CHAPTER V

CONCLUSIONS AND SUMMARY
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CHAPTER V
CONCLUSIONS AND SUMMARY

5.1 Introduction

This chapter comprises a brief summary of the study, followed by the major findings and conclusion arrived at, implications of the study, few recommendations and the suggestions for further research.

5.2 The Study in Retrospect

The purpose of the present study was to find out the effectiveness and to compare the effectiveness of Value Analysis Model and Value Discussion Model in developing Valuing Competencies of standard eight students. The different aspects of this study are summarized under the following heads.

5.2.1 Restatement of the Problem

The present study was aimed to find and compare the effectiveness of Value Analysis Model and Value Discussion Model in developing Valuing Competencies among standard eight students by considering the various characteristics of the sample such as gender and type of management of school. Thus the study is entitled as “Effectiveness of Value Analysis Model and Value Discussion Model in developing Valuing Competencies”.

5.2.2 Operational Definitions of Key Terms

Educational terminologies have different interpretations. In any research on education, it is desirable to define the key terminologies used so that there is no misconception of the theme as well as the results of the study. The following key terms used in the study are defined for clarification.

5.2.2.1 Effectiveness

According to Oxford dictionary (1975) effectiveness is ‘being able to bring about the result intended’. Chamber’s Twentieth century dictionary (1972) defines effectiveness
as ‘being successful in producing a result or effect’. Effectiveness means ‘the quality of being effective’. Effective means producing or adapted to produce its proper result.

In the present study, effectiveness means desired result produced in the Valuing Competencies of standard eight students through the implementation of Value Analysis Model and Value Discussion Model.

5.2.2.2 Value Analysis Model

Value Analysis Model was developed by Coombs and Frankael (1971) based on the theories of moral reasoning to help students to learn a highly systematic, step-by-step process for making moral decisions. It is a model of teaching values in which value dilemmas in the conflicting situations are analysed through seven steps. The following are seven steps in executing Value Analysis Model in a classroom situation: presenting the dilemma, identifying and clarifying value conflict, asking for conceivable alternatives, asking for possible consequences of each alternative, asking for evidence to support the likelihood of consequence occurring, asking for evaluation of likely consequences, and asking for judgement as to which alternative seems best and why.

In the present study, the instructional material prepared by the investigator based on Value Analysis Model is used.

5.2.2.3 Value Discussion Model

Value Discussion Model was developed by Sansanwal and Passi (1988). It is based on the theories of moral reasoning to help students to improve the listening skills, self-esteem, valuing competencies, attitude towards school and knowledge of key concepts through highly systematic step-by-step process. It is a model of teaching values in which value dilemmas in the conflicting situations are discussed through five phases. The following are five steps in executing Value Discussion Model in a classroom situation: presenting the dilemma/issue, dividing on action, organising small group discussion, conducting a class discussion and closing the discussion.

In the present study, the instructional material prepared by the investigator based on Value Discussion Model is used.
5.2.2.4 Valuing Competencies

Valuing Competencies are the value clarifying abilities used in daily life when we make judgement about things, events and people or the abilities to choose correct values in value conflicting situations through analysis and discussion of value dilemma. Valuing Competencies are value clarifying abilities used in the process of Valuing. Valuing is the tendency of a person to show preference (Carl Rogers, 1989). The process of valuing is what we go through when we make judgement about things, events and people that we encounter in our day to day life (Archana Tomar, 1996).

In the present study, the seven value clarifying abilities based on the three processes namely; Choosing, Prizing and Acting described by Raths, Harmin and Simon (1966) are taken into consideration as Valuing Competencies. They are Choosing Freely, Choosing from Alternatives, Choosing after considering the Consequences, Prizing and Cherishing, Publicly Affirming, Acting when Situation Demands and Acting with Pattern of Consistency and Repetition.

5.2.3 Objectives of the Study

1. To develop Valuing Competencies Scale of standard eight students.

2. To develop Instructional materials based on Value Analysis Model and Value Discussion Model for developing Valuing Competencies among standard eight students.

3. To find out the level of Valuing Competencies of standard eight students before and after the implementation of Instructional materials based on Value Analysis Model, Value Discussion Model and existing method.

4. To find out the effectiveness of Value Analysis Model in developing Valuing Competencies over the Existing method for the total sample and for the sub-samples based on (a) Gender and (b) Type of Management of School.

5. To find out the effectiveness of Value Discussion Model in developing Valuing Competencies over the Existing method for the total sample and for the sub-samples based on (a) Gender and (b) Type of Management of School.

6. To compare the effectiveness of Value Analysis Model and Value Discussion Model in developing Valuing Competencies for the total sample and for the sub-samples based on (a) Gender and (b) Type of Management of School.
5.2.4 Hypotheses of the Study

1. There is a significant difference between experimental group I (Value Analysis Model) and control group in the Valuing Competencies for the total sample.

2. There is a significant difference between experimental group I (Value Analysis Model) and control group in the Valuing Competencies for the sub-samples based on (a) Gender and (b) Type of management of school.

3. There is a significant difference between experimental group II (Value Discussion Model) and control group in the Valuing Competencies for the total sample.

4. There is a significant difference between experimental group II (Value Discussion Model) and control group in the Valuing Competencies for the sub-samples based on (a) Gender and (b) Type of management of school.

5. There is a significant difference between experimental group I (Value Analysis Model) and experimental group II (Value Discussion Model) in the Valuing Competencies for the total sample.

6. There is a significant difference between experimental group I (Value Analysis Model) and experimental group II (Value Discussion Model) in the Valuing Competencies for the sub-samples based on (a) Gender and (b) Type of management of school.

5.2.5 Methodology in Brief

The purpose of the study was to find out the effectiveness of Value Analysis Model and Value Discussion Model in developing Valuing Competencies of standard eight students and also to compare the effectiveness of these two models. Valuing Competencies Scale was used to assess the Valuing Competencies of standard eight students. Instructional Materials based on Value Analysis Model and Value Discussion Model was used in the present study.

The method adopted for the study was experimental. The design selected for the experiment was Pre-test Post-test Non-equivalent group design. The geographical area of the study was Pathanamthitta district of Kerala state. In the present study, three schools were taken by giving due weightage to gender and type of management of school. It includes Government, Aided and Private school. The sample for experiment
comprised of 462 students of standard eight from nine divisions of three schools. In each school, three divisions were taken, two divisions were considered as experimental group I and experimental group II and one division was considered as control group.

After the selection of sample, investigator administered Valuing Competencies Scale as pre-test to the entire three groups before implementing the instructional material on Value Analysis Model and Value Discussion Model. The students were divided into three groups. Each group was exposed to one of the three types of Instructional method viz., Value Analysis Model, Value Discussion Model and existing method.

Experimental Group I : Students were taught by Value Analysis Model
Experimental Group II : Students were taught by Value Discussion Model
Control Group : Students were taught by Existing Method

After the completion of the instruction, Valuing Competencies Scale as post-test was administered to all the three groups. Thus, obtained data were analyzed and interpreted for further statistical treatments. Mean, Standard deviation, Independent samples ’t’–test, Analysis of Variance (ANOVA), and Analysis of Co-Variance (ANCOVA) were employed for the analysis of data.

5.3 Major Findings of the Study

The major findings of the study from the analysis of data are presented below under four headings.

5.3.1 Pre-test and Post-test scores of Valuing Competencies among standard eight students before and after experiment

The analysis of Pre-test and Post-test scores of Valuing Competencies among standard eight students before and after experiment revealed the following findings.

(i) Before experiment, in Experimental group I, Number and Percentage of students getting scores between 100 and 139 are 18(11.6%); between 140-179 are 126(81.8); between 180-219 are 3(1.9%); between 220-259 are 7(4.5%). In Experimental group II, Number and Percentage of students getting scores between 100-139 are 21(13.6%); between 140-179 are 116(75.3%); between 180-219 are 13(8.4%); between 220-259 are 4(2.5%). In control group, Number
and Percentage of students getting scores between 100 and 139 are 27(17.5%); between 140-179 are 95(61.6%); between 180-219 are 27(17.5%); between 220-259 are 5(3.2%). *It revealed that majority of the students scored between 140 and 179 in all the three groups in Pre-test.*

(ii) The mean value (160.75, 161.23 and 161.47) shows that the students in experimental group I, experimental group II and control group achieve 57% of Valuing Competencies in pre-test which is average. Further, the value of mean (160.75, 161.23 and 161.47), median (161.50, 163 and 162.50) and mode (168, 165 and 169) *revealed that the three groups did not differ very much in their Valuing Competencies before experiment.*

(iii) After experiment, in Experimental group I, Number and Percentage of students getting scores between 100 and 139 are 0(0%); between 140-179 are 10(6.4); between 180-219 are 132(85.7%); between 220-259 are 12(7.7%) in Experimental group II, Number and Percentage of students getting scores between 100-139 are 0(0%); between 140-179 are 49(31.8%); between 180-219 are 100(64.9%); between 220-259 are 5(3.2%) in control group, Number and Percentage of students getting scores between 100 and 139 are 13(8.4%); between 140-179 are 82(53.2%); between 180-219 are 53(34.4%); between 220-259 are 6(3.8%). *It revealed that majority of the students scored between 180 and 219 in experimental groups and between 140 and 179 in control group in Post-test.*

(iv) The mean value (204.17, 186.34 and 172.26) shows that the students in experimental group I achieve 73%; experimental group II achieve 67% and control group achieve 61% of Valuing Competencies in post-test which are higher than pre-test score (57%) in all the three groups. *It revealed that the students in experimental group I, experimental group II and control group achieve higher scores in post-test than pre-test.* Further, the value of mean (204.17, 186.34 and 172.26), median (208, 189 and 174) and mode (211, 189 and 167) *revealed that the three groups differ in their Valuing Competencies after experiment in which experimental groups scored higher than control groups.*
5.3.2 Effectiveness of Value Analysis Model over Existing Method in Developing Valuing Competencies of standard eight students

5.3.2.1 Analysis of data with respect to Valuing Competencies of standard eight students in Experimental group I and Control group for the total sample

The analysis of data with respect to means of Pre-test, Post-test, Gain and Adjusted Post-test scores of Valuing Competencies in experimental group I and control group for the total sample revealed the following findings.

(i) When compared the pre-test, post-test and gain scores of Valuing Competencies between experimental group I and control group, it was found that the two groups did not differ significantly (t = 0.29) in pre-test scores; experimental group I and control group differ significantly at 0.01 level (t = 13.97 and t = 48.11) in their post-test and gain scores. Further, the mean scores of two groups in post-test scores (204.18 and 172.26) and gain scores (43.41 and 10.15) revealed that experimental group I scored higher than the control group in Valuing Competencies.

(ii) Experimental group I and Control group were further compared using ANCOVA. Since the obtained Fyx = 1450.24 is significant at 0.01 value, it suggested that the final mean scores of students of the experimental group I and control group differ significantly after they were adjusted for the difference in the pre-test scores.

(iii) The difference in the Adjusted Mean Scores of experimental group I and control group is significant at 0.01 level (t = 38.06) Further the adjusted mean scores (204.5 and 172) of two groups revealed that experimental group I scored higher than the control group in Valuing Competencies.

From the above findings, it can be concluded that Value Analysis Model is effective in developing Valuing Competencies of standard eight students for the total sample.

5.3.2.2 Analysis of data with respect to Valuing Competencies of standard eight students in Experimental group I and Control group for the sub-sample – Boys

The analysis of data with respect to means of Pre-test, Post-test, Gain and Adjusted Post-test scores of Valuing Competencies in experimental group I and control
group for the sub-sample of boys revealed the following findings.

(i) When compared the pre-test, post-test and gain scores of Valuing Competencies between boys of experimental group I and control group, it was found that the two groups did not differ significantly (t = 1.56) in pre-test scores; experimental group I and control group differ significantly at 0.01 level (t=12.04 and t=52.08) in their post-test and gain scores. Further, the mean scores of two groups in post-test scores (202.29 and 163.88) and gain scores (45.12 and 10.22) revealed that boys in experimental group I scored higher than the control group in Valuing Competencies.

(ii) Experimental group I and Control group were further compared using ANCOVA. Since the obtained Fyx=547.37 is significant at 0.01 value, it suggested that the final mean scores of boys in the experimental group I and control group differ significantly after they were adjusted for the difference in the pre-test scores.

(iii) The difference in the Adjusted Mean Scores of experimental group I and Control group is significant at 0.01 level (t=23.61) Further the adjusted mean scores (200 and 166) of two groups revealed that boys in the experimental group I scored higher than the control group in Valuing Competencies.

From the above findings, it can be concluded that Value Analysis Model is effective in developing Valuing Competencies of standard eight students for the sub-sample of boys.

5.3.2.3 Analysis of data with respect to Valuing Competencies of standard eight students in Experimental group I and Control group for the sub-sample – Girls

The analysis of data with respect to means of Pre-test, Post-test, Gain and Adjusted Post-test scores of Valuing Competencies in experimental group I and control group for the sub-sample of girls revealed the following findings.

(i) When compared the pre-test, post-test and gain scores of Valuing Competencies between girls of experimental group I and control group, it was found that the two groups did not differ significantly (t =1.85) in pre-test scores; experimental group I and control group differ significantly at 0.01 level (t=8.44 and t=27.33) in their post-test and gain scores. Further, the mean scores
of two groups in post-test scores (205.96 and 180.86) and gain scores (41.85 and 10.05) revealed that girls in experimental group I scored higher than the control group in Valuing Competencies.

(ii) Experimental group I and Control group were further compared using ANCOVA. Since the obtained $F_{yx}=1225.83$ is significant at 0.01 value, it suggested that the final mean scores of girls in the experimental group I and control group differ significantly after they were adjusted for the difference in the pre-test scores.

(iii) The difference in the Adjusted Mean Scores of experimental group I and control group is significant at 0.01 level ($t=35.19$) Further the adjusted mean scores (208.5 and 178.2) of two groups revealed that girls in experimental group I scored higher than the control group in Valuing Competencies.

From the above findings, it can be concluded that Value Analysis Model is effective in developing Valuing Competencies of standard eight students for the sub-sample of girls.

5.3.2.4 Analysis of data with respect to Valuing Competencies of standard eight students in Experimental group I and Control group for the sub-sample – Government school students

The analysis of data with respect to means of Pre-test, Post-test, Gain and Adjusted Post-test scores of Valuing Competencies in experimental group I and control group for the sub-sample of government school students revealed the following findings.

(i) When compared the pre-test, post-test and gain scores of Valuing Competencies between government school students of experimental group I and control group, it was found that the two groups did not differ significantly ($t=0.13$) in pre-test scores; experimental group I and control group differ significantly at 0.01 level ($t=8.05$ and $t=45.28$) in their post-test and gain scores. Further, the mean scores of two groups in post-test scores (203.51 and 172.96) and gain scores (43.43 and 10.37) revealed that government school students in experimental group I scored higher than the control group in Valuing Competencies.
(ii) Experimental group I and Control group were further compared using ANCOVA. Since the obtained $F_{yx}=217.48$ is significant at 0.01 value, it suggested that the final mean scores of government school students in the experimental group I and control group differ significantly after they were adjusted for the difference in the pre-test scores.

(iii) The difference in the Adjusted Mean Scores of experimental group I and control group is significant at 0.01 level ($t=14.76$) Further the adjusted mean scores (203.7 and 172.7) of two groups revealed that government school students in experimental group I scored higher than the control group in Valuing Competencies.

From the above findings, it can be concluded that Value Analysis Model is effective in developing Valuing Competencies of standard eight students for the sub-sample of government school students.

5.3.2.5 Analysis of data with respect to Valuing Competencies of standard eight students in Experimental group I and Control group for the sub-sample – Aided school students

The analysis of data with respect to means of Pre-test, Post-test, Gain and Adjusted Post-test scores of Valuing Competencies in experimental group I and control group for the sub-sample of aided school students revealed the following findings.

(i) When compared the pre-test, post-test and gain scores of Valuing Competencies between aided school students of experimental group I and control group, it was found that the two groups did not differ significantly ($t=1.61$) in pre-test scores; experimental group I and control group differ significantly at 0.01 level ($t=8.28$ and $t=40.62$) in their post-test and gain scores. Further, the mean scores of two groups in post-test scores (202.44 and 174.26) and gain scores (44.44 and 10.42) revealed that aided school students in experimental group I scored higher than the control group in Valuing Competencies.

(ii) Experimental group I and Control group were further compared using ANCOVA. Since the obtained $F_{yx}=1856.47$ is significant at 0.01 value, it
suggested that the final mean scores of aided school students in the experimental group I and control group differ significantly after they were adjusted for the difference in the pre-test scores.

(iii) The difference in the Adjusted Mean Scores of experimental group I and control group is significant at 0.01 level (t=43.63) Further the adjusted mean scores (205.1 and 171.5) of two groups revealed that aided school students in experimental group I scored higher than the control group in Valuing Competencies.

From the above findings, it can be concluded that Value Analysis Model is effective in developing Valuing Competencies of standard eight students for the sub-sample of aided school students.

5.3.2.6 Analysis of data with respect to Valuing Competencies of standard eight students in Experimental group I and Control group for the sub-sample – Private school students

The analysis of data with respect to means of Pre-test, Post-test, Gain and Adjusted Post-test scores of Valuing Competencies in experimental group I and control group for the sub-sample of private school students revealed the following findings.

(i) When compared the pre-test, post-test and gain scores of Valuing Competencies between private school students of experimental group I and control group, it was found that the two groups did not differ significantly (t=0.76) in pre-test scores; experimental group I and control group differ significantly at 0.01 level (t=8.12 and t=18.44) in their post-test and gain scores. Further, the mean scores of two groups in post-test scores (206.61 and 169.82) and gain scores (42.33 and 10.16) revealed that private school students in experimental group I scored higher than the control group in Valuing Competencies.

(ii) Experimental group I and Control group were further compared using ANCOVA. Since the obtained Fyx=686.11 is significant at 0.01 value, it suggested that the final mean scores of private school students in the experimental group I and control group differ significantly after they were adjusted for the difference in the pre-test scores.
(iii) The difference in the Adjusted Mean Scores of experimental group I and control group is significant at 0.01 level (t=26.38) Further the adjusted mean scores (204.9 and 171.4) of two groups revealed that private school students in experimental group I scored higher than the control group in Valuing Competencies.

From the above findings, it can be concluded that Value Analysis Model is effective in developing Valuing Competencies of standard eight students for the sub-sample of private school students.

5.3.3 Effectiveness of Value Discussion Model over Existing Method in Developing Valuing Competencies of standard eight students

5.3.3.1 Analysis of data with respect to Valuing Competencies of standard eight students in Experimental group II and Control group for the total sample

The analysis of data with respect to means of Pre-test, Post-test, Gain and Adjusted Post-test scores of Valuing Competencies in experimental group II and control group for the total sample revealed the following findings.

(i) When compared the pre-test, post-test and gain scores of Valuing Competencies between experimental group II and control group, it was found that the two groups did not differ significantly (t =0.098) in pre-test scores; experimental group II and control group differ significantly at 0.01 level (t=5.59 and t=59.92) in their post-test and gain scores. Further, the mean scores of two groups in post-test scores (186.34 and 172.26) and gain scores (25.75 and 10.15) revealed that experimental group II scored higher than the control group in Valuing Competencies.

(ii) Experimental group II and Control group were further compared using ANCOVA. Since the obtained Fyx=395.11 is significant at 0.01 value, it suggested that the final mean scores of students of the experimental group II and control group differ significantly after they were adjusted for the difference in the pre-test scores.

(iii) The difference in the Adjusted Mean Scores of experimental group II and control group is significant at 0.01 level (t=20) Further the adjusted mean scores
(186.5 and 172.1) of two groups revealed that experimental group II scored higher than the control group in Valuing Competencies.

From the above findings, it can be concluded that Value Discussion Model is effective in developing Valuing Competencies of standard eight students for the total sample.

5.3.3.2 Analysis of data with respect to Valuing Competencies of standard eight students in Experimental group II and Control group for the sub-sample – Boys

The analysis of data with respect to means of Pre-test, Post-test, Gain and Adjusted Post-test scores of Valuing Competencies in experimental group II and control group for the sub-sample of boys revealed the following findings.

(i) When compared the pre-test, post-test and gain scores of Valuing Competencies between boys of experimental group II and control group, it was found that the two groups did not differ significantly (t =1.47) in pre-test scores; experimental group II and control group differ significantly at 0.01 level (t=5.97 and t=46.21) in their post-test and gain scores. Further, the mean scores of two groups in post-test scores (182.61 and 163.88) and gain scores (26 and 10.22) revealed that boys in experimental group II scored higher than the control group in Valuing Competencies.

(ii) Experimental group II and Control group were further compared using ANCOVA. Since the obtained Fyx=118.09 is significant at 0.01 value, it suggested that the final mean scores of boys in the experimental group II and control group differ significantly after they were adjusted for the difference in the pre-test scores.

(iii) The difference in the Adjusted Mean Scores of experimental group II and control group is significant at 0.01 level (t=10.90) Further the adjusted mean scores (180.5 and 166) of two groups revealed that boys in the experimental group II scored better than the control group in Valuing Competencies.

From the above findings, it can be concluded that Value Discussion Model is effective in developing Valuing Competencies of standard eight students for the sub-sample of boys.
5.3.3.3 Analysis of data with respect to Valuing Competencies of eighth standard students in Experimental group II and Control group for the sub-sample – Girls

The analysis of data with respect to means of Pre-test, Post-test, Gain and Adjusted Post-test scores of Valuing Competencies in experimental group II and control group for the Sub-sample of girls revealed the following findings.

(i) When compared the pre-test, post-test and gain scores of Valuing Competencies between girls of experimental group II and control group, it was found that the two groups did not differ significantly (t=1.39) in pre-test scores; experimental group II and control group differ significantly at 0.01 level (t=2.79 and t=39.21) in their post-test and gain scores. Further, the mean scores of two groups in post-test scores (190.08 and 180.86) and gain scores (25.51 and 10.05) revealed that girls in experimental group II scored higher than the control group in Valuing Competencies.

(ii) Experimental group II and Control group were further compared using ANCOVA. Since the obtained Fyx=683.84 is significant at 0.01 value, it suggested that the final mean scores of girls in the experimental group II and control group differ significantly after they were adjusted for the difference in the pre-test scores.

(iii) The difference in the Adjusted Mean Scores of experimental group II and control group is significant at 0.01 level (t=25.84) Further the adjusted mean scores (192.3 and 178.6) of two groups revealed that girls in experimental group II scored higher than the control group in Valuing Competencies.

From the above findings, it can be concluded that Value Discussion Model is effective in developing Valuing Competencies of standard eight students for the sub-sample of girls.

5.3.3.4 Analysis of data with respect to Valuing Competencies of eighth standard students in Experimental group II and Control group for the Sub-sample – Government school students

The analysis of data with respect to means of Pre-test, Post-test, Gain and Adjusted Post-test scores of Valuing Competencies in experimental group II and control group for
the sub-sample of government school students revealed the following findings.

(i) When compared the pre-test, post-test and gain scores of Valuing Competencies between government school students of experimental group II and control group, it was found that the two groups did not differ significantly ($t = 0.08$) in pre-test scores; experimental group II and control group differ significantly at 0.05 level ($t = 2.28$); and differ significantly at 0.01 level ($t = 41.92$) in their post-test and gain scores. Further, the mean scores of two groups in post-test scores (183.56 and 172.96) and gain scores (25.04 and 10.37) revealed that government school students in experimental group II scored higher than the control group in Valuing Competencies.

(ii) Experimental group II and Control group were further compared using ANCOVA. Since the obtained $F_{yx} = 26.63$ is significant at 0.01 value, it suggested that the final mean scores of government school students in the experimental group II and control group differ significantly after they were adjusted for the difference in the pre-test scores.

(iii) The difference in the Adjusted Mean Scores of experimental group II and control group is significant at 0.01 level ($t = 5.14$) Further the adjusted mean scores (183.7 and 172.8) of two groups revealed that government school students in experimental group II scored higher than the control group in Valuing Competencies.

From the above findings, it can be concluded that Value Discussion Model is effective in developing Valuing Competencies of standard eight students for the sub-sample of government school students.

5.3.3.5 Analysis of data with respect to Valuing Competencies of standard eight students in Experimental group II and Control group for the sub-sample Aided school students

The analysis of data with respect to means of Pre-test, Post-test, Gain and Adjusted Post-test scores of Valuing Competencies in experimental group II and control group for the sub-sample of aided school students revealed the following findings.
(i) When compared the pre-test, post-test and gain scores of Valuing Competencies between aided school students of experimental group II and control group, it was found that the two groups did not differ significantly (t =0.71) in pre-test scores; experimental group II and control group differ significantly at 0.01 level (t=3.87) and (t=29.96) in their post-test and gain scores. Further, the mean scores of two groups in post-test scores (187.08 and 174.26) and gain scores (25.83 and 10.42) revealed that aided school students in experimental group II scored higher than the control group in Valuing Competencies.

(ii) Experimental group II and Control group were further compared using ANCOVA. Since the obtained Fyx=1245.56 is significant at 0.01 value, it suggested that the final mean scores of aided school students in the experimental group II and control group differ significantly after they were adjusted for the difference in the pre-test scores.

(iii) The difference in the Adjusted Mean Scores of experimental group II and control group is significant at 0.01 level (t=35.11) Further the adjusted mean scores (188.2 and 173.1) of two groups revealed that aided school students in experimental group II scored higher than the control group in Valuing Competencies.

From the above findings, it can be concluded that Value Discussion Model is effective in developing Valuing Competencies of standard eight students for the sub-sample of aided school students.

5.3.3.6 Analysis of data with respect to Valuing Competencies of standard eight students in Experimental group II and Control group for the sub-sample Private school students

The analysis of data with respect to means of Pre-test, Post-test, Gain and Adjusted Post-test scores of Valuing Competencies in experimental group II and control group for the sub-sample of private school students revealed the following findings.

(i) When compared the pre-test, post-test and gain scores of Valuing Competencies between private school students of experimental group II and
control group, it was found that the two groups did not differ significantly \( t=0.38 \) in pre-test scores; experimental group II and control group differ significantly at 0.01 level \( t=4.30 \) and \( t=42.18 \) in their post-test and gain scores. Further, the mean scores of two groups in post-test scores \( (188.21 \) and \( 169.82 \)) and gain scores \( (26.42 \) and \( 10.16 \)) revealed that private school students in experimental group II scored higher than the control group in Valuing Competencies.

(ii) Experimental group II and Control group were further compared using ANCOVA. Since the obtained \( F_{yx}=2369.49 \) is significant at 0.01 value, it suggested that the final mean scores of private school students in the experimental group II and control group differ significantly after they were adjusted for the difference in the pre-test scores.

(iii) The difference in the Adjusted Mean Scores of experimental group II and control group is significant at 0.01 level \( t=49.41 \). Further the adjusted mean scores \( (187.4 \) and \( 170.6 \)) of two groups revealed that private school students in experimental group II scored higher than the control group in Valuing Competencies.

From the above findings, it can be concluded that Value Discussion Model is effective in developing Valuing Competencies of standard eight students for the sub-sample of private school students.

5.3.4 Comparative Effectiveness of Value Analysis Model and Value Discussion Model in developing Valuing Competencies of standard eight students

5.3.4.1 Analysis of data with respect to Valuing Competencies of standard eight students in Experimental group I and Experimental group II for the total sample

The analysis of data with respect to mean post-test scores of Valuing Competencies in experimental group I and experimental group II for the total sample revealed the following findings.

The difference in the Mean Post-test Scores of experimental group I and experimental group II is significant at 0.01 level \( t=9.59 \). It shows that experimental group I and experimental group II differ significantly in the mean post-test scores of Valuing Competencies. Further the mean post-test scores \( (204.18 \) and \( 186.34 \)) of experimental groups I and II revealed that experimental group I scored higher than the
experimental group II in Valuing Competencies. Therefore, it can be concluded that Value Analysis Model is comparatively more effective than Value Discussion Model in developing Valuing Competencies of standard eight students for the total sample.

**5.3.4.2 Analysis of data with respect to Valuing Competencies of standard eight students in Experimental group I and Experimental group II for the sub-sample of boys**

The analysis of data with respect to mean post-test scores of Valuing Competencies in experimental group I and experimental group II for the sub-sample of boys revealed the following findings.

The difference in the Mean Post-test Scores of boys in experimental group I and experimental group II is significant at 0.01 level (t=8.17). It shows that boys under experimental group I and experimental group II differ significantly in the mean post-test scores of Valuing Competencies. Further the mean post-test scores (202.29 and 182.61) of experimental groups I and II revealed that boys under experimental group I scored higher than the experimental group II in Valuing Competencies. Therefore, it can be concluded that Value Analysis Model is comparatively more effective than Value Discussion Model in developing Valuing Competencies of standard eight students for the sub-sample of boys.

**5.3.4.3 Analysis of data with respect to Valuing Competencies of standard eight students in Experimental group I and Experimental group II for the sub-sample of girls**

The analysis of data with respect to mean post-test scores of Valuing Competencies in experimental group I and experimental group II for the sub-sample of girls revealed the following findings.

The difference in the Mean Post-test Scores of girls in experimental group I and experimental group II is significant at 0.01 level (t=5.73). It shows that girls under experimental group I and experimental group II differ significantly in the mean post-test scores of Valuing Competencies. Further the mean post-test scores (205.96 and 190.08) of experimental groups I and II revealed that girls under experimental group I scored higher than the experimental group II in Valuing Competencies. Therefore, it can be concluded that Value Analysis Model is comparatively more effective than Value Discussion Model in developing Valuing Competencies of standard eight students for the sub-sample of girls.
5.3.4.4 Analysis of data with respect to Valuing Competencies of standard eight students in Experimental group I and Experimental group II for the sub-sample of government school students

The analysis of data with respect to mean post-test scores of Valuing Competencies in experimental group I and experimental group II for the sub-sample of government school students revealed the following findings.

The difference in the Mean Post-test Scores of government school students in experimental group I and experimental group II is significant at 0.01 level (t=5.53). It shows that government school students under experimental group I and experimental group II differ significantly in the mean post-test scores of Valuing Competencies. Further the mean post-test scores (203.51 and 183.56) of experimental groups I and II revealed that government school students under experimental group I scored higher than the experimental group II in Valuing Competencies. Therefore, it can be concluded that Value Analysis Model is comparatively more effective than Value Discussion Model in developing Valuing Competencies of standard eight students for the sub-sample of government school students.

5.3.4.5 Analysis of data with respect to Valuing Competencies of standard eight students in Experimental group I and Experimental group II for the sub-sample of aided school students

The analysis of data with respect to mean post-test scores of Valuing Competencies in experimental group I and experimental group II for the sub-sample of aided school students revealed the following findings.

The difference in the Mean Post-test Scores of aided school students in experimental group I and experimental group II is significant at 0.01 level (t=5.75). It shows that aided school students under experimental group I and experimental group II differ significantly in the mean post-test scores of Valuing Competencies. Further the mean post-test scores (202.44 and 187.08) of experimental groups I and II revealed that aided school students under experimental group I scored higher than the experimental group II in Valuing Competencies. Therefore, it can be concluded that Value Analysis Model is comparatively more effective than Value Discussion Model in developing Valuing Competencies of standard eight students for the sub-sample of aided school students.
5.3.4.6 Analysis of data with respect to Valuing Competencies of standard eight students in Experimental group I and Experimental group II for the sub-sample of private school students

The analysis of data with respect to mean post-test scores of Valuing Competencies in experimental group I and experimental group II for the sub-sample of private school students revealed the following findings.

The difference in the Mean Post-test Scores of private school students in experimental group I and experimental group II is significant at 0.01 level (t=5.58). It shows that private school students under experimental group I and experimental group II differ significantly in the mean post-test scores of Valuing Competencies. Further the mean post-test scores (206.61 and 188.21) of experimental groups I and II revealed that private school students under experimental group I scored higher than the experimental group II in Valuing Competencies. Therefore, it can be concluded Value Analysis Model is comparatively more effective than Value Discussion Model in developing Valuing Competencies of standard eight students for the sub-sample of private school students.

5.4 Major Conclusions of the Study

1. Value Analysis Model is effective in developing Valuing Competencies of standard eight students over existing method for the total sample.

2. Value Analysis Model is effective in developing Valuing Competencies of standard eight students over existing method for the sub-samples based on (a) Gender and (b) Type of Management of School.

3. Value Discussion Model is effective in developing Valuing Competencies of standard eight students over existing method for the total sample.

4. Value Discussion Model is effective in developing Valuing Competencies of standard eight students over existing method for the sub-samples based on (a) Gender and (b) Type of Management of School.

5. Value Analysis Model is comparatively more effective than Value Discussion Model in developing Valuing Competencies of standard eight students for the total sample.
6. Value Analysis Model is comparatively more effective than Value Discussion Model in developing Valuing Competencies of standard eight students for the sub-samples based on (a) Gender and (b) Type of Management of School.

5.5 Tenability of the Hypotheses

Each of the hypotheses that were formulated for the study were tested and their tenability are presented below.

Hypothesis 1

There is a significant difference between experimental group I (Value Analysis Model) and control group in the Valuing Competencies for the total sample.

The findings (5.3.2.1) of the study revealed that there was a significant difference between experimental group I and control group in the mean post-test, gain and adjusted post-test scores of Valuing Competencies. It also revealed that the mean post-test, gain and adjusted post-test scores of Valuing Competencies of the Experimental group I was significantly greater than that of the Control group for the total sample.

Thus the Hypothesis 1 was fully substantiated.

Hypothesis 2

There is a significant difference between experimental group I (Value Analysis Model) and control group in the Valuing Competencies for the sub-samples based on (a) Gender and (b) Type of Management of School.

The findings (5.3.2.2, 5.3.2.3, 5.3.2.4, 5.3.2.5, and 5.3.2.6) of the study revealed that there was a significant difference between experimental group I and control group in the mean post-test, gain and adjusted post-test scores of Valuing Competencies. It also revealed that the mean post-test, gain and adjusted post-test scores of Valuing Competencies of the Experimental group I was significantly greater than that of the Control group for the sub-samples based on (a) Gender and (b) Type of Management of School.

Thus the Hypothesis 2 was fully substantiated.
Hypothesis 3

There is a significant difference between experimental group II (Value Discussion Model) and control group in the Valuing Competencies for the total sample.

The findings (5.3.3.1) of the study revealed that there was a significant difference between experimental group II and control group in the mean post-test, gain and adjusted post-test scores of Valuing Competencies. It also revealed that the mean post-test, gain and adjusted post-test scores of Valuing Competencies of the Experimental group II was significantly greater than that of the Control group for the total sample.

Thus the Hypothesis 3 was fully substantiated.

Hypothesis 4

There is a significant difference between experimental group II (Value Discussion Model) and control group in the Valuing Competencies for the sub-samples based on (a) Gender and (b) Type of Management of School.

The findings (5.3.3.2, 5.3.3.3, 5.3.3.4, 5.3.3.5, and 5.3.3.6) of the study revealed that there was a significant difference between experimental group II and control group in the mean post-test, gain and adjusted post-test scores of Valuing Competencies. It also revealed that the mean post-test, gain and adjusted post-test scores of Valuing Competencies of the Experimental group II was significantly greater than that of the Control group for the sub-samples based on (a) Gender and (b) Type of Management of School.

Thus the Hypothesis 4 was fully substantiated.

Hypothesis 5

There is a significant difference between experimental group I (Value Analysis Model) and experimental group II (Value Discussion Model) in the Valuing Competencies for the total sample.

The findings (5.3.4.1) of the study revealed that there was a significant difference between experimental group I and experimental group II in the mean post-test scores of Valuing Competencies. It also revealed that the mean post-test scores of Valuing Competencies of the Experimental group I was significantly greater than that of the Experimental group II for the total sample.

Thus the Hypothesis 5 was fully substantiated.
Hypothesis 6

There is a significant difference between experimental group I (Value Analysis Model) and experimental group II (Value Discussion Model) in the Valuing Competencies for the sub-samples based on (a) Gender and (b) Type of Management of School.

The findings (5.3.4.2, 5.3.4.3, 5.3.4.4, 5.3.4.5, and 5.3.4.6) of the study revealed that there was a significant difference between experimental group I and experimental group II in the mean post-test scores of Valuing Competencies. It also revealed that the mean post-test scores of Valuing Competencies of the Experimental group I was significantly greater than that of the Experimental group II for the sub-samples based on (a) Gender and (b) Type of Management of School.

Thus the Hypothesis 6 was fully substantiated.

5.6 Educational Implications of the Study

In the present study, Instructional Material based on Value Analysis Model and Value Discussion Model is used for instructing the experimental group I and experimental group II and existing method for control group. The findings of the study throw light on the fact that teaching through instructional material based on Value Analysis Model and Value Discussion Model is more effective in developing Valuing Competencies of standard eight students than the existing method. When the two models are compared over the existing method, it was found that Value Analysis Model is comparatively more effective than Value Discussion Model. This effectiveness is also continued to be reflected for the sub-samples based on gender and type of management of school. The findings of the study have profound implications for teachers, students, curriculum planners, research agencies and research scholars. Given below are some of the educational implications of the study.

- As the study has established the effectiveness of the Value Analysis Model and Value Discussion Model, the teachers and trainers can be given orientation and training on the development of instructional materials to teach at different levels. The NCERT, SCERT and DIETs should take up the responsibility of developing instructional material for solving value conflicts of students.
➢ The training on Value Analysis Model and Value Discussion Model will solve the value conflicts of students at all level. It will enhance Valuing Competencies of the future generation through modelling and transfer.

➢ A monitoring committee consisting of educational experts, school teachers, and experts on value education, philosophers, psychologists, counsellors and administrators should be constituted at the state and national level for developing a instructional style including Value Analysis and Value Discussion in the curriculum for solving the value conflicts through scientific way.

➢ Teacher training institutions can incorporate the components of Valuing Competencies and the techniques of Value Analysis and Value Discussion in their training curriculum and thereby, the future teachers will get adequate knowledge and skills on Values and Value education.

➢ A resource team consisting of teacher educators should be evolved to handle classes on Value Analysis Model and Value Discussion Model so that they can help others to improve the Valuing Competencies at the level of society.

➢ The instructional materials and the Valuing Competencies Scale evolved out the study can be used by teacher for taking classes on Value Analysis Model and Value Discussion Model for developing Valuing Competencies and for finding the level of Valuing Competencies.

➢ Tool on Valuing Competencies can be further used for related studies. It can be widely used in other parts of the state to find out the level of Valuing Competencies of students.

➢ The study insists the importance of teachers, parents and students to work together towards an integrated approach to Value Education. Teachers and students will consciously link values with educational programmes, with home, community, media and other agencies and institutions.

The study reveals that it is necessary for the teachers to be aware of the different value conflicts and dilemmas the students facing in their daily life from different angles. The teachers should be role models before the students in solving value conflicts.
5.7 Delimitations of the Study

The following are the delimitations of the study:

- The study is limited to one educational district of Kerala and was confined, only to the standard eight students.
- The comprehensive instructional materials was developed based only on Value Analysis Model and Value Discussion Model.
- The experiment was conducted in three schools – one government, one aided and one private school for a period of six months each.
- Classroom intact group was selected for experimenting, as the one to one equalized group was not possible practically.

5.8 Suggestions for Further Research

The findings of this study suggest certain areas for further research.

- A study can be done to find out the problems behind implementing the instructional material based on Value Analysis Model and Value Discussion Model.
- Studies can be done to find out the different value conflicts in the life of students from different areas.
- The present study can be extended to large sample including illiterates, neo-literates, labourers, women, professionals, students at different levels and teachers.
- Studies can be conducted to identify the Valuing Competencies of students at different levels in different areas.
- The study was restricted to some selected value conflicting situations from different area. Further studies can concentrate on more value conflicting situations.
- Instructional materials based on Value Analysis Model and Value Discussion Model was developed only for standard eight students. So, the further studies can be extended for designing instructional materials for different level of students.
A study can be conducted to find out the comparative effects of other different strategies and models of Value education.

Valuing Competencies Scale includes only four areas from daily life. Studies can be conducted with a tool comprised of different areas of life.

The study was confined to a sample of English medium students only. The study can be replicated to Malayalam medium students also.

An evaluation performa may be given to the teachers and students after implementing the instructional materials based on Value Analysis Model and Value Discussion Model.

Similar studies can be conducted among primary, secondary and college level students including teacher trainees.

Studies can be made to identifying various other programmes to develop the Valuing Competencies of students at all levels.

5.9 Conclusion

Valuing Competencies are the value clarifying abilities, which we use, in Valuing. Valuing is a clarifying process, which is gradual and steady. It is a process wherein an individual prizes and esteems a principle dearly. It influences our emotions, feelings, behaviour and activities and gives meaning to our life. No one is born with a set of values related to events, situations, practices, individuals or institutions. These are shaped, nurtured and developed at home and educational institutions. Values and process of Valuing go hand in hand. One supports the other. Process of valuing is determined by one’s internal make up of the mind and state of body and the external factors which occur in natural setting. Process of valuing does not aim to instill any set of values. Rather, it helps students to apply to already formed beliefs and behaviour patterns and to those still emerging. The end product of the process is culmination of a value or new form of value.

In recent times, a variety of value clarification strategies to help students build the seven valuing processes into their lives have been developed. Studies based on Valuing Competencies with respect to experimental studies revealed that most of the
models of teaching Value Education were effective in developing Valuing Competencies. Value Analysis Model, Value Discussion Model, Value Clarification Model and Jurisprudential Inquiry Model were found to be effective in developing Valuing Competencies of Secondary School Students and B.Ed Student Teachers.

The present study persuasively and conclusively revealed that, the instructional materials on Value Analysis Model and Value Discussion Model were effective in developing Valuing Competencies among standard eight students. It helps students to face the value conflicting situations and to handle the value dilemmas in a right manner. The Valuing Competencies are different for different individuals. In this case, the home and educational organizations should concentrate more on the development of Valuing Competencies of the students especially for secondary school students.