of education - newly introduced programme in the field of education).

The researcher had 20 years of teaching experience and observed the achievement of the students in science at secondary school level. It is his experience that the achievement of some students may be cent percent in science.

4. OBJECTIVES OF THE STUDY:

Keeping the above said theoretical background in view the present study was taken up to study the attitudes of Social Science teachers of Koppal District towards Programmed Instructions with the following objectives.

1. To study the attitudes of Social Science teachers towards Programmed Instructions
2. To study the attitudes of Male and female Social Science teachers towards Programmed Instructions.
3. To study the attitudes of Graduate and Post graduate Social Science teachers towards Programmed Instructions.
4. To study the attitudes of Urban, Semi urban and rural Social Science teachers towards Programmed Instructions.
5. To study the attitudes of Govt., Aided and private Social Science teachers towards Programmed Instructions.
6. To study the attitudes of more, moderate and less experience Social Science teachers towards Programmed Instructions.
7. To study the attitudes of Social Science teachers, Science and language teachers towards Programmed Instructions.

5. HYPOTHESIS OF THE STUDY:

1. H₀1: There is no difference between the attitudes of Male and female Social Science teachers towards Programmed Instructions.
2. H₀2: There is no difference between the attitudes of Graduate and Post graduate Social Science teachers towards Programmed Instructions.
3. H₀3: There is no difference between the more, moderate and less experience Social Science teachers towards Programmed Instructions.
4. H₀4: There is no difference between the attitudes of Govt., Aided and private Social Science teachers towards Programmed Instructions.
5. H₀5: There is no difference between the attitudes of Urban, Semi urban and rural Social Science teachers towards Programmed Instructions.
6. H₀6: There is no difference between the attitudes of Boys, Girls and Co-education school Social Science teachers towards Programmed Instructions.
7. H₀7: There is no difference between the attitudes of Social Science teachers, Science and language teachers towards Programmed Instructions.

8. DESIGN OF THE STUDY:

8.1. Sample:

All the teachers of Secondary schools of Koppal District are the population. 200 Social Science teachers of 40 schools were considered as the samples of the study. Sample comprises were Govt., Aided, and private school teachers with different span of experiences.

8.2. Tools used for data collection:

- a) Programmed Instruction Attitude Scale (PIAS), which is developed and Standardized by Dr. Haseen Taj.
- b) Personal Information sheet developed by Investigator himself.

8.3. Data collection procedure:

Investigator personally visited selected schools and given proper suggestions for giving responses to attitudes scale. He provided the sufficient time for them to do the same.

8.4. Statistical techniques used for data analysis:

The mean, S.D., t-test and F-test Statistical techniques used for data analysis. The S.P.S.S.-16 software was used to analyze the data.

9. ANALYSIS OF THE DATA:

H₀1: There is no difference between the attitudes of Male and female Social Science teachers towards Programmed Instructions.

Table-1
Statistics of attitudes of Male and female Social Science teachers towards Programmed Instructions.

Variable	Type	Number	Mean	SD	t- value	Table value	Significance
Gender	Male	100	180.4	14.09	1.10	1.960 at 0.05	NS at both 0.05 and 0.01
	Female	100	183.0	15.63		2.576 at 0.01	

Degree of Freedom: (N1+N2-2) 198

On an inspection of Table-1, when the mean attitudes of male high school social science teachers was compared with the female high school social science teachers, it was found that the two groups did not differ significantly in terms of their level of attitudes towards Programmed Instructions. Thus, the proposed null hypothesis (H₀1) is accepted. It is evident from the above Table shows that the difference between the mean attitudes of male high school social science teachers and mean female high school social science teachers is negligible; it clearly shows that both the groups are having almost equally attitude towards Programmed Instructions.

H₀2: There is no difference between the attitudes of Graduate and Post graduate Social Science teachers towards Programmed Instructions.

Table-2
Statistics of the attitudes of Graduate and Post graduate Social Science teachers towards Programmed Instructions

Variable	Type	Number	Mean	SD	t-value	Table value	Significance
Qualification	Under graduate	100	183.5	15.61	1.54	1.960 at 0.05	NS at both significant level (0.05 and 0.01)
	Post graduate	100	180.0	14.01		2.576 at 0.01	

Degree of Freedom: (N1+N2-2) 198

On an inspection of Table-2, when the mean attitudes of male under graduate social science teachers was compared with the Post graduate social science teachers, it was found that the two groups did not differ significantly in terms of their level of attitudes towards Programmed Instructions. Thus, the proposed null hypothesis (H₀2) is accepted. It is evident from the above Table that the difference between the mean attitudes of under graduate social science teachers and mean Post graduate social science teachers is negligible; it clearly shows that both the groups are having almost equally attitude towards Programmed Instructions.

H₀3: There is no difference between the more, moderate and less experience Social Science teachers towards Programmed Instructions.

Table-3
Statistics of the more, moderate and less experience Social Science teachers towards Programmed Instructions

Variable	Type	Number	Source	Sum of Squares	df	Mean Square	F-Value	Sign.
Experi ence	More experience (above 20 Years)	70	Between Groups	104.601	2	52.30	0.234	No signific ant
	Moderate experience (10-20 Years)	70	Within Groups	44108.57	197	223.90		
	Less experience (Less than10 Years)	60	Total	44213.18	199			

From Table 3, the result of interaction analysis exhibits that the interaction between attitudes of teachers having different level of experience (F=0.234) is not significant at 0.01 level of significance. It means that the experience of social science teachers not affects on the attitudes towards programmed instruction. Therefore the null hypothesis “there is no difference between the more, moderate and less experience Social Science teachers towards Programmed Instructions” accepted at 0.01 level of significance.

H₀4: There is no difference between the attitudes of Govt., Aided and private Social Science teachers towards Programmed Instructions.

Table-4
Statistics of the attitudes of Govt., Aided and private Social Science teachers
towards Programmed Instructions

Variable	Type	Number	Source	Sum of Squares	df	Mean Square	F-Value	Sign.
Type of management of School	Govt. School teachers	70	Between Groups	1010.18	2	505.09	2.305	Significant
	Aided School teachers	70	Within Groups	43171.61	197	219.14		
	Private School teachers	60	Total	44181.87	199			

From Table 4, the result of interaction analysis exhibits that the interaction between high, average and low experience ($F= 2.305$) is significant at 0.01 level of significance. It means that the type of management of School affects on the attitudes of Social science towards Programmed Instructions. Therefore the null hypothesis ‘there is no difference between the attitudes of Govt., Aided and private Social Science teachers towards Programmed Instructions’ stands rejected at 0.01 level of significance and alternative hypothesis was accepted i.e. There is difference between the attitudes of Govt., Aided and private Social Science teachers towards Programmed Instructions.

H₀5: There is no difference between the attitudes of Urban, Semi urban and rural Social Science teachers towards Programmed Instructions.

Table-5
Statistics of the attitudes of Urban, Semi urban and rural Social Science teachers towards Programmed
Instructions

Variable	Type	Number	Source	Sum of Squares	df	Mean Square	F-Value	Sign.
Locale of the School	Urban School teachers	70	Between Groups	1097.356	2	548.678	2.675	Significant
	Semi-urban School teachers	60	Within Groups	40413.519	197	205.145		
	Rural School teachers	70	Total	41510.875	199			

From Table 5, the result of interaction analysis exhibits that the interaction between high, average and low experience ($F= 2.675$) is significant at 0.01 level of significance. It means that the type of

management of School affects on the attitudes of Social science towards Programmed Instructions. Therefore the null hypothesis “there is no difference between the attitudes of Urban, Semi urban and rural Social Science teachers towards Programmed Instructions” stands rejected at 0.01 level of significance and alternative hypothesis was accepted i.e. there is no difference between the attitudes of Urban, Semi urban and rural Social Science teachers towards Programmed Instructions.

H₀6: There is no difference between the attitudes of Boys, Girls and Co-education school Social Science teachers towards Programmed Instructions.

Table-6
Statistics of the attitudes of Boys, Girls and Co-education school Social Science teachers towards Programmed Instructions

Variable	Type	Number	Source	Sum of Squares	df	Mean Square	F-Value	Sign.
Type of School	Boys School teachers	70	Between Groups	830.744	2	415.372	1.975	Not significant
	Girls School teachers	60	Within Groups	41428.276	197	210.296		
	Co-education School teachers	70	Total	42259.020	199			

From Table 6, the result of interaction analysis exhibits that the interaction between high, average and low experience (F= 1.975) is significant at 0.01 level of significance. It means that the type of School affects on the attitudes of Social science towards Programmed Instructions. Therefore the null hypothesis “There is no difference between the attitudes of Boys, Girls and Co-education school Social Science teachers towards Programmed Instructions” stands rejected at 0.01 level of significance and alternative hypothesis was accepted i.e. There is difference between the attitudes of Boys, Girls and Co-education school Social Science teachers towards Programmed Instructions.

H₀7: There is no difference between the attitudes of Social Science teachers, Science and language teachers towards Programmed Instructions.

Table-7
Statistics of the attitudes of Social Science teachers, Science and language teachers towards Programmed Instructions

Variable	Type	Number	Source	Sum of Squares	df	Mean Square	F-Value	Sign.
Subject taught	Social Science teachers	70	Between Groups	1628.694	2	814.347	3.625	Not significant
	Science teachers	60	Within Groups	44260.88	197	224.675		
	Language teachers	70	Total	45889.58	199			

From Table 7, the result of interaction analysis exhibits that the interaction between high, average and low experience ($F= 1.975$) is significant at 0.01 level of significance. It means that the subject taught affects on the attitudes of Social science towards Programmed Instructions. Therefore the null hypothesis "There is no difference between the attitudes of Boys, Girls and Co-education school Social Science teachers towards Programmed Instructions" stands rejected at 0.01 level of significance and alternative hypothesis was accepted i.e. There is difference between the attitudes of Boys, Girls and Co-education school Social Science teachers towards Programmed Instructions.

10. FINDING:

Hypothesis-1: There is no difference between the attitudes of Male and female Social Science teachers towards Programmed Instructions.

Result: the difference between the mean attitudes of male high school social science teachers and mean female high school social science teachers is negligible (Not significant) ; it clearly shows that both the groups are having almost equally attitude towards Programmed Instructions.

Hypothesis-2: There is no difference between the attitudes of Graduate and Post graduate Social Science teachers towards Programmed Instructions.

Result: the difference between the mean attitudes of under graduate social science teachers and mean Post graduate social science teachers is negligible(Not significant); it clearly shows that both the groups are having almost equally attitude towards Programmed Instructions.

Hypothesis-3: There is no difference between the more, moderate and less experience Social Science teachers towards Programmed Instructions.

Result: The experience of social science teachers not affects on the attitudes of science teachers towards programmed instruction. There is no difference between the more, moderate and less experience Social Science teachers towards Programmed Instructions.

Hypothesis-4: H_04 : There is no difference between the attitudes of Govt., Aided and private Social Science teachers towards Programmed Instructions.

Result: The type of management of School affects on the attitudes of Social science towards Programmed Instructions. There is difference between the attitudes of Govt., Aided and private Social Science teachers towards Programmed Instructions.

Hypothesis-5: There is no difference between the attitudes of Urban, Semi urban and rural Social Science teachers towards Programmed Instructions.

Result: The Locale of School affects on the attitudes of Social science towards Programmed Instructions. There is no difference between the attitudes of Urban, Semi urban and rural Social Science teachers towards Programmed Instructions.

Hypothesis-6: There is no difference between the attitudes of Boys, Girls and Co-education school Social Science teachers towards Programmed Instructions.

Result: The type of School was affects on the attitudes of Social science towards Programmed Instructions. There is difference between the attitudes of Boys, Girls and Co-education school Social Science teachers towards Programmed Instructions.

Hypothesis-7: There is no difference between the attitudes of Social Science teachers, Science and language teachers towards Programmed Instructions.

Result: The subject taught was affects on the attitudes of Social science towards Programmed Instructions. There is difference between the attitudes of Boys, Girls and Co-education school Social Science teachers towards Programmed Instructions.

11. Limitations of the studies:

1. This study was restricted to Social science teachers
2. This study was restricted to Secondary School Education

12. Educational Implications:

All selected teachers are having almost positive attitude towards programmed instructions. The classes of secondary school needs innovative teaching method like Programmed instruction. Some factors like gender and qualification of teacher will not affects on the attitudes of Social science teachers towards programme instructions but some other factors like span of teaching experience, type of school, type of management of school and subject taught by the teacher are affecting on the attitudes of Social science teachers of Secondary schools.

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