

CHAPTER 6

SUMMARY

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6.1. Introduction

A brief summary of this study may present an overall view of the work done. The important conclusions of the study are finally pointed in brief. At the end, several suggestions for further research are given in this chapter.

Planned efforts in education would mean identifying educational activities, ensuring their potential and evolving effective ways of their organization. In the present century when the extension of education to children and adults has lot of importance, many educational programmes were being established at various levels through various modes and channels. These channels include mass media like television, radio, video etc. Television is one of the major media through which mass communication is carried out and it can play an important role in the instruction to the students. There is a need that teachers must make more and more qualitative educational T.V. programmes. For this they must develop software. Video technology offers considerable potential for improvement of the quality of education. According to the investigator, the use of video instructional package in primary school level must employ to enrich learning experiences of the students. There is an urgent need to create awareness about learning balanced diet through video instructional package.

The present study is essentially aimed at producing a video instructional package on balanced diet, meant for the Standard VII students and validating its effectiveness of video instructional package over traditional method of teaching was carried out. Further correlates of achievement like S.E.S., J.I.M., anxiety and sex have been studied.

5.2. Objectives

The problem of the present study can be stated more specifically in terms of the following objectives:

1. To compare the achievement of students of high S.E.S. and low S.E.S. groups from urban area studied through video instructional package on immediate retention test and delayed retention test.
2. To compare the achievement of students of high S.E.S. and low S.E.S. group from rural area studied through video instructional package on immediate retention test and delayed retention test.
3. To compare the achievement of students of high J.I.M. and low J.I.M. groups from urban area studied through video instructional package on immediate retention test and delayed retention test.
4. To compare the achievement of students of high J.I.M. and low J.I.M. groups from rural area studied through video instructional package on immediate retention test and delayed retention test.
5. To compare the achievement of students of high anxiety and low anxiety groups from urban area studied through video instructional package on immediate retention test and delayed retention test.
6. To compare the achievement of students of high anxiety and low anxiety groups from rural area studied through video instructional package on immediate retention test and delayed retention test.
7. To compare the achievement of male and female students from urban area studied through video instructional package on immediate retention test and delayed retention test.
8. To compare the achievement of male and female students from rural area studied through video instructional package on immediate retention test and delayed retention test.

9. To compare the achievement of urban and rural students on immediate retention test and delayed retention test.
10. To compare the achievement of students studied through video instructional package and traditional method of teaching on immediate retention test and delayed retention test.
11. To compare the achievement of students of high S.E.S. and low S.E.S. on immediate retention test and delayed retention test.
12. To compare the achievement of students of high J.I.M. and low J.I.M. on immediate retention test and delayed retention test.
13. To compare the achievement of students of high anxiety and low anxiety on immediate retention test and delayed retention test.
14. To compare the achievement of male students and female students on immediate retention test and delayed retention test.
15. To study the interaction between area and methods of teaching on immediate retention test and delayed retention test.
16. To study the interaction between area and S.E.S. on immediate retention test and delayed retention test.
17. To study the interaction between methods of teaching and S.E.S. on immediate retention test and delayed retention test.
18. To study the interaction between area and J.I.M. on immediate retention test and delayed retention test.
19. To study the interaction between methods of teaching and J.I.M. on immediate retention test and delayed retention test.
20. to study the interaction between area and anxiety on immediate retention test and delayed retention test.
21. To study the interaction between methods of teaching and anxiety on immediate retention test and delayed retention test.

22. To study the interaction between area and sex of students on immediate retention test and delayed retention test.
23. To study the interaction between methods of teaching and sex of students on immediate retention test and delayed retention test.
24. To study the interaction between area, methods of teaching and S.E.S. on immediate retention test and delayed retention test.
25. To study the interaction between area, methods of teaching and J.I.M. on immediate retention test and delayed retention test.
26. To study the interaction between area, methods of teaching and anxiety on immediate retention test and delayed retention test.
27. To study the interaction between area, methods of teaching and sex of the students on immediate retention test and delayed retention test.

6.3. The Hypotheses

In order to make the study more scientific it is essential to formulate the hypotheses with care and caution. Investigator has found the null hypothesis as useful tool in testing the significance of differences. Hence the following null of hypotheses were formulated:

1. There will not be significant difference between mean achievement of high S.E.S. and low S.E.S. group of students studied through, video instructional package in urban area on immediate retention test scores.
2. There will not be significant difference between mean achievement of high S.E.S. and low S.E.S. group of students studied through video instructional package in urban area on delayed retention test scores.

3. There will not be significant difference between mean achievement of high S.E.S. and low S.E.S. group of students studied through video instructional package in rural area on immediate retention test scores.
4. There will not be significant difference between mean achievement of high S.E.S. and low S.E.S. group of students studied through video instructional package in rural area on delayed retention test scores.
5. There will not be significant difference between mean achievement of high J.I.M. and low J.I.M. group of students studied through video instructional package in urban area on immediate retention test scores.
6. There will not be significant difference between mean achievement of high J.I.M. and low J.I.M. group of students studied through video instructional package in urban area on delayed retention test scores.
7. There will not be significant difference between mean achievement of high J.I.M. and low J.I.M. group of students studied through video instructional package in rural area on immediate retention test scores.
8. There will not be significant difference between mean achievement of high J.I.M. and low J.I.M. group of students studied through video instructional package in rural area on delayed retention test scores.
9. There will not be significant difference between mean achievement of high anxiety and low anxiety group of students studied through video instructional package in urban area on immediate retention test scores.
10. There will not be significant difference between mean achievement of high anxiety and low anxiety group of students studied through video instructional package in urban area on delayed retention test scores.

11. There will not be significant difference between mean achievement of high anxiety and low anxiety group of students studied through video instructional package in rural area on immediate retention test scores.
12. There will not be significant difference between mean achievement of high anxiety and low anxiety group of students studied through video instructional package in rural area on delayed retention test scores.
13. There will not be significant difference between mean achievement of male and female students studied through video instructional package in urban area on immediate retention test scores.
14. There will not be significant difference between mean achievement of male and female students studied through video instructional package in urban area on delayed retention test scores.
15. There will not be significant difference between mean achievement of male and female students studied through video instructional package in rural area on immediate retention test scores.
16. There will not be significant difference between mean achievement of male and female students studied through video instructional package in rural area on delayed retention test scores.
17. There will not be significant difference in mean achievement on immediate retention test between urban and rural students.
18. There will not be significant difference in mean achievement on immediate retention test of students belonging to experimental group and control group.
19. There will not be significant difference between mean achievement on immediate retention test of high S.E.S. group and low S.E.S. group.

20. There will not be interaction between area and methods of teaching on immediate retention test scores.
21. There will not be interaction between area and S.E.S. on immediate retention test scores.
22. There will not be interaction between methods of teaching and S.E.S. on immediate retention test scores.
23. There will not be interaction between area, methods of teaching and S.E.S. on immediate retention test scores.
24. There will not be significant difference in mean achievement on delayed retention test between urban and rural students.
25. There will not be significant difference in mean achievement on delayed retention test of students belonging to experimental group and control group.
26. There will not be significant difference between mean achievement on delayed retention test between high S.E.S. group and low S.E.S. group.
27. There will not be interaction between area and methods of teaching on delayed retention test scores.
28. There will not be interaction between area and S.E.S. on delayed retention test scores.
29. There will not be interaction between methods of teaching and S.E.S. on delayed retention test scores.
30. There will not be interaction between area, methods of teaching and S.E.S. on delayed retention test scores.
31. There will not be significant difference in mean achievement on immediate retention test between high J.I.M. group and low J.I.M. group.
32. There will not be interaction between area and J.I.M. on immediate retention test scores.

33. There will not be interaction between methods of teaching and J.I.M. on immediate retention test scores.
34. There will not be interaction between area, methods of teaching and J.I.M. on immediate retention test scores.
35. There will not be significant difference between mean achievement on delayed retention test of high J.I.M. group and low J.I.M. group.
36. There will not be interaction between area and J.I.M. on delayed retention test scores.
37. There will not be interaction between methods of teaching and J.I.M. on delayed retention test scores.
38. There will not be interaction between area, methods of teaching and J.I.M. on delayed retention test scores.
39. There will not be significant difference between mean achievement on immediate retention test between high anxiety group and low anxiety group.
40. There will not be interaction between area and anxiety on immediate retention test scores.
41. There will not be interaction between methods of teaching and anxiety on immediate retention test scores.
42. There will not be interaction between area, methods of teaching and anxiety on immediate retention test scores.
43. There will not be significant difference between mean achievement on delayed retention test of high anxiety group and low anxiety group.
44. There will not be interaction between area and anxiety on delayed retention test scores.
45. There will not be interaction between methods of teaching and anxiety on delayed retention test scores.

46. There will not be interaction between area, methods of teaching and anxiety on delayed on delayed retention test scores.
47. There will not be significant difference in mean achievement of male and female students on immediate retention test scores.
48. There will not be interaction between area and sex on immediate retention test scores.
49. There will not be interaction between methods of teaching and sex on immediate retention test scores.
50. There will not be interaction between area, methods of teaching and sex on immediate retention test scores.
51. There will not be significant difference in mean achievement on delayed retention test between male and female students.
52. There will not be interaction between area and sex on delayed retention test scores.
53. There will not be interaction between methods of teaching and sex on delayed retention test scores.
54. There will not be interaction between area, method of teaching and sex on delayed retention test scores.

6.4. Delimitations of the Study

1. This study is limited to the topic balanced diet for the students of Standard VII, according to their science textbook published by Gujarat State School Textbook Board, Gandhinagar (1990).
2. This study is limited to students coming under the age group 12-14 years.

3. The video instructional package was developed for selected topic in Gujarati language only.

6.5. Methodology

1. Sample

List of all Gujarati medium co-education school was prepared separately for urban and rural area in Vadodara district. Two schools from urban and two schools from rural area were selected randomly. All students of Standard VII were included in the sample. Thus cluster sampling technique was applied to draw the sample. One school was treated as experimental group and other was treated as control group in urban and rural area. Enough care was taken that schools selected, were equal in terms of physical facilities and other factors.

2. Tools

Following tools have been used for the present study:

- i. Socio-Economic Status Scale (S.E.S. Scale)
- ii. Junior Index of Motivation Scale (J.I.M. Scale)
- iii. Anxiety Scale
- iv. Achievement Test.

Socio-economic status scale consists of eight items; junior index of motivation scale consists of fourty items; achievement test consists of twenty items.

6.6. Development and Validation of Video Instructional Package

The present study essentially aimed at producing a Video Instructional Package (VIP) on balanced diet for VIIth standard students and validating through consultation with experts. Content aspect of the video instructional package included balanced diet with its relevant aspects like carbohydrates, fat, proteins, minerals, vitamins and water, values of proper energy and growth in human life, source of food, importance of nourishing food, selection of food, importance of milk, egg, components of food, prevention of food, interval between two meals, important message to the students and quantitative aspects of balanced diet. According to the relevant topic given in Standard VIIth science textbook the content was organized for video shooting.

The script was prepared and shown to the experts for validating purpose concerning objectives, logical sequence, language used in the narration, suitability of visuals and sounds. Video instructional package was designed with the help of validated script, time factor, running explanation, material, background music, and colour photographs. Both indoor and outdoor shooting carried out with the help of studio facility and professional videographers.

6.7. Conduct of the Study

For the present study the experiment was conducted in four different primary schools from urban and rural area of Vadodara. Before starting the experiment, the investigator took prime permissions of respective schools, on which the experiment was to be conducted.

For the present study a group of students from the Standard VII of Vasant Vidyalaya of urban area of Vadodara was selected to tryout the video instructional package and to focus on the practicability concerning teaching the balanced diet through video instructional package. The same students were used for the tryout of the achievement test also.

After conducting the pilot study the sample from the four different schools other than that of pilot group school belonging to urban and rural area of Vadodara was drawn for the present study. The sample of students were belonging to Standard VII of Gujarati medium co-education schools of urban and rural area of Vadodara. These students were divided into experimental and control group.

The teacher asked the students of control group of urban and rural area to sit comfortably in the classroom. He oriented the students in order to develop rapport. He has taught about the balanced diet to the students by traditional method.

The students belonging to the experimental group of urban and rural area were taught about the balanced diet through video instructional package. The content of the teaching and the time were same for both the groups. But the difference was there in the treatment only.

Students belonging to experimental and control group of urban and rural area were given achievement test immediately after the treatment. In order to study the level of socio-economic status, the level of motivation and the level of anxiety the socio-economic status scale, junior index of motivation scale and anxiety test were administered to the students of

experimental and control groups of urban and rural area before the treatment.

In order to study the effectiveness of video instructional package to teach balanced diet in terms of students achievement, the students of both the groups were given all the test immediately after the treatment. After an interval of 10 days again the achievement test was again administered to the control group and experimental group.

6.8. Analysis of the Data

After collection of the data the next step is to analyze the obtained data. For the present study the statistical technique namely the analysis of variance was used to study the effect of video instructional package to teach balanced diet to the students of Standard VII and its effectiveness in terms of students achievement. Analysis of variance is useful to study the main effects as well as interaction effects.

6.9. Major Findings and Conclusions

As a result of the experiment the following findings were arrive at:

1. There was significant difference between mean achievement of high S.E.S. and low S.E.S. group of students studied through video instructional package in urban area on immediate retention test scores.

2. There was no significant difference between mean achievement of high and low S.E.S. group of students studied through video instructional package in urban area on delayed retention test scores.
3. There was significant difference between mean achievement of high S.E.S. and low S.E.S. group of students studied through video instructional package in rural area on immediate retention test scores.
4. There was significant difference between mean achievement of high S.E.S. and low S.E.S. group of students studied through video instructional package in rural area on delayed retention test scores.
5. There was significant difference between mean achievement of high J.I.M. and low J.I.M. group of students studied through video instructional package in urban area on immediate retention test scores.
6. There was significant difference between mean achievement of high J.I.M. and low J.I.M. group of students studied through video instructional package in urban area on delayed retention test scores.
7. There was significant difference between mean achievement of high J.I.M. and low J.I.M. group of students studied through video instructional package in rural area on immediate retention test scores.
8. There was no significant difference between mean achievement of high J.I.M. and low J.I.M. group of students studied through video instructional package in rural area on delayed retention test scores.
9. There was significant difference between mean achievement of high anxiety and low anxiety group of students studied through video instructional package in urban area on immediate retention test scores.

10. There was significant difference between mean achievement of high anxiety and low anxiety group of students studied through video instructional package in urban area on delayed retention test scores.
11. There was significant difference between mean achievement of high anxiety and low anxiety group of students studied through video instructional package in rural area on immediate retention test scores.
12. There was significant difference between mean achievement of high anxiety and low anxiety group of students studied through video instructional package in rural area on delayed retention test scores.
13. There was significant difference between mean achievement of male and female students studied through video instructional package in urban area on immediate retention test scores.
14. There was significant difference between mean achievement of male and female students studied through video instructional package in urban area on delayed retention test scores.
15. There was significant difference between mean achievement of male and female students studied through video instructional package in rural area on immediate retention test scores.
16. There was significant difference between mean achievement of male and female students studied through video instructional package in rural area on delayed retention test scores.
17. There was no significant difference in mean achievement on immediate retention test between urban and rural students.
18. There was significant difference in mean achievement on immediate retention test of students belonging to experimental group and control group.

19. There was no significant difference between mean achievement on immediate retention test of high S.E.S. group and low S.E.S. group.
20. There was no interaction between area and methods of teaching on immediate retention test scores.
21. There was no interaction between area and S.E.S. on immediate retention test scores.
22. There was no interaction between methods of teaching and S.E.S. on immediate retention test scores.
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25. There was significant difference in mean achievement delayed retention test of students belonging to experimental group and control group.
26. There was no significant difference between mean achievement on delayed retention test between high S.E.S. group and low S.E.S. group.
27. There was interaction between area and methods of teaching on delayed retention test scores.
28. There was no interaction between area and S.E.S. on delayed retention test scores.
29. There was no interaction between methods of teaching and S.E.S. on the performance of delayed retention test scores.
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34. There was no interaction between area, methods of teaching and J.I.M. on immediate retention test scores.
35. There was no significant difference between mean achievement on delayed retention test of high J.I.M. group and low J.I.M. group.
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