**EFFECT OF SELF CONCEPT ON TEACHER EFFICACY OF SECONDARY SCHOOL TEACHERS OF KERALA**

###### ABIDALI. E

### **Dissertation**

**Submitted to the University of Calicut**

**in partial fulfillment of the**

**requirements for the Degree of**

# MASTER OF EDUCATION

#### FAROOK TRAINING COLLEGE

UNIVERSITY OF CALICUT

KERALA

**2008**

ACKNOWLEDGEMENT

 The investigator wishes to express his deep indebtedness to **Dr. Mohamedunni Alias Musthafa**, Lecturer in Education, Farook Training College, Calicut who has supervised his research work. His constant encouragement, generous help and valuable suggestions combined with his expert criticism and deep knowledge of the subject helped the investigator in the successful completion of this work.

 The investigator expresses his sincere thanks to **Prof.** **P. Faziluddin**, Principal of Farook Training College, Calicut for providing the necessary facilities for conducting this study.

 The investigator is very thankful to **All the Members of Teaching , Non Teaching Staff and Librarian**, Farook Training College, Calicut who helped the investigator in every possible way.

 The investigator expresses his thanks to **Dr. Kamala S. Pillai**, Former Head of Department of Education, University of Calicut for kindly permitting to use the tool developed by her.

 The investigator would like to express his gratitude to the Heads and Teachers of various secondary schools of Kerala and also to all those who helped directly or indirectly for their wholehearted co-operation and encouragement.

 Finally the investigator express his deep gratitude to his family for their constant encouragement, patience and help in doing this study.

Farook Training College **ABIDALI. E**

##  .10.2008

## DECLARATION

I, **ABIDALI. E,** do hereby declare that this dissertation, **“EFFECT OF SELF CONCEPT ON TEACHER EFFICACY OF SECONDARY SCHOOL TEACHERS OF KERALA”**, has not been submitted by me for the award of any Degree, Diploma, Title or Recognition before.

Farook Training College **ABIDALI. E**

 .10.2008

Dr. Mohamedunni Alias Musthafa

Lecturer,

Farook Training College,

Calicut.

## Certificate

I, **Dr. MOHAMEDUNNI ALIAS MUSTHAFA**, do hereby certify that this dissertation, **“EFFECT OF SELF CONCEPT ON TEACHER EFFICACY OF SECONDARY SCHOOL TEACHERS OF KERALA”**, is a record of bonafide study and research carried out by **Mr. ABIDALI. E,** under my supervision and guidance. The report has not been submitted by him for the award of a Degree, Diploma, Title or Recognition before.

Farook Training College **Dr. Mohamedunni Alias Musthafa**

 .10.2008 (Supervising teacher)

Contents

 LIST OF TABLES

 LIST OF APPENDICES

|  |  |
| --- | --- |
| Chapter  | **Page No.** |
| I | INTRODUCTION  | 1-12 |
| II | REVIEW OF RELATED LITERATURE  | 13-27 |
| III | METHODOLOGY  | 28-44 |
| IV | ANALYSIS  | 45-82 |
| V | SUMMARY  | 83-92 |
|  | BIBLIOGRAPHY  | 93-96 |
|  | APPENDICES  |  |

List Of Tables

| **Table No.** | **Title** | **Page** |
| --- | --- | --- |
| 1 | Item Analysis of Teacher Efficacy Scale | 34 |
| 2 | Statistical Components of the Two Select Variable for the Total Sample  | 46 |
| 3 | Statistical Consonants of the Two Select Variables for Male Subsample  | 47 |
| 4 | Statistical Consonants of the Two Select Variables for Female Subsample  | 48 |
| 5 | Statistical Consonants of the Two Selected Variables for Urban Subsample  | 49 |
| 6 | Statistical Consonants of the Two Selected Variables for Rural Subsample  | 50 |
| 7 | Statistical Consonants of the Two Selected Variables for Government Subsample  | 51 |
| 8 | Statistical Consonants of the Two Selected Variables for Aided Subsample  | 52 |
| 9 | Statistical Consonants of the Two Selected Variables for Unaided Subsample  | 53 |
| 10 | Statistical Consonants of the Two Selected Variables for the Experience Below 5 Years Subsample  | 54 |
| 11 | Statistical Consonants of the Two Selected Variables for the Teaching Experience between 5 and 10 years Subsample  | 55 |
| 12 | Statistical Consonants of the Two Selected Variables for the Teaching Experience Above 10 years Subsample  | 57 |
| 13 | Details of Number of Cases Lies in the Three Different Self Concept Group for Total and Relevant Subsamples | 60 |
| 14 | Data and Results of One-Way ANOVA for Teacher Efficacy by Self-Concept for Total Sample | 62 |
| 15 | Data and Results of t-test Between the Mean Scores of Teacher Efficacy Among Three Self Concept Group for Total Sample | 63 |
| 16 | Data and Results of One-Way ANOVA for Teacher Efficacy by Self Concept for Male Sample  | 65 |
| 17 | Data and Results of One-Way ANOVA for Teacher Efficacy by Self Concept for Female Sample  | 66 |
| 18 | Data and Results of t-test Between the Mean Scores of Teacher Efficacy Among Three Self Concept Group for Female Sample | 67 |
| 19 | Data and Results of One-way ANOVA for Teacher Efficacy by Self Concept for Urban Sample  | 68 |
| 20 | Data and Results of One-way ANOVA for Teacher Efficacy by Self Concept for Rural Sample | 69 |
| 21 | Data and Results of t-test Between the Mean Scores of Teacher Efficacy Among Three Self Concept Group for Rural Sample | 70 |
| 22 | Data and Results of One-Way ANOVA for Teacher Efficacy by Self Concept for Government Sample  | 72 |
| 23 | Data and Results of t-test Between the Mean Scores of Teacher Efficacy Among Three Self Concept Group for Government Sample | 73 |
| 24 | Data and Results of One-Way ANOVA for Teacher Efficacy by Self Concept for Aided Sample | 74 |
| 25 | Data and Results of t-test Between the Mean Scores of Teacher Efficacy Among Three Self Concept Group for Aided Sample | 76 |
| 26 | Data and Results of One-Way ANOVA for Teacher Efficacy by Self Concept for Unaided Sample  | 77 |
| 27 | Data and Results of One-Way ANOVA for Teacher Efficacy by Self Concept for the Below 5 years Experienced Teachers Sample  | 78 |
| 28 | Data and Results of One-Way ANOVA for Teacher Efficacy by Self Concept for Between 5 and 10 years Experienced Teachers Sample | 79 |
| 29 | Data and Results of One-Way ANOVA for Teachers Efficacy by Self Concept for the Above 10 Years Experienced Teachers Sample  | 80 |
| 30 | Data and Results of t-test Between the Mean Scores of Teacher Efficacy Among Three Self Concept Group for Above 10 years Experienced Teachers Sample | 81 |

List Of Appendices

|  |  |
| --- | --- |
| **Appendix No.** | **Item** |
| I | Teacher Efficacy Scale (Malayalam-Draft) |
| II | Teacher Efficacy Scale (English-Draft) |
| III | Teacher Efficacy Scale (Malayalam-Final) |
|  IV | Teacher Efficacy Scale (English -Final) |
|  |  |

##  CHAPTER I

# INTRODUCTION

* ****
* ****
* ****
* ****
* ****
* ****
* ****
* ****

##  CHAPTER II

# REVIEW OF

# RELATED LITERATURE

* ****
* ****

## CHAPTER III

# METHODOLOGY

* ****
* ****
* ****
* ****
* ****
* ****
* ****

##  CHAPTER IV

# ANALYSIS

* ****
* ****

##  CHAPTER V

# SUMMARY

* ****
* ****
* ****
* ****
* ****

# BIBLIOGRAPHY

# APPENDICES

INTRODUCTION

 Education is the most powerful instrument that brought about tremendous achievement in various spheres of life and teacher is backbone of any education system. Therefore teacher occupies a pivotal position in the field of education and society. Thus inorder to reform the society and the nation as a whole it was felt to pay special attention to the teachers and patternization of developing teachers’ personality so that they may innovate the social structure in the right direction. It is the teacher and teaching process, which always revolutionize the whole human society in the rationally desired direction because in the process of teaching, teacher’s personality affects the personality of students. Teacher has more mature and experienced personality, which influences the immature and growing personalities of the students.

 The quality of entire education system depends on the quality of teachers. A teacher is expected to possess a wide knowledge and within this a sound understanding of subject matter and the innovations in the field, and he must possess profound knowledge about the children.

 Teacher, as the word itself indicates the light of knowledge, for ever has a distinct and admirable position in the world. In this complex industrial-technical society, teachers become an unavoidable social necessity, since the diffusion of basic skills, such as literacy and the provision of technocrats are the prime importance for the nation’s survival. At the same time, in such a society, the teacher is increasingly expected to stimulate the child to accept certain social values.

 In present days there occurred a deterioration in both students and teachers commitment to their duty. Without considering their responsibility towards the pupils and society they concentrated on the accumulation of wealth. Their work became only according to their whims and fancies. It is the major reason for the eroding commitment of both teachers and students and diminishing human values. So especially in the present world of violence, complication and misery, it is the duty of a teacher to make the student highly committed and socialized. For this first and foremost a teacher should be a friend and benefactor of his pupils. He should love his pupils with all his heart and his profession too. Students who constitute a cross section of the community, are his raw materials. He is building up a nation with that raw material with the insight and ingenuity of a Michael Angelo, he is moulding Einsteens and Gandhijis in the workshop of his school. He never sits idle, but works out his mission silently and perseveringly at school and in society.

 With any reduction of the family contribution in socialization and particularly if both parents are working, the role of the teacher becomes more of a multiple role adding further functions to an already diffuse role complex. The teacher therefore rapidly arrives at the point whereby he must presumably

1. Fulfill the multiple objectives of the modern state of educational system.
2. Be a member of a particular institution and relate to hierarchical role positions within an organizational frame work.
3. Relate parents and pupils with a particular community context and need.
4. Fulfill his obligations as an adherent of his own social grouping and profession.

 All these means that the teacher has to perform tasks which are not only concerned with imparting a body of knowledge, but also with the inculcation of attitudes, the development of habit and skills, the strengthening of loyalties and the reinforcement of moral codes. Wilson (1962) maintains that the effect of the dynamics of operating these tasks upon status is very marked and suggested that the teacher has been forced to spread his talents very thinly.

 But in this present world of decreasing human values, it is suspectable that whether there is anyone who is truly committed, evaluated his/herself in the divine field of teaching especially due to these two aspects-efficacy and self concept are most essential for a successful teacher.

 Success leads to satisfaction. That is, when a teacher gets success in all spheres of his/her profession. For example-managing the class well, teaching the subject well, etc. definitely will give that much amount of satisfaction in his life also. To get success a teacher should be fully committed to all aspects which are related to his profession such as the learner, the society, the values that should be included by teaching, his/her own professional growth, etc. A committed teacher will also be one, who have a concept about him/herself. That is he/she will have some aspirations about what ought to be and will have an understanding about what he/she is. This understanding about oneself is generally known as self-concept and about which is very essential for getting success. It helps one to change, modify and follow the ways which leads to success. So self-concept helps one to know whether he/she is committed to his professional life and by being committed one gets satisfaction.

**1.1 NEED AND SIGNIFICANCE**

 Ultimately education in its real sense is the pursuit of truth. It is an endless journey through knowledge and enlightenment. Such a journey opens up new vistas of development of humanism, where there is no scope or room for pettiness, disharmony, jealousy, hatred or enemity. It transforms a human being into a wholesome whole, a noble social and an asset to the universe. Universal brotherhood in its true sense becomes the sheet anchor for such education. Real education enhances the dignity of a human being and increases his self-respect. Then only the real sense of education could be realized by each individual, and carried forward in every field of human activity the world will be so much a better place to live in.

 The words ‘alround’, ‘balanced’, ‘development’, and ‘personality’ have to be rightly understood and have to be put into practice in the education process, which is rarely done by present day educators. Unless corrective measures are speedily taken, it will be difficult to maintain and upgrade the quality and standard of education at all levels. No doubt, various education commission from 1948 to 1986 have made some useful recommendation and the National Policy on Education being declared in 1968, 1986 and renewed from time to time aided by a programme of Action. Even then the effect of the recommendations is not seen either in the attitude or academic action of teachers at various stages of education. Present day education is mainly book centered encouraging rote learning without critical thinking and introspection. More knowledge of things and men is not sufficient without the development of right attitude. Education will be useless even if it stops at this point without translating the knowledge into practice with the attitudinal psychological force, resulting in the development of psychomotor skills enabling the student to do things for himself. This can be done in an acting community schools with the help of teachers with conviction and not by mercenaries recruited by the educational authorities. More knowledge, right attitude and understanding and skills of doing things is not sufficient, unless they are all flavoured with appropriate values. Since values cannot be taught and can be caught, individual students should select ideas, ideals and actions which they think are most desirable and valuable for bettering their life.

 Delors Commission (1996) has identified four pillars of learning-learning to know, learning to do, learning to live together and learning to be. It provides a broad vision of quality education. Inorder to be able to impart quality education, our education system has to have the following five quality pre-requisites, quality syllabus, quality faculty, quality teaching and evaluation, quality research and quality character of faculty. The main role of teachers in quality education is to maintain high level professional efficiency by upgrading domain knowledge and adopt the right attitude to disseminate this knowledge to the learners.

 A professional is committed to the publicity accountable for his work. 19th century society emphasized teacher’s morale character and conduct. While late 20th century emphasizes teacher’s accountability and use of appropriate pedagogical techniques. Twenty first century will demand quality education and more accountability from teachers. A good teacher should look at teaching not only as a vocation has a mission. Teacher have responsibilities beyond their subject specialization. They are involved in cross-curricular issues as school development, career advice, social events etc. Unless we have people in this profession passionately involved in it, efforts at improving quality of education will not succeed. Teacher Efficacy includes a sense of personal accomplishment, positive expectation for student behaviour and achievement, personal personality responsibility for student learning, strategies for achieving objectives, positive affect, sense of control and democratic decision making. But unfortunately now a days majority of the teachers are not responsible in their profession. Many persons are not committed in their profession..

 Self efficacy and self concept are the requirements essential for imparting quality education. A teacher must believe he or she has the capacity to affect student performance. Only the students will imbibe the quality and performances of their teachers. They can influenced by their teachers. Therefore the teacher must have the composite of ideas, feelings and attitudes about himself. Hence these facts enabled the investigator wanted to know “Effect of Self Concept on Teacher Efficacy of Secondary School Teachers of Kerala”.

**1.2 STATEMENT OF THE PROBLEM**

 “The problem under study is entitled as “**EFFECT OF SELF CONCEPT ON TEACHER EFFICACY OF SECONDARY SCHOOL TEACHERS OF KERALA**”.

**1.3 DEFINITION OF KEY TERMS**

**Teacher Efficacy**

 “Teacher efficacy has been defined as the extent which the teacher believes he or she has the capacity to affect student performance”.

(Berman, *et al.,* 1977, P. 137).

 “Teacher efficacy is the teachers belief in his or her capacity to organize and execute courses of action required to successfully accomplish a specific teaching task in a particular context”.

**Self-Concept**

 “The individuals evaluation of himself, the appraisal of self by the individual himself”.

(J. Atkinson, E. Berne & R.S. Woodworth, 1996)

 “The composite of ideas, feelings and attitudes people have about themselves”.

(Dictionary-Louis Smith, Hilgard, *et al*., 1979)

 Self Concept is defined as those parts of the phenomenal field which the individual has differentiated as relatively stable and definite parts or characteristics of himself.

(Dictionary of Education, C.V. Good, 1959)

**Secondary School Teachers**

 Secondary School Teachers refers to the teachers who are working as High School Assistant in government, aided or unaided recognized schools in Kerala.

**Variables of the Study**

 The present study is designed with two types of variables., viz., independent variable and dependent variable.

**Independent Variable**

 The independent variable included in the present study is Self Concept.

**Dependent Variable**

 Teacher Efficacy is taken as the dependent variable.

**1.4 OBJECTIVES OF THE STUDY**

1. To find out if there exists any significant effect of self concept on teacher efficacy of secondary school teachers of Kerala.
2. To find out whether there exists any significant effect of self concept on teacher efficacy of secondary school teachers for the subsamples based on
	1. Gender
	2. Locale
	3. Type of School Management
	4. Teaching Experience

**1.5 HYPOTHESES**

 The hypotheses formulated for the presented study are

1. There will be a significant effect of self concept on teacher efficacy of secondary school teachers of Kerala.
2. These will be a significant effect of self concept on teacher efficacy of secondary school teachers for the relevant subsamples based on
	1. Gender
	2. Locale
	3. Type of Management
	4. Teaching Experience

**1.6 METHODOLOGY**

**Sample**

 The study is proposed to be on a sample of 288 secondary school teachers belonging to various secondary schools under the jurisdiction of Thiruvananthapuram, Alappuzha, Ernakulam, Malappuram, Kozhikode and Kannur drawn by stratified sampling technique giving due representation to different strata, viz., Gender, Locale, Type of School Management and Teaching Experience.

**Tools**

 The following tools are used in this study

1. Teacher Efficacy Scale (Musthafa and Abidali, 2008)
2. Self Concept Scale for Teachers (Pillai, 1989).

**1.7 STATISTICAL TECHNIQUES USED**

 The following statistical techniques are used for analysis of data

1. Preliminary Analysis
2. Classification Techniques
3. One-way ANOVA
4. Mean Difference Analysis

**1.8 SCOPE AND LIMITATION**

 The present study is an attempt to the effect of self concept on teacher efficacy of secondary school teachers of Kerala.

 Standardized tools were used for the collection of data, from the sample of 288 teachers of Thiruvananthapuram, Alappuzha, Ernakulam, Malappuram, Kozhikode and Kannur districts. Therefore the investigator hopes that the study will yield reliable results which can be generalized. The investigator by this study expects the findings of the study will help the teachers to improve their qualities and characteristics.

 Even though the investigator tried this best to make the study a perfect one, certain limitations are there:

1. The sample for the study is chosen from six districts only. The limited time and inconveniences forced the investigator to restrict the sample from a wider sample.
2. The sample was selected from only one stages of education, viz., secondary education.
3. Limitation of time for the teachers due to the tight schedule of the school works was one of the difficulties faced by the investigator in the study.

REVIEW OF

RELATED LITERATURE

 Review of related literature of the study is an important aspect of any investigation. It is necessary for a researcher to make a thorough survey of related studies before planning and carrying out the study. A proper study of the related literature would enable the investigator to locate and go deep in to the problem. Familiar with what is already known and what is still unknown and untested helps the researcher to eliminate the duplication of what has been done and provides useful hypotheses and helpful suggestion for significant investigation. Inorder to get an insight in to the theoretical background of the subject of study related literature was thoroughly reviewed. The result of the review is summarized in this chapter. For convenience this has been attempted into two section, viz.,

1. Theoretical Overview
2. Review of Related Studies

**2.1 THEORETICAL OVERVIEW**

**(i) SELF CONCEPT**

 Self Concept refers to the experience of one’s own being. It includes what people come to know about themselves through experience, reflection and feedback from others. The Self Concept is an organized cognitive structure comprising of a set of attitudes, believes and values that cut across all facets of experience and action, organizing and trying together the variety of specific habits, abilities, outlooks, ideas and feelings that a person displays.

 The concept of self has origins in the earliest history of personality theory. In the 17th Century, the philsopher Rene Decartes discussed the ‘Cognito’ (awareness of ones own being) as the core of human existence.

 Willhem Wundt, among others referred largely the notion of self to the person’s experience of his own body.

 According to William James (1982) the bodily self was sub-assumed under one of three categories of self experience, the ‘Material Me’- his body, his home, his family and the physical objects with which he surrounds himself, the ‘Social Me’- his awareness of himself as he feels others see him, the ‘Spiritual Me’- his awareness of his own mental process- his thinking and feeling.

 James Mark Baldwin (1877) the early developmental psychologist brought stimulating idea on the functions of imitation in developing self-consciousness. For him, the imitation of other was a major way of learning about oneself.

 Sigmund Freud’s (1920) psycho-analytic theory also contributed to the wide spread concern with self. The concept of ‘ego’ in Freudian theory had much in common with self concept.

 British Theorist Charles Horton Cooley (1922) drew early attention to the important relationship between self and society in his idea of “looking glass self” proposing that the content of self perception is derived largely through the mirror of interaction with other people where by one assumes the role of another inorder to have a look back at oneself.

 George Herbert Mead (1934), an American extended the same idea into a more elaborate description of feedback from others who are especially important meaningful individuals (“Significant others”) and composite feedback synthesized from collective interaction with many other people (“The generalized other”).

 Theory of Self Concept was elaborated in 1940’s by Prescott Lecky and Carl Rogers, focusing attention upon the perceptual aspects of Self-Concept and the evaluative elements of Self Esteem. Rogers proposed a distinction between the self-as-actually perceived (Self Concept) and the self as ideally desired (ideal-self) suggesting that both are measurable and diagnostically useful notation. Discrepancy between self concept and ideal self represents an index of personal psychological adjustment, with the optimum condition placing Self Concept slightly (but only slightly) inferior to ideal self resulting in happy levels of self regard, optimum about goal setting and appropriate incentive for achievement and adjustment to the world.

 The term Self-Concept has been defined by different psychologists.

 Self Concept is our perception about ourselves (Woolfolk, 2004).

 It refers to the composite of ideas, feelings and attitudes of peoples about themselves (Atkinson & Atkinson, 1979).

 The incongruence between one’s Self Concept and ones organismic experience is the source of psychological stagnation (Feist & Feist, 2002).

 Rogers stressed the subjective nature of the self concept. Most people tend to distort their experiences to some extent to promote a relatively favourable self concept. Eg: You may believe that you are quite bright but your grade transcript might suggest otherwise. Rogers called the gap between Self-Concept and reality incongruence. “Incongruence is the degree of disparity between one’s Self Concept and one’s actual experience”.

 In contrast if a person’s Self Concept is reasonably accurate, it is said to be ‘Congruent’ with reality. Everyone experiences some incongruence. The crucial issue is how much. As we will see Rogers maintained that too much incongruence undermine’s one’s psychological well being.

**Development of Self Concept**

 Many factors contribute to the development of Self Concept. Overall, it is related to the scope of experience one accumulates with oneself. It is at first a simplistic awareness of oneself and ones capacities generalized across all situations, but as one grows older, the self concept becomes more complex and differentiated into subfacets that have to do with the self in different situations, such as the ‘social self’ the ‘academic self’ or the ‘physical self’.

 Among the many forces that help to organize this accumulated experience with oneself, four are especially notable. Language, personal success and failure, to label experiences and actions, organizing experience into integrated conceptual categories. The forces of personal success or failure involve ideas and feelings arising out of rewards and punishments. The pleasure and satisfaction that accompany personal success (or pain and distress and accompany personal failure). Become cognitive associated with all of the activities and experiences accompanying such situations, including perception of oneself. Social feedback enables one to incorporate what others perceive as a part of impression of oneself. Identification is a process through which beliefs and values are incorporated by young children into their own personalities from exposure to such agents of the society as parents, teachers or heroes. Beliefs about oneself (Self-Concept) and values for oneself (Self-Esteem) are generated through the identification process, which includes introjection (assimilating anothers’ values as one’s own) and imitation (copying actions, believes or judgments of others).

 The degree of consistency or stability of self-concept may vary considerably. Cognitive process that organize all aspects of perception as well operate to shape the Self-Concept.

**(ii) TEACHER EFFICACY**

 The construct of self-efficacy primarily comes from Bandura’s social cognitive theory, which postulates that the believes people about their efficacy influence the choices they make, their aspirations, level of effort and perseverance, resilence to adversity vulnerability to stress and depression, and performance accomplishment (Bandura, 1977, 1997). That is efficacy believes influence whether people that optimistically or pessimistically, what course of action they choose to pursue; the goals they set for themselves and their commitment to them; how much effort they put forth in given endeavors and how much stress and depression they experience in coping with environmental demands and the accomplishments they realize (Bandura, 2000).

 Applied to the context of education, teacher efficacy has been defined as “the extent to which teachers believe they can affect student learning” (Dembo & Gibson, 1985, p. 173). It is seen as a multidimensional construct with Ashton and Webb (1982), and Gibson and Dembo (1984), who identified two dimensions as ‘teaching efficacy’ and ‘personal efficacy’. The first factor refers to a teacher’s belief that the teaching profession in general can bring about student change. The second dimension represents the belief of individual teacher in his/her own personal capacity to deliver the necessary teaching behaviours to influence student learning.

 Over two decades of research findings have indicated that teacher efficacy underlines critical instructional decisions including use of time, classroom management strategies and questioning techniques. It also affects teacher’s control orientations and control behaviours; their use of classroom discussions and innovative teaching practices, their responses to learners who are difficult to teach and their level of stress and their satisfaction with the teaching profession. As a consequence of these behavioural differences, teachers’ self-efficacy has important formative effects on student outcomes such as achievement, motivation and students own sense of efficacy across various areas and levels. At the school level, higher teacher efficacy is related to the health of the organizational climate, an orderly and positive school atmosphere, greater classroom-based decision making and the strength of the collective efficacy.

 The importance of teacher efficacy among prospective teachers is also well established. Emmer and Hickman (1991) found that efficacy scores were positively correlated with the prospective teachers’ preferences for positive management strategies, for example talking with a student or modifying assignments. The study conducted by Woolfolk et al, (1990) revealed negative correlations between prospective teachers’ belief about their own instructional competence and their attitudes towards pupils control. The less efficacious they were the more custodial was their perspective, for example taking pessimistic view of student’s motivation, emphasizing rigid control of classroom behaviours and relying on extrinsic inducements and negative sanctions to make students study. On the other hand, highly efficacious pre-service teachers were observed to be more humanistic in their orientation toward managing students’ behaviours. Wertheim and Leyser (2002) in their study with Israeli prospective teachers found that teachers who obtained higher efficacy scores obtained higher scores than the less efficacious teachers on the intension to frequently use individualized and diagnostic teaching strategies, implement a variety of management techniques and communicate with parents, professionals, students and the building principal.

 A substantial body of research suggests the difficulty in changing teachers’ beliefs, the development of which is mainly influenced by three forms of experience; personal experience, experience with schooling and instruction, and experience with formal knowledge. These three forms begins at different stages of the individual’s educational career (Richardson, 1996; Ball et al., 2001; Stipek, 2001) and as a result of those experiences, strong belief about the subject area or the way it should be taught are formed, Bandura’s theory of self-efficacy suggests that efficacy belief is most malleable early in learning ad that once established, it appears to be some what resistant to change. This idea suggests that it is easier to effect change when teachers are in the formative process in teachers preparation programs rather than when they are in the classroom.

**2.2 REVIEW OF RELATED STUDIES**

**(i) STUDIES ON SELF CONCEPT**

 A number of studies on self concept have been reported from abroad and India. A selected survey of these studies are given below:

 Coney (1979) while investigating achievement, Self Concept and School Attitudes as measures of the effectiveness of a title VII intervention programme noticed significant relationship between Self Concept of ability and Achievement.

 The study conducted by Rai (1983) on 600 prospective teachers showed that barring the background differences in self concept on the basis of the four socio-economic variable-sex, marital status, level of education and religion has been found significant. the results indicate that the level of education is an important correlate of self concept.

 Chadda (1985) conducted a study on self concept of teachers and their emotional adjustment. The sample consisted 350 teachers of high school and higher secondary school teachers in Hariyana state. The investigators found that (i) the distribution of the scores of self concept through profile analysis was not normal for the total group of teachers as well as for the subsamples of teachers consisting of male, female, rural and urban subgroups. (ii) There was no significant difference between the self concept scores of the male-female and rural-urban subgroups of teachers. (iii) Self-Concept of teachers differed significantly from their emotional adjustment.

 Pandit (1985) identified that personality as revealed in terms of basic need structure and self concept had a significant on adjustment. (1) There is significant difference between the ideal self and perceived self and ideal self and social self of adolescents (2) The difference between ideal self and perceived self was not significant.

 In a study of the relationship among self-concept, race, socio-economic status and mathematics achievement in black and white fifth grade students on a sample of 55 black and 65 white students of New York by Cozart (1988) found that self concept was positively related to mathematics achievement.

 A study of Komp (1988) on teacher Self Concept and evaluation resistance on a sample of 72 regular full time teachers found a low to moderate correlation between teacher Self Concepts and teacher resistance/acceptance of evaluation.

 Ansari and Ansari (1989) conducted a study on the relationship between job satisfaction and self concept. The investigators found that over all job satisfaction and its various facts are significantly related to self concept. In 1980 Ansari found significant relationship between self concept and job satisfaction in clerks and significant relationship in technicians.

 A study of parental deafness as a factor in the development of Self Concept in samples of deaf and hearing college students on a sample of 51 deaf and 58 hearing college students by Searls (1989) showed significant difference in Self Concept between deaf and hearing college students.

 A longitudinal study of student perseverance in a job corps centres using self concept as a predictor of success on a sample of 64 corps enrollers, Owens (1990) found positive correlation between Self Concept and success.

 Jayalatha (1991) studied the attitude towards teaching profession and teachers’ self concept as correlates of teachers’ perception of effective classroom teaching of secondary school teachers and found that the relationship between teachers’ perception of effective classroom teaching and teachers’ self concept is negative and not significant.

 Devi (1993) studied the relationship of creativity with self concept and some selected sociological variables. It is found that creativity is positively correlated with self concept.

 Marsh (2000) conducted a study on multiple dimension of university teachers’ self concept. In this study he integrated research literatures on self concept and on students evaluation of teaching effectiveness (SETs). The results showed that agreement between teacher self-concept and SETs was moderate, for teachers who had not previously received SET feedbacks, but substantially higher for teachers previously received SET feedback.

 Smith and Kenneth (2000) conducted a study on the self concept and verbal academic achievement of primary and secondary student teachers. Results identified significant difference between the two cohorts of students teachers on the self-reported measures of self concept and test anxiety. The results also reveals that verbal academic self concept has significant and positive direct effect on verbal academic achievement. The indirect effect of verbal academic self concept, mediated by worry component of test anxiety, was found to be significant for secondary student teachers. Results supported the proposition that an individual’s self concept has a major direct influence on the worry component of test anxiety and in addition, a more dominant direct effect on verbal academic achievement than test worry.

 Brown (2004) examined the relationship of self concepts to changes in cultural diversity awareness of urban teacher educators. The sample consisted of 100 European-American Pre-service teachers. The findings indicate that a statistically significant relationship does not exist between total self concept and total cultural diversity awareness.

 Sasikumar (2005) conducted a study on teacher commitment and teachers’ self concept as correlates of job satisfaction for total sample and subsamples. It is found that there is no significant difference between male and female teachers in self concept. Male teachers are superior in teacher commitment while female teachers are superior in self concept and job satisfaction.

 **(ii) STUDIES ON TEACHER EFFICACY**

 Campbell & Jack (1996) conducted a study on a comparison of teacher efficacy for pre and in-service teachers in Scotland and America. A teacher’s confidence in his or her ability to execute appropriate teacher behaviours to positively effect student outcomes, or teacher efficacy as it is known, is an essential aspect of teaching. The purpose of the study was to determine if there were differences between pre-service teachers and inservice teachers on this important variable. The results clearly demonstrated that there were no differences in teacher efficacy between Scottish teachers and American teachers. However, there were significant differences between pre-service and inservice teachers of both countries.

 Lewandowski (2005) investigated the relationship of teacher self efficacy and professional development. The result suggested that teachers’ perceptions of self-efficacy exist in varying degrees. Teachers perceive themselves to have some degree of self efficacy and feel that their efficiencies to a degree helps students to achieve.

 Tucker (2005) studied on promoting teacher efficacy for working with culturally diverse students. It is found that teachers exert a potent influence over the achievement of all students, low-income culturally diverse students in particular. Although recent research has confirmed that teacher involvement is critical for promoting academic engagement of low-income and ethnically diverse students.

 Utley & Juliana (2005) studied on relationship between science and mathematics teaching efficacy of pre-service elementary teachers. The purpose of this study was to investigate the change in teacher efficacy beliefs about mathematics and science teaching during participation in methods courses and student teaching as well as the relationship between mathematics and science teaching efficacy. Data revealed that as science and mathematics teacher education in a methods course progressed, science and mathematics teaching efficacy significantly increased. This effect appeared to decrease slightly by the end of student teaching. Analysis of data indicated a significant difference in both the personal mathematics and personal science teaching efficacy scores.

 Sridhar and Badei (2006) studied on Teacher Efficacy and Emotional Intelligence of primary school teachers. The sample consisted 100 primary school teachers from all the urban primary school teachers in Mysore South. Teacher Efficacy Scale and Emotional Intelligence Test were used to data collection. Both on Teacher Efficacy Scale and Emotional Intelligence Test and t test to investigate significant difference between the Means. The mean accounted for Teacher Efficacy (TE) was 35 on Teaching Efficacy and 25 on Personal Efficacy; both fall under ‘moderate’ category of Teacher Efficacy. The mean obtained for EQ was 202, which is located ‘Moderate’ category of Emotional Intelligence. There is no, however, significant difference between the means of Teacher Efficacy and EQ with reference to two of independent variables which are considered in this study (Gender, Educational Level). In respect of third independent variable (age) a significant difference has been observed.

 Martin (2007) studied in the influences of Professional Development on Teachers’ self efficacy toward educational change. The sample consisted 50 elementary physical education teachers from a large urban school district in the Midwest USA. It is found that support the value of professional development training in physical activity curriculum on teachers’ self-efficacy perceptions for teaching the curriculum.

 Ross & John (2007) conducted a study on professional development effects on teacher efficacy. The sample randomly assigned 106 Grade VI teachers in school district to treatment and control condition in a delayed treatment design. The professional development (PD) explicitly addressed four sources of teacher efficacy information identified in social cognition theory (Bandura, 1997). Treatment teachers outperformed control group teachers on three measures of teacher efficacy, but results were statistically significant only for efficacy for classroom management.

**Conclusion**

 Though the investigator made wholehearted attempts to tap the different studies in the area, he could able to locale only a few. The studies conducted are mainly in abroad. These stresses the need for the present investigation.

METHODOLOGY

 This chapter presents an account of the methodology followed for the present study. The main purpose of the study was to find out the effect of self concept on teacher efficacy of secondary school teachers of Kerala. This is a descriptive type of research and the method employed is survey. This chapter includes the following subsections.

3.1 OBJECTIVES OF THE STUDY

3.2 HYPOTHESES OF THE STUDY

3.3 VARIABLES OF THE STUDY

3.4 TOOLS USED FOR DATA COLLECTION

3.5 SAMPLE FOR THE STUDY

3.6 DATA COLLECTION PROCEDURE, SCORING AND CONSOLIDATION OF DATA

3.7. STATISTICAL TECHNIQUES USED FOR ANALYSIS

**3.1 OBJECTIVES OF THE STUDY**

1. To find out if there exists any significant effect of self concept on teacher efficacy of secondary school teachers of Kerala.
2. To find out whether there exists any significant effect of self concept on teacher efficacy of secondary school teachers for the subsamples based on
	1. Gender
	2. Locale
	3. Type of School Management
	4. Teaching Experience

**3.2 HYPOTHESES**

 The hypotheses formulated for the presented study are

1. There will be a significant effect of self concept on teacher efficacy of secondary school teachers of Kerala.
2. These will be a significant effect of self concept on teacher efficacy of secondary school teachers for the relevant subsamples based on
	1. Gender
	2. Locale
	3. Type of Management
	4. Teaching Experience

**3.3 VARIABLES OF THE STUDY**

The independent variable selected for the study is

1. Self Concept

The dependent variables is selected for the study is

1. Teacher Efficacy

The classificatory variables selected for the study are given below:

1. Gender,
2. Locale,
3. Type of Management,
4. Teaching Experience.

**3.4 TOOLS USED FOR DATA COLLECTION**

 The tools used for the present study and a description of tools are presented in this section.

3.4.1 Teacher Efficacy Scale (Musthafa & Abidali, 2007)

3.4.2 Self Concept Scale for Teachers (Pillai, 1989)

**3.4.1 Teacher Efficacy Scale**

 This is a five point scale developed by Mohamedunni Alias Musthafa and Abidali (2007) intended to measure teacher efficacy to different aspects of the profession.

**a) Planning the Scale**

 The investigator made an extensive study on the characteristics of Teacher Efficacy and its components. Bandura (1977) identifying teacher efficacy as a type of self-efficacy- a cognitive process in which people construct believes about their capacity to perform at a given level of attainment.

 The scale includes 51 items in the following eight dimensions.

1. ***A sense of personal accomplishment***

 This dimension implies the teacher must view the work as meaningful and important.

 A sample of item belonged to the above dimension is presented here.

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| I get enough consideration from the society as a teacher | A | B | C | D | E |
|  |  |  |  |  |

1. ***Positive expectations for student behaviour and achievement.***

 The implication of the above dimension is that the teacher must expect students to progress.

 A sample of item belonged to the above dimension is presented here.

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| I suggest measures for the students progress in PTA meetings | A | B | C | D | E |
|  |  |  |  |  |

1. ***Personal responsibility for student learning***

 The implication of the above dimension is that accepts accountability and shows willingness to examine performance.

 A sample of item belonged to the above dimension is presented here.

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| I utilize those opportunities which a good mastery of the subject | A | B | C | D | E |
|  |  |  |  |  |

1. ***Strategies for achieving objectives***

 The implication of the above dimension is that must plan for student learning, set goal for themselves and identify strategies to achieve them.

 A sample of item belonged to the above dimension is presented here.

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| I take classes after much planning much preparations | A | B | C | D | E |
|  |  |  |  |  |

1. ***Positive affect***

 The implication of the above dimension is that feels good about teaching, about self and about students.

 A sample of item belonged to the above dimension is presented here.

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| I behave as a model teacher among my students | A | B | C | D | E |
|  |  |  |  |  |

1. ***Sense of Control***

 The implication of the above dimension is that believe(s) he can influence student learning.

 A sample of item belonged to the above dimension is presented here.

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| In encourage each and every student on the basis of their abilities | A | B | C | D | E |
|  |  |  |  |  |

1. ***Sense of common teacher/ student goals***

 The implication of the above dimension is that develops a joint venture with student to accomplish goals.

 A sample of item belonged to the above dimension is presented here.

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| I ensure the participation of pupils in learning activities | A | B | C | D | E |
|  |  |  |  |  |

1. ***Democratic decision making:***

 The implication of the above dimension is that involves students in making decisions regarding goals and strategies.

 A sample of item belonged to the above dimension is presented here.

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| I try to develop leadership qualities in the students | A | B | C | D | E |
|  |  |  |  |  |

**b) Try Out of the Scale**

 The pilot test was administered to a sample of 10 teachers selected at random. It is administered at random. It is administered for examining the time limit and identifying the ambiguity of items. The item of the scale was checked for clarity and specificity.

 Try out of the scale aims to select the items for the final scale by empirically testing the item characteristics. Copies of the draft of Teacher Efficacy Scale (Malayalam and English) are given as Appendices I and II.

**c) Item Analysis**

 A sample of 100 teachers were taken for the standardization purpose through random selection. The answer sheets of these 100 samples were scored and arranged in the rank order of total scores obtained by them. After this, the highest and the lowest of 27 sheets (27 percent) were separated.

 The mean and standard deviation of the scores obtained for each item for the high group and low group were calculated separately. The critical ratio were calculated.

 t = 

 = Mean of the high group (for an item)

  = Mean of the low group

 σH = Standard deviation of the high group

 σL = Standard deviation of the low group

 N= sample size of the high/low group

 Items with critical ratio greater than 2.58 the table value of ‘t’ at 0.01 level of significance was selected for the final scale. Thus after standardization final scale contains 45 items.

 The critical ratio (t-value) obtained for each item together with mean and standard deviations for two groups are given as Table 1.

**TABLE 1**

**Item Analysis of Teacher Efficacy Scale**

|  |  |  |  |
| --- | --- | --- | --- |
| **Question Number**  | **High Group**  | **Low Group**  | **‘t’ value** |
|  | **σ (S.D)** |  | **σ (S.D)** |
| 1. | 4.93 | 0.27 | 4.30 | 0.47 | 6.10 |
| 2. | 4.89 | 0.32 | 4.07 | 0.87 | 4.55 |
| 3. | 4.96 | 0.19 | 4.44 | 0.51 | 4.97 |
| 4. | 4.85 | 0.77 | 4.11 | 0.85 | 3.36 |
| 5. | 4.85 | 0.36 | 3.67 | 0.88 | 6.49 |
| 6. | 4.70 | 0.82 | 3.44 | 1.15 | 4.61 |
| 7. | 4.96 | 0.19 | 4.22 | 0.51 | 7.11 |
| 8. | 4.93 | 0.38 | 4.07 | 0.83 | 4.84 |
| 9. | 4.96 | 0.19 | 4.41 | 0.64 | 4.34 |
| 10. | 5 | 0 | 3.78 | 0.85 | 7.50 |
| 11. | 4.96 | 0.19 | 4.26 | 0.71 | 4.96 |
| 12. | 5.00 | 0 | 3.70 | 0.82 | 8.18 |
| 13. | 4.93 | 0.27 | 4.00 | 0.78 | 5.81 |
| 14. | 4.89 | 0.32 | 3.89 | 0.64 | 7.26 |
| 15. | 4.41 | 0.89 | 3.74 | 0.86 | 2.80 |
| 16. | 4.74 | 0.71 | 3.60 | 0.84 | 5.40 |
| 17. | 4.85 | 0.60 | 3.63 | 0.63 | 7.30 |
| 18. | 4.93 | 0.27 | 3.67 | 0.62 | 9.69 |
| 19. | 4.93 | 0.27 | 3.63 | 1.04 | 6.26 |
| 20. | 4.93 | 0.27 | 3.41 | 0.89 | 8.51 |
| 21. | 4.59 | 0.84 | 3.88 | 0.59 | 3.58 |
| 22. | 3.74 | 1.13 | 3.04 | 1.09 |  2.33\* |
| 23. | 3.89 | 1.33 | 2.89 | 1.22 | 2.87 |
| 24. | 4.52 | 1.12 | 3.74 | 0.66 | 3.11 |
| 25. | 4.67 | 0.96 | 3.07 | 1.00 | 5.98 |
| 26. | 2.85 | 1.68 | 2.85 | 1.10 |  0\* |
| 27. | 4.37 | 1.36 | 3.30 | 1.27 | 3.00 |
| 28. | 4.63 | 1.08 | 3.85 | 0.99 | 2.76 |
| 29. | 4.52 | 0.98 | 3.19 | 1.00 | 4.96 |
| 30. | 4.63 | 1.08 | 3.78 | 0.85 | 3.23 |
| 31. | 4.33 | 1.36 | 3.15 | 1.17 | 3.44 |
| 32. | 4.44 | 1.09 | 3.74 | 1.09 |  2.37\* |
| 33. | 4.89 | 0.32 | 3.33 | 1.18 | 6.63 |
| 34. | 4.22 | 1.37 | 2.33 | 1.07 | 5.64 |
| 35. | 4.41 | 1.34 | 3.78 | 0.70 |  2.17\* |
| 36. | 4.70 | 0.87 | 3.78 | 0.64 | 4.46 |
| 37. | 4.93 | 0.27 | 3.85 | 0.72 | 7.29 |
| 38. | 5.00 | 0.00 | 4.26 | 0.45 | 8.62 |
| 39. | 4.74 | 0.53 | 3.78 | 0.97 | 4.52 |
| 40. | 4.63 | 0.79 | 3.30 | 0.78 | 6.25 |
| 41. | 4.63 | 0.97 | 3.22 | 1.12 | 4.94 |
| 42. | 4.81 | 0.62 | 3.07 | 1.11 | 7.12 |
| 43. | 4.96 | 0.19 | 3.81 | 0.79 | 7.37 |
| 44. | 4.67 | 0.88 | 4.11 | 0.51 | 2.85 |
| 45. | 4.85 | 0.46 | 4.00 | 0.73 | 5.12 |
| 46. | 4.63 | 1.00 | 3.52 | 1.05 | 3.97 |
| 47. | 3.81 | 1.73 | 2.89 | 1.19 |  2.29\* |
| 48. | 4.15 | 1.56 | 3.63 | 0.84 |  1.52\* |
| 49. | 4.96 | 0.19 | 3.93 | 0.62 | 8.36 |
| 50. | 4.85 | 0.60 | 4.22 | 0.42 | 4.47 |
| 51. | 4.78 | 0.42 | 4.15 | 0.46 | 5.26 |

*\* Indicates rejected items*

 Copies of the final of Teacher Efficacy Scale (Malayalam and English) are given as Appendices III and IV

**d) Scoring Procedure:**

 Both positive and negative items were included in the scale. Each statement has give responses viz., strongly agree, agree, undecided, disagree and strongly disagree. For positive item the respective scores to the give responses are 5, 4, 3, 2 and 1. For negative item scoring was done in the reverse order.

**f) Reliability and Validity of the Scale**

Reliability and Validity are two most important qualities required for a tool of measurement.

***i) Reliability***

 Reliability is the degree of consistency that the instrument or procedure demonstrates: whatever it is measuring it does so consistently (Best & Kahn, 2001). For establishing the reliability of the scale, the investigator used the test-retest method. The reliability co-efficient of the scale found to be 0.70, using the test-retest method on a sample of 30 teachers with an interval of three weeks, between the testing. The reliability coefficient 0.70 which shows that the scale is a reliable instrument.

***ii) Validity***

 “Validity is that quality of a data gathering instrument or procedure, that enable it to measure what it is supposed to measure” (Best & Kahn, 2001). The validity for the present scale was ensured using face validity. A test is said to have face validity. When it appears to measure whatever the author had in mind, namely what he was thought he was measuring (Garrett, 1973). The items in the scale were phrased in the least ambiguous way and the meaning of all terms were clearly defined. The scale was administered to a try out sample of 30 teachers. It was found that the subjects comprehended the scale clearly and responded to the items without misunderstanding the items. Thus the scale possesses face validity.

**3.4.2 Self-Concept Scale for Teachers**

 The self-concept scale for teachers used for the present study is developed by Pillai (1989). The sale has 48 statements under two parts A and B each with 24 statements. Part A provides a measure of ideal self and part B a real self. The subjects are expected to respond in any of the five forms viz., strongly agree, agree, undecided, disagree and strongly disagree. There is no time limit for the scale and all the statements are positive.

**a) Scoring Procedure**

 This is done in two stages. At first, to all the statements assign scores 5, 4, 3, 2, 1 respectively to the five responses viz., strongly agree, agree, undecided viz., strongly agree, agree, undecided, disagree and strongly disagree for both sections A and B of the ideal self ad real self. If the difference between scores of sections A and B is small it represents higher self-concept as compared with large difference. The maximum possible difference of an item is 4, representing very low self-concept. Therefore, at the second stage of scoring for the 24 statements of section A or B, the actual difference, between the scores of the ideal and real self is subtracted from 4. The possible maximum and minimum score of the scale thus are 96 and zero respectively.

**b) Reliability of the Scale**

 The reliability of the scale was estimated by Jayalatha (1990), using split-half method and the co-efficient was found to be 0.74 (N=40).

**c) Validity of the Scale**

 The validity of the scale was also estimated against scores of a semantic differential criterion (Jayalatha, 1990). The correlation coefficient was found to be 0.45 (N=50). This suggest that the tool is a reasonably valid measure of self-concept.

**3.5 SAMPLE FOR THE STUDY**

 “A sample is a small proportion of a population selected for observation and analysis” (Best, 1983). The sample is taken to represent the total population of which it is a part and generalization are made.

 The present study includes the population of secondary school teachers of Kerala.

**3.5.1 Sample Technique**

 The sample was collected by using stratified random sampling technique for ensuring representation of the population. Stratified random sampling is the best suited technique of sampling when there are obvious differences or subgroups among the population to be sampled. The following factors were considered for the selection of sample.

**a) Gender of the Teachers**

By considering the physical and social differences between male and female teachers, for the present study the sample consisted of male and female teachers.

**b) Locale of Schools**

 As it is a well known fact that urban schools are more endowed with almost all types of facilities, it is assumed that rural teachers will be more or less unsatisfied with their working conditions and for some times this may result in low self concept about themselves and reluctancy in doing work with perfection. While selecting the sample this factor was also considered.

**c) Type of Management**

 Based on the agencies which run the schools are three categories of schools in Kerala. They are Government, Aided and Unaided schools. To know whether there is any differences between Government, Aided and Unaided school teachers in independent and Dependent variables. Thus the type of management was taken for the present study.

**d) Teaching Experience**

 Teaching experience is also taken for classification of the sample. Teachers having below five year’s experience, between five and ten years experience and above ten years experience were categorized.

**3.5.2. Size of the Sample**

 For the present study constituted 288 secondary school teachers belonging to schools of Kerala. The sampling technique used is stratified-random sampling. The sample consisted of the following categories.

* 1. Male teachers – Female teachers
	2. Urban teachers – Rural teachers
	3. Government school teachers – Aided School teachers- Unaided school teachers
	4. Teachers with below 5 years experience- Teachers with between 5 and 10 years experience- Teachers with above 10 years experience.

**3.6 DATA COLLECTION PROCEDURE, SCORING AND CONSOLIDATION OF DATA**

**a) Data Collection Procedure**

 After the selection of required sample by stratified-random sampling technique, the investigator approached heads of the selected schools and sought permission to collect data from teachers of their institutions. Then the tools on Teacher Efficacy & Teachers’ self concept were presented to each teachers along with space for marking responses. Adequate directions were given to respond to each tool.

**b) Scoring and Consolidation of Data**

 All the response sheets were scored as per the scoring scheme of the scale prepared. The incomplete data sheets were removed and the scoring is done as follows.

 Scoring of Teacher Efficacy Scale was done by giving scores 5, 4, 3, 2 and 1 respectively was given for the responses; strongly agree, agree, undecided, disagree and strongly disagree for positive items. The negative items were scored in the reverse order.

 Scoring of Self Concept Scale for teachers was done by giving scores 5, 4, 3, 2 and 1 respectively for the responses; strongly agree, agree, undecided, disagree and strongly disagree. All statements are positive in this tool.

**3.7 STATISTICAL TECHNIQUES USED FOR ANALYSIS**

 The objectives and hypotheses of the present study demand the use of following statistical techniques. The entire statistical processing was done through computer.

**3.7.1 Statistical Techniques Used for Preliminary Analysis**

 The investigator used the statistical techniques like

* 1. Measures of central tendency-Mean, Media and Mode.
	2. Measures of Standard Deviation
	3. Measures of Skewness, and
	4. Measures of Kurtosis

 **3.7.2 Classification Techniques**

 The conventional procedure of ‘σ’ distance from the Mean was employed for classifying Self Concept scores. Subjects whose scores were M+1σ and above were treated as Low group, and those below M-1σ were treated as High group. Those subjects having scores between the cut off points were considered as Average group.

**3.7.3 One Way Analysis of Variance (ANOVA)**

 The analysis of variance is a method for dividing the variation observed in experimental data into different parts, each part assignable to a known source, cause or factor.

 In its simplest form of the analysis of variance is used to test the significance of the differences between the means of a number of different populations. The analysis variance may also be used in the analysis of data resulting from experiments which involve more than one basis of classification (Ferguson, 1971).

 In One-Way Analysis of Variance the relationship between one independent variable is examined (Best, 2001). A model of ANOVA is presented analysis of variance for One-Way Classification.

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **Source of Variation**  | **Degrees of Freedom**  | **Sum of Squares**  | **Mean Squares**  | **Variation Ration of F** |
| Between samples  | C-1 | SSC | MSC | MSC/MSE |
| With in samples  | n-c | SSE | MSE |
| **Total**  | **n-1** | **SST** |  |  |

*SST- Total Sum of Squares of Variation*

*SSC – Sum of Squares Between Samples (columns)*

*SSE- Sum of Squares Within Samples (Rows)*

*MSC – Mean Sum of Squares Between Samples (SSC/C-1)*

*MSE- Mean Sum of Squares Within Samples (SSE/n-c)*

**3.7.4 Mean Difference Analysis**

 Mean difference analysis was done for the investigation of follow up analysis in independent variable- self-concept and dependent variable- Teacher Efficacy.

 For this purpose the Mean and Standard Deviation of Self Concept and Teacher Efficacy of High Self Concept Group, Average Self Concept Group and Low Self Concept Group were subjected to the two- tailed test of significance of difference. The formula was,

 Critical Ratio = t = 

 M1 = Mean of first group

 M2 = Mean of second group

 σ1 = Standard deviation of first group

 σ2 = Standard deviation of second group

 N1 = Size of first group

 N2 = Size of second group

 The difference is said to be significant at 0.0.5 or 0.01 level of significance depending on whether critical ratio exceeds 1.96 or 2.58 respectively.

 Since SPSS software (Statistical Package for the Social Science) was available the analysis was done by utilizing this.

 The results obtained is presented in Chapter IV.

ANALYSIS

 This chapter deals with the analysis of data obtained data analysis embraces a whole range of activities of both the qualitative and quantitative type. It is an ongoing cyclical process integrated into all faces of research.

 “Analysis is a systematic process of selecting, categorizing, comparing, synthesizing and interpreting to provide explanations of the single phenomenon of interest” (Mac Millan and Schumacher, 1998). The result obtained from the analysis is presented in to two headings along with discussion.

4.1 PRELIMINARY ANALYSIS

4.2 MAJOR ANALYSIS

**4.1 PRELIMINARY ANALYSIS**

 As a first step analysis the investigator calculated the important statistical consonants of the scores on the variables under the study. The Mean, Median, Mode, Standard Deviation, Skewness and Kurtosis were calculated for the total sample and subsamples and presented in the following tables.

**TABLE 2**

**Statistical Components of**

**the Two Select Variable for the Total Sample**

|  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- |
| **Sl. No.** | **Variables** | **Mean** | **Median** | **Mode** | **SD** | **Skewness** | **Kurtosis** |
| 1. | Self Concept  | 27.64 | 26 | 22.72 | 11.36 | 1.08 | 2.08 |
| 2. | Teacher Efficacy  | 190.04 | 190 | 189.92 | 16.32 | -0.12 | -0.58 |

**Discussion**

 To know the nature of distribution, the important statistical consonants of the selected variables for the total were analyzed. It is found that the measures of Central Tendency viz., Mean, Median and Mode are almost equal for the self concept. The skewness is 1.08, which shows that the distribution is positively skewed. The value of kurtosis is 2.08, which suggests that the distribution is slightly platikurtic. This indicates that the distribution of the scores approximate closely what is expected for a normal curve and the variable can be considered to be normally distributed.

 In the case of Teacher Efficacy, the value of Mean, Median and Mode are almost equal. The result obtained is presented in Table 2 the obtained value of skewness is –0.12, which shows that the distribution is negatively skewned. The value of kurtosis is –0.58, which suggests that the distribution is slightly leptokurtic. This indicates that the distribution of scores approximate closely what is expected a normal curve and variable can be considered to be a normally distributed.

**TABLE 3**

**Statistical Consonants of**

**the Two Select Variables for Male Subsample**

|  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- |
| **Sl. No.** | **Variables** | **Mean** | **Median** | **Mode** | **S.D.** | **Skewness** | **Kurtosis** |
| 1. | Self Concept  | 27.56 | 26 | 22.88 | 11.50 | 0.97 | 1.17 |
| 2. | Teacher Efficacy  | 187.41 | 188.50 | 190.68 | 14.99 | 0.02 | 0.09 |

**Discussion**

 To understand the nature of distribution, the important statistical consonants of the selected variables for the male subsample were analyzed. It is found that the measures of Central Tendency viz., Mean, Median and Mode are almost equal for the self concept. The skewness is 0.97, which shows that the distribution is positively skewed. The value of kurtosis is 1.17, which suggests that the distribution is slightly platikurtic. This indicates that the distribution of the scores approximate closely what is expected for a normal curve and the variable can be considered to be normally distributed.

 In the case of Teacher Efficacy, the value of Mean, Median and Mode are almost equal. The result obtained is presented in Table 3. The obtained value of skewness is 0.02, which shows that the distribution is positively skewned. The value of kurtosis is 0.09, which suggests that the distribution is slightly leptokurtic. This indicates that the distribution of scores approximate closely what is expected a normal curve and variable can be considered to be a normally distributed.

**TABLE 4**

**Statistical Consonants of**

**the Two Select Variables for Female Subsample**

|  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- |
| **Sl. No.** | **Variables** | **Mean** | **Median** | **Mode** | **S.D.** | **Skewness** | **Kurtosis** |
| 1. | Self Concept  | 27.69 | 26.5 | 24.12 | 11.31 | 1.17 | 2.78 |
| 2. | Teacher Efficacy  | 191.71 | 192 | 192.58 | 16.95 | -0.24 | -0.78 |

**Discussion**

 To understand the nature of distribution, the important statistical consonants of the selected variables for the female subsample were analyzed. It is found that the measures of Central Tendency viz., Mean, Median and Mode are almost equal for the self concept. The skewness is 1.17, which shows that he distribution is positively skewed. The value of kurtosis is 2.78, which suggests that the distribution is slightly platikurtic. This indicates that the distribution of the scores approximate closely what is expected for a normal curve and the variable can be considered to be normally distributed.

 In the case of Teacher Efficacy, the value of Mean, Median and Mode are almost equal. The result obtained is presented in Table 4. The obtained value of skewness is –0.24, which shows that he distribution is negatively skewed. The value of kurtosis is –0.78, which suggests that the distribution is slightly leptokurtic. This indicates that the distribution of scores approximate closely what is expected a normal curve and variable can be considered to be a normally distributed.

**TABLE 5**

**Statistical Consonants of**

**the Two Selected Variables for Urban Subsample**

|  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- |
| **Sl. No.** | **Variables** | **Mean** | **Median** | **Mode** | **S.D.** | **Skewness** | **Kurtosis** |
| 1. | Self Concept  | 26.74 | 26 | 24.52 | 12.31 | 1.08 | 1.63 |
| 2. | Teacher Efficacy  | 190.01 | 190.05 | 191.48 | 16.11 | -0.09 | -1.08 |

**Discussion**

 To understand the nature of distribution, the important statistical consonants of the selected variables for the urban subsample were analyzed. It is found that the measures of Central Tendency viz., Mean, Median and Mode are almost equal for the self concept. The skewness is 1.08, which shows that the distribution is positively skewed. The value of kurtosis is 1.63, which suggests that the distribution is slightly platikurtic. This indicates that the distribution of the scores approximate closely what is expected for a normal curve and the variable can be considered to be normally distributed.

 In the case of Teacher Efficacy, the value of Mean, Median and Mode are almost equal. The result obtained is presented in Table 5. The obtained value of skewness is –0.09, which shows that the distribution is negatively skewed. The value of kurtosis is –1.08, which suggests that the distribution is slightly leptokurtic. This indicates that the distribution of scores approximate closely what is expected for a normal curve and variable can be considered to be a normally distributed.

**TABLE 6**

**Statistical Consonants of**

**the Two Selected Variables for Rural Subsample**

|  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- |
| **Sl. No.** | **Variables** | **Mean** | **Median** | **Mode** | **S.D.** | **Skewness** | **Kurtosis** |
| 1. | Self Concept  | 28.1 | 27 | 24.5 | 10.84 | 1.13 | 2.53 |
| 2. | Teacher Efficacy  | 190.05 | 190 | 189.9 | 16.47 | -0.13 | -0.34 |

**Discussion**

 To understand the nature of distribution, the important statistical consonants of the selected variables for the rural subsample were analyzed. It is found that the measures of Central Tendency viz., Mean, Median and Mode are almost equal for the self concept. The skewness is 1.13, which shows that the distribution is positively skewed. The value of kurtosis is 2.53, which suggests that the distribution is slightly platikurtic. This indicates that the distribution of the scores approximate closely what is expected for a normal curve and the variable can be considered to be normally distributed.

 In the case of Teacher Efficacy, the value of Mean, Median and Mode are almost equal. The result obtained is presented in Table 6. The obtained value of skewness is –0.13, which shows that the distribution is negatively skewed. The value of kurtosis is –0.34, which suggests that the distribution is slightly leptokurtic. This indicates that the distribution of scores approximate closely what is expected a normal curve and variable can be considered to be a normally distributed.

**TABLE 7**

**Statistical Consonants of**

**the Two Selected Variables for Government Subsample**

|  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- |
| **Sl. No.** | **Variables** | **Mean** | **Median** | **Mode** | **S.D.** | **Skewness** | **Kurtosis** |
| 1. | Self Concept  | 28.2 | 27 | 24.6 | 12.26 | 0.96 | 2.16 |
| 2. | Teacher Efficacy  | 194.86 | 193 | 189.28 | 15.29 | -0.05 | -0.79 |

**Discussion**

 To know the nature of distribution, the important statistical consonants of the selected variables for the government subsample were analyzed. It is found that the measures of Central Tendency viz., Mean, Median and Mode are almost equal for the self concept. The skewness is 0.96, which shows that the distribution is positively skewed. The value of kurtosis is 2.16, which suggests that the distribution is slightly platikurtic. This indicates that the distribution of the scores approximate closely what is expected for a normal curve and the variable can be considered to be normally distributed.

 In the case of Teacher Efficacy, the value of Mean, Median and Mode are almost equal. The result obtained is presented in Table 7. The obtained value of skewness is –0.05, which shows that the distribution is negatively skewed. The value of kurtosis is –0.79, which suggests that the distribution is slightly leptokurtic. This indicates that the distribution of scores approximate closely what is expected a normal curve and variable can be considered to be a normally distributed.

**TABLE 8**

**Statistical Consonants of**

**the Two Selected Variables for Aided Subsample**

|  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- |
| **Sl. No.** | **Variables** | **Mean** | **Median** | **Mode** | **S.D.** | **Skewness** | **Kurtosis** |
| 1. | Self Concept  | 27.03 | 26 | 23.94 | 11.08 | 1.31 | 2.5 |
| 2. | Teacher Efficacy  | 186.59 | 187 | 187.82 | 16.98 | -0.04 | -0.63 |

**Discussion**

 To understand the nature of distribution, the important statistical consonants of the selected variables for the aided subsample were analyzed. It is found that the measures of Central Tendency viz., Mean, Median and Mode are almost equal for the self concept. The skewness is 1.31, which shows that the distribution is positively skewed. The value of kurtosis is 2.50, which suggests that the distribution is slightly platikurtic. This indicates that the distribution of the scores approximate closely what is expected for a normal curve and the variable can be considered to be normally distributed.

 In the case of Teacher Efficacy, the value of Mean, Median and Mode are almost equal. The result obtained is presented in Table 8. The obtained value of skewness is –0.04, which shows that the distribution is negatively skewed. The value of kurtosis is –0.63, which suggests that the distribution is slightly leptokurtic. This indicates that the distribution of scores approximate closely what is expected a normal curve and variable can be considered to be a normally distributed.

**TABLE 9**

**Statistical Consonants of**

**the Two Selected Variables for Unaided Subsample**

|  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- |
| **Sl. No.** | **Variables** | **Mean** | **Median** | **Mode** | **S.D.** | **Skewness** | **Kurtosis** |
| 1. | Self Concept  | 28.39 | 27 | 24.22 | 10.07 | 0.51 | -0.07 |
| 2. | Teacher Efficacy  | 190.22 | 192 | 195.56 | 13.45 | -0.26 | -0.87 |

**Discussion**

 To know the nature of distribution, the important statistical consonants of the selected variables for the unaided subsample were analyzed. It is found that the measures of Central Tendency viz., Mean, Median and Mode are almost equal for the self concept. The skewness is 0.51, which shows that the distribution is positively skewed. The value of kurtosis is –0.07, which suggests that the distribution is slightly leptokurtic. This indicates that the distribution of the scores approximate closely what is expected for a normal curve and the variable can be considered to be normally distributed.

 In the case of Teacher Efficacy, the value of Mean, Median and Mode are almost equal. The result obtained is presented in Table 9. The obtained value of skewness is –0.26, which shows that the distribution is negatively skewed. The value of kurtosis is –0.87, which suggests that the distribution is slightly leptokurtic. This indicates that the distribution of scores approximate closely what is expected a normal curve and variable can be considered to be a normally distributed.

**TABLE 10**

**Statistical Consonants of the**

**Two Selected Variables for the Experience Below 5 Years Subsample**

|  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- |
| **Sl. No.** | **Variables** | **Mean** | **Median** | **Mode** | **S.D.** | **Skewness** | **Kurtosis** |
| 1. | Self Concept  | 27.51 | 26 | 22.98 | 11.8 | 0.72 | 0.30 |
| 2. | Teacher Efficacy  | 187.94 | 189 | 191.12 | 14.14 | -0.06 | -0.64 |

**Discussion**

 To know the nature of distribution, the important statistical consonants of the selected variables for the teaching experience below 5 years subsample were analyzed. It is found that the measures of Central Tendency viz., Mean, Median and Mode are almost equal for the self concept. The skewness is 0.72, which shows that the distribution is positively skewed. The value of kurtosis is 0.30, which suggests that the distribution is slightly platikurtic. This indicates that the distribution of the scores approximate closely what is expected for a normal curve and the variable can be considered to be normally distributed.

 In the case of Teacher Efficacy, the value of Mean, Median and Mode are almost equal. The result obtained is presented in Table 10. The obtained value of skewness is –0.06, which shows that the distribution is negatively skewed. The value of kurtosis is –0.64, which suggests that the distribution is slightly leptokurtic. This indicates that the distribution of scores approximate closely what is expected a normal curve and variable can be considered to be a normally distributed.

**TABLE 11**

**Statistical Consonants of the Two Selected Variables**

**for the Teaching Experience between 5 and 10 years Subsample**

|  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- |
| **Sl. No.** | **Variables** | **Mean** | **Median** | **Mode** | **S.D.** | **Skewness** | **Kurtosis** |
| 1. | Self Concept  | 26.22 | 26 | 25.56 | 8.09 | 0.52 | -0.15 |
| 2. | Teacher Efficacy  | 188.75 | 188 | 186.5 | 13.11 | 0.09 | -0.50 |

**Discussion**

 To understand the nature of distribution, the important statistical consonants of the selected variables for the teaching experience between 5 and 10 years subsample were analyzed. It is found that the measures of Central Tendency viz., Mean, Median and Mode are almost equal for the self concept. The skewness is 0.52, which shows that the distribution is positively skewed. The value of kurtosis is -0.15, which suggests that the distribution is slightly leptokurtic. This indicates that the distribution of the scores approximate closely what is expected for a normal curve and the variable can be considered to be normally distributed.

 In the case of Teacher Efficacy, the value of Mean, Median and Mode are almost equal. The result obtained is presented in Table 11. The obtained value of skewness is 0.09, which shows that the distribution is positively skewed. The value of kurtosis is –0.50, which suggests that the distribution is slightly leptokurtic. This indicates that the distribution of scores approximate closely what is expected a normal curve and variable can be considered to be a normally distributed.

**TABLE 12**

**Statistical Consonants of the Two Selected**

**Variables for the Teaching Experience Above 10 years Subsample**

|  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- |
| **Sl. No.** | **Variables** | **Mean** | **Median** | **Mode** | **S.D.** | **Skewness** | **Kurtosis** |
| 1. | Self Concept  | 28.2 | 27 | 24.6 | 12.25 | 1.13 | 2.11 |
| 2. | Teacher Efficacy  | 191.07 | 192 | 193.86 | 17.85 | -0.23 | -0.70 |

**Discussion**

 To know the nature of distribution, the important statistical consonants of the selected variables for the teaching experience above 10 years subsample were analyzed. It is found that the measures of Central Tendency viz., Mean, Median and Mode are almost equal for the self concept. The skewness is 1.13, which shows that the distribution is positively skewed. The value of kurtosis is 2.11, which suggests that the distribution is slightly platikurtic. This indicates that the distribution of the scores approximate closely what is expected for a normal curve and the variable can be considered to be normally distributed.

 In the case of Teacher Efficacy, the value of Mean, Median and Mode are almost equal. The result obtained is presented in Table 12. The obtained value of skewness is –0.23, which shows that the distribution is negatively skewed. The value of kurtosis is –0.70, which suggests that the distribution is slightly leptokurtic. This indicates that the distribution of scores approximate closely what is expected a normal curve and variable can be considered to be a normally distributed.

**4.2 MAJOR ANALYSIS**

 In order to find out the effect of self concept on Teacher Efficacy of secondary school teachers, one-way analysis of variance is employed. For employing Analysis of variance, it demands satisfaction of some basic assumption, which are

1. The distribution of the dependent variable in the population from which the samples are dawn is normal
2. The variances in the population from which the samples are drawn are equal

 The preliminary analysis shows that the variables are following almost the normal distribution. It assumed that there exists homogeneity of variance since the sample is large (N=288). The basic assumptions for employing ANOVA were employed (Ferguson, 1971).

**4.2.1 Classification Sample Based on Independent Variable**

 On the basis of Self concept scores the whole sample was classified into three groups; viz., High Self concept group, Average Self concept Group and Low Self concept Group. Subjects having scores on Self concept survey, one standard deviation below the mean were treated as groups having High Self concept Groups (HSG). Those who have scores one standard deviation above the mean were treated as group having Low Self concept Groups (LSG) and subjects having scores between mean plus one standard deviation and mean minus one standard deviation were considered as groups having Average Self concept Group (ASG).

 In the present study the mean score of self concept for the total sample is 27.639 and standard deviation is 11.36. Therefore subjects having score 16 and below (m-1σ) were considered as having High Self concept Group and those score 39 and above (M+1σ) were considered as having Low Self concept Group. Subjects who score come between 17 and 38 were considered as having Average Self concept Group. The details of number of case lies in High, Average and Low Self concept Group for Total sample, Male teachers, Female teachers, Urban teachers, Rural teachers, Government teachers, Aided teachers, Unaided teachers, Teachers who experience of below 5, between 5 and 10, and Above 10 are presented in Table 13.

**TABLE 13**

**Details of Number of Cases Lies in the Three**

**Different Self Concept Group for Total and Relevant Subsamples**

|  |  |  |  |
| --- | --- | --- | --- |
| **Samples** | **No. of Cases of High self Concept Group** | **No. of Cases of Average Self Concept Group** | **No. of Cases of Law Self Concept Group** |
| Total  | 41 | 202 | 45 |
| Male  | 17 | 77 | 18 |
| Female | 24 | 125 | 27 |
| Urban  | 20 | 62 | 16 |
| Rural  | 21 | 140 | 29 |
| Government  | 15 | 68 | 19 |
| Aided | 20 | 105 | 20 |
| Unaided  | 6 | 29 | 6 |
| Below 10 | 7 | 31 | 9 |
| Between 5 and 10 | 7 | 53 | 5 |
| Above 10 | 27 | 118 | 31 |

**4.2.2 Investigation of Effect of Select Concept on Teacher Efficacy**

 In the present study, One Way Analysis of Variance was employed. By this effect of one independent variable on dependent variable was studied for total sample Gender, Locale, Type of Management and Experience. In one way ANOVA, three levels of Self Concept (High Self Concept, Average Self Concept and Low Self Concept) were made use of.

 The whole computation were done by using computer software statistical package for the Social Science (SPSS). The programme for unequal number was used for analysis due to unequal number of cases in the cells.

**4.2.3 Effect of Self Concept on Teacher Efficacy for Total Sample**

 As the major analysis, One-Way ANOVA is employed for Total sample and subsample to find the effect of self concept on Teacher Efficacy of Secondary School Teachers of Kerala.

 To study the extend of effect of self concept on Teacher Efficacy, One Way ANOVA was used. By this technique, the sum of squares, their degrees of freedom, the mean squares of variance and corresponding F ratio were obtained. In order to ascertain the significance, tabled ratio is taken from table.

 To investigate the group difference in mean scores of Teacher Efficacy among three different self concept group for total sample and subsamples, follow-up analysis were employed.

 As a part of follow up analysis mean and standard deviation of Teacher Efficacy of Total sample, Female, Rural, Government, Aided and Above 10 years experienced teachers were subjected to the two-tailed test of significance of difference.

 The result obtained is presented for total sample in table 14.

**TABLE 14**

**Data and Results of One-Way**

**ANOVA for Teacher Efficacy by Self-Concept for Total Sample**

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| **Source of Variation** | **Sum of Squares (SS)** | **Degrees of Freedom (df)** | **Mean Squares (MS)** | **F-ratio** | **Level of significance (LS)** |
| Between groups | 3086.221 | 2 | 1543.11 | 5.994061 | 0.01 |
| Within groups  | 73370.36 | 285 | 257.4398 |
| **Total** | **76456.581** | **287** |  |  |  |

**Discussion**

 The obtained value for the effect of Self Concept on Teacher Efficacy for the total sample is 5.994061, is more than the Table value 4.61 which is significant at 0.01 level of significance. From the table it was found that the effect of self concept on Teacher Efficacy for total sample have significant effect.

**4.2.3.1 *Difference in Mean Scores of Teacher Efficacy Among Three Different Self Concept Group for Total Sample***

 The mean scores of Teacher Efficacy of three different self concept groups taken in pairs were compared. For this purpose the mean ad standard deviation of Teacher Efficacy of Total sample, Female, Rural, Government, Aided, and Above 10 years experienced teachers samples were subjected to the two-tailed test of significance of difference.

 The data and results of the t-test between the mean scores of Teacher Efficacy among three different self concept groups for total sample are given in Table 15

# TABLE 15

**Data and Results of t-test Between the Mean Scores**

**of Teacher Efficacy Among Three Self Concept Group for Total Sample**

|  |  |  |  |
| --- | --- | --- | --- |
|  | **Teacher Efficacy** | **t value** | **Level of Significance** |
| High Self Concept Group | M1 | 193.878 | 1.042 | NS |
| σ1 | 17.128 |
| N1 | 41 |
| Average Self Concept Group | M2 | 190.866 |
| σ2 | 15.554 |
| N2 | 202 |
| High Self Concept Group | M1 | 193.878 | 2.984 | 0.01 |
| σ1 | 17.128 |
| N1 | 41 |
| Low Self Concept Group | M2 | 182.822 |
| σ2 | 17.194 |
| N2 | 45 |
| Average Self Concept Group | M1 | 190.866 | 2.886 | 0.01 |
| σ1 | 15.554 |
| N1 | 202 |
| Low Self Concept Group | M2 | 182.822 |
| σ2 | 17.194 |
| N2 | 45 |

## Discussion

 The mean scores of Teacher Efficacy of different Self Concept Groups taken in pairs of the total sample were compared.

 The t-value obtained for High Self Concept Group and Average Self Concept Group is 1.042 which reveals that these group is identified with their Teacher Efficacy, which is not significant at 0.01 level or even at 0.05 level of significance.

 The t-value obtained for High Self Concept Group and Low Self Concept group is 2.984. The t-value obtained for Average Self Concept Group and Low Self Concept Group is 2.886. It was found that these paired groups were significant at 0.01 level of significance, which reveals that these paired groups were not identified with regard to their Teacher Efficacy.

**4.2.4 Effect of Self Concept on Teacher Efficacy for the Male Sample**

 To study the extent of effect of Self Concept on Teacher Efficacy, One-way ANOVA was used.

 The data and results of One-Way ANOVA of Teacher Efficacy for male samples are given in Table 16

**TABLE 16**

**Data and Results of One-Way**

**ANOVA for Teacher Efficacy by Self Concept for Male Sample**

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| **Source of Variation** | **Sum of Squares (SS)** | **Degrees of Freedom (df)** | **Mean Squares (MS)** | **F-ratio** | **Level of significance (LS)** |
| Between groups | 841.8999 | 2 | 420.95 | 1.90426 | NS |
| Within groups  | 24095.21 | 109 | 221.0569 |
| **Total** | **24937.109** | **111** |  |  |  |

**Discussion**

 The obtained value for the effect of Self Concept on Teacher Efficacy is 1.90426 is less than the table value 3.09 which is not significant at 0.01 level or even at 0.05 level of significance. Therefore the effect of self concept on Teacher Efficacy for the Males have not significant effect.

**4.2.5 Effect of Self Concept on Teacher Efficacy for the Female Sample**

 Data and results of effect of Self Concept on Teacher Efficacy for Female sample are given in Table 17.

**TABLE 17**

**Data and Results of One-Way ANOVA**

**for Teacher Efficacy by Self Concept for Female Sample**

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| **Source of Variation** | **Sum of Squares (SS)** | **Degrees of Freedom (df)** | **Mean Squares (MS)** | **F-ratio** | **Level of significance (LS)** |
| Between groups | 2654.948 | 2 | 1327.474 | 4.824718 | 0.01 |
| Within groups  | 47599.27 | 173 | 275.1403 |
| **Total** | **50254.218** | **175** |  |  |  |

**Discussion**

 The obtained value for the effect of Self Concept on Teacher Efficacy for the Female sample is 4.824718 is more than the table value 4.73 which is significant at 0.01 level of significance. Therefore it is found that self concept have significant effect on Teacher Efficacy for the Female sample.

**4.2.5.1 *Difference in Mean Scores of Teacher Efficacy Among the Three Self Concept Groups for Female Sample***

 The data and results of t-test between the mean scores of Teacher Efficacy among three different Self Concept Groups for Female sample are given in Table 18

# TABLE 18

**Data and Results of t-test Between the Mean Scores of**

**Teacher Efficacy Among Three Self Concept Group for Female Sample**

|  |  |  |  |
| --- | --- | --- | --- |
|  | **Teacher Efficacy** | **t value** | **Level of Significance** |
| High Self Concept Group | M1 | 194.625 | 0.378 | NS |
| σ1 | 18.408 |
| N1 | 24 |
| Average Self Concept Group | M2 | 193.104 |
| σ2 | 16.134 |
| N2 | 125 |
| High Self Concept Group | M1 | 194.625 | 2.399 | 0.05 |
| σ1 | 18.408 |
| N1 | 24 |
| Low Self Concept Group | M2 | 182.667 |
| σ2 | 17.016 |
| N2 | 27 |
| Average Self Concept Group | M1 | 193.104 | 2.916 | 0.01 |
| σ1 | 16.134 |
| N1 | 125 |
| Low Self Concept Group | M2 | 182.667 |
| σ2 | 17.016 |
| N2 | 27 |

## Discussion

 The mean scores of Teacher Efficacy of different Self Concept Groups taken in pairs of the female sample were compared.

 The t-value obtained for High Self Concept Group and Average Self Concept Group is 0.378 is not significant at 0.01 level or even at 0.05 level of significance which reveals that these group is identified with their Teacher Efficacy.

 The t-value obtained for High Self Concept Group and Low Self Concept group is 2.399 which is significant at 0.05 level of significance. This indicates these groups differ their Teacher Efficacy.

 The t value obtained for Average Self Concept group and Low Self Concept Group is 2.916 which is significant at 0.01 level of significance. This indicates that these groups differ in their Teacher Efficacy.

**4.2.6 Effect of Self Concept on Teacher Efficacy for Urban Sample**

 Data and Results of the Effect of Self Concept on Teacher Efficacy for Urban Sample is given in Table 19.

**TABLE 19**

**Data and Results of One-way ANOVA**

**for Teacher Efficacy by Self Concept for Urban Sample**

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| **Source of Variation** | **Sum of Squares (SS)** | **Degrees of Freedom (df)** | **Mean Squares (MS)** | **F-ratio** | **Level of significance (LS)** |
| Between groups | 1397.401 | 2 | 698.7006 | 2.790855 | NS |
| Within groups  | 23783.59 | 95 | 250.3536 |
| **Total** | **25180.991** | **97** |  |  |  |

**Discussion**

 The obtained value for the effect of Self concept on Teacher Efficacy is 2.790855 is less than the table value 3.11 which is not significant at 0.01 level or even at 0.05 level of significance. Therefore the effect of self concept on Teacher Efficacy for Urban school sample have no significant effect.

**4.2.7 Effect of Self Concept on Teacher Efficacy for Rural Sample**

 Data and results of the effect of self concept on Teacher Efficacy for Rural Sample is given in Table 20.

**TABLE 20**

**Data and Results of One-way ANOVA**

**for Teacher Efficacy by Self Concept for Rural Sample**

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| **Source of Variation** | **Sum of Squares (SS)** | **Degrees of Freedom (df)** | **Mean Squares (MS)** | **F-ratio** | **Level of significance (LS)** |
| Between groups | 2547.98 | 2 | 1273.99 | 4.889152 | 0.01 |
| Within groups  | 48727.49 | 187 | 260.5748 |
| **Total** | **51275.47** | **189** |  |  |  |

**Discussion**

 The obtained value for the effect of self concept on Teacher Efficacy for Rural sample is 4.889152 is more than the table value 4.73 which is significant at 0.01 level of significance. Therefore the effect of Self Concept on Teacher Efficacy for Rural sample have significant effect.

**4.2.7.1 *Difference in Mean Scores of Teacher Efficacy Among the Three Self Concept Groups for Rural Sample***

 The data and results of t-test between the mean scores of Teacher Efficacy among three different Self Concept Groups for Rural sample are given in Table 21.

# TABLE 21

**Data and Results of t-test Between the Mean Scores**

**of Teacher Efficacy Among Three Self Concept Group for Rural Sample**

|  |  |  |  |
| --- | --- | --- | --- |
|  | **Teacher Efficacy** | **t value** | **Level of Significance** |
| High Self Concept Group | M1 | 197.81 | 1.937 | NS |
| σ1 | 16.798 |
| N1 | 21 |
| Average Self Concept Group | M2 | 190.264 |
| σ2 | 15.588 |
| N2 | 140 |
| High Self Concept Group | M1 | 197.81 | 2.885 | 0.01 |
| σ1 | 16.798 |
| N1 | 21 |
| Low Self Concept Group | M2 | 183.414 |
| σ2 | 18.234 |
| N2 | 29 |
| Average Self Concept Group | M1 | 190.264 | 1.88 | NS |
| σ1 | 15.588 |
| N1 | 140 |
| Low Self Concept Group | M2 | 183.414 |
| σ2 | 18.234 |
| N2 | 29 |

## Discussion

 The mean scores of Teacher Efficacy of different Self Concept Groups taken in pairs of the Rural sample were compared.

 The t-value obtained for High Self Concept Group and Average Self Concept Group is 1.937 which is not significant at 0.01 level or even at 0.05 level of significance which reveals that these group is identified with their Teacher Efficacy.

 The t-value obtained for High Self Concept Group and Low Self Concept group is 2.885 which is significant at 0.01 level of significance. This indicates these groups differ their Teacher Efficacy.

 The t-value obtained for Average Self Concept Group and Low self Concept Group is 1.88, which is not significant at 0.01 level or even at 0.05 level of significance which reveals that these two groups are identified with their Teacher Efficacy.

**4.2.8 Effect of Self Concept on Teacher Efficacy for Government Sample**

 Data and results of effect of self concept on Teacher Efficacy for the Government Sample is given in Table 22.

**TABLE 22**

**Data and Results of One-Way ANOVA**

**for Teacher Efficacy by Self Concept for Government Sample**

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| **Source of Variation** | **Sum of Squares (SS)** | **Degrees of Freedom (df)** | **Mean Squares (MS)** | **F-ratio** | **Level of significance (LS)** |
| Between groups | 2340.686 | 2 | 1170.343 | 5.444379 | 0.01 |
| Within groups  | 21281.39 | 99 | 214.9636 |
| **Total** | **23622.07** | **101** |  |  |  |

**Discussion**

 The obtained value for the effect of Self Concept on Teacher Efficacy is 5.444379 is more than the table value 4.83, which is significant at 0.01 level of significance. Therefore the effect of Self Concept on Teacher Efficacy for Government sample have significant effect.

**4.2.8.1 *Difference in Mean Scores of Teacher Efficacy Among the Three Self Concept Groups for Government Sample***

 The data and results of t-test between the mean scores of Teacher Efficacy among three different Self Concept Groups for Government sample are given in Table 23.

# TABLE 23

**Data and Results of t-test Between the Mean Scores of Teacher**

**Efficacy Among Three Self Concept Group for Government Sample**

|  |  |  |  |
| --- | --- | --- | --- |
|  | **Teacher Efficacy** | **t value** | **Level of Significance** |
| High Self Concept Group | M1 | 204.667 | 2.726 | 0.01 |
| σ1 | 12.687 |
| N1 | 15 |
| Average Self Concept Group | M2 | 194.618 |
| σ2 | 13.955 |
| N2 | 68 |
| High Self Concept Group | M1 | 204.667 | 3.138 | 0.01 |
| σ1 | 12.687 |
| N1 | 15 |
| Low Self Concept Group | M2 | 188 |
| σ2 | 18.227 |
| N2 | 19 |
| Average Self Concept Group | M1 | 194.618 | 1.467 | NS |
| σ1 | 13.955 |
| N1 | 68 |
| Low Self Concept Group | M2 | 188 |
| σ2 | 18.227 |
| N2 | 19 |

## Discussion

 The mean scores of Teacher Efficacy of different Self Concept Groups taken in pairs of the Government sample were compared.

 The t-value obtained for High Self Concept Group and Average Self Concept Group is 2.726 which is significant at 0.01 level of significance. This indicates that these groups differ in their Teacher Efficacy.

 The t-value obtained for High Self Concept Group and Low Self Concept group is 3.138, which is significant at 0.01 level of significance. This indicates these groups differ their Teacher Efficacy.

 The t-value obtained for Average Self Concept Group and Low self Concept Group is 1.467, which is not significant at 0.01 level or even at 0.05 level of significance which reveals that these two groups are identified with their Teacher Efficacy.

**4.2.9 Effect of Self Concept on Teacher Efficacy for the Aided Sample**

 Data and results of effect of Self Concept on Teacher Efficacy for the Aided sample is given in Table 24

**TABLE 24**

**Data and Results of One-Way ANOVA**

**for Teacher Efficacy by Self Concept for Aided Sample**

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| **Source of Variation** | **Sum of Squares (SS)** | **Degrees of Freedom (df)** | **Mean Squares (MS)** | **F-ratio** | **Level of significance (LS)** |
| Between groups | 2467.436 | 2 | 1233.718 | 4.487677 | 0.05 |
| Within groups  | 39037.56 | 142 | 274.9124 |
| **Total** | **41504.996** | **144** |  |  |  |

**Discussion**

 The obtained value for the effect of self concept on Teacher Efficacy for Aided sample is 4.487677 is more than the table value of 3.06, which is significant at 0.05 level of significance. Therefore the effect of Self Concept on Teacher Efficacy for aided sample have significant effect.

**4.2.9.1 *Difference in Mean Scores of Teacher Efficacy Among the Three Self Concept Groups for Aided Sample***

 The data and results of t-test between the mean scores of Teacher Efficacy among three different Self Concept Groups for Aided sample are given in Table 25

# TABLE 25

**Data and Results of t-test Between the Mean Scores**

**of Teacher Efficacy Among Three Self Concept Group for Aided Sample**

|  |  |  |  |
| --- | --- | --- | --- |
|  | **Teacher Efficacy** | **t value** | **Level of Significance** |
| High Self Concept Group | M1 | 187.05 | -0.332 | NS |
| σ1 | 17.545 |
| N1 | 20 |
| Average Self Concept Group | M2 | 188.457 |
| σ2 | 16.544 |
| N2 | 105 |
| High Self Concept Group | M1 | 187.05 | 2.028 | 0.05 |
| σ1 | 17.545 |
| N1 | 20 |
| Low Self Concept Group | M2 | 176.35 |
| σ2 | 15.769 |
| N2 | 20 |
| Average Self Concept Group | M1 | 188.457 | 3.122 | 0.01 |
| σ1 | 16.544 |
| N1 | 105 |
| Low Self Concept Group | M2 | 176.35 |
| σ2 | 15.769 |
| N2 | 20 |

**Discussion**

 The mean scores of Teacher Efficacy of different Self Concept Groups taken in pairs of the Aided sample were compared.

 The t-value obtained for High Self Concept Group and Average Self Concept Group is –0.332, which is not significant at 0.01 level or even at 0.05 level of significance, which reveals that these two groups are identified with their Teacher Efficacy

 The t-value obtained for High Self Concept Group and Low Self Concept group is 2.028, which is significant at 0.05 level of significance. This indicates these groups differ their Teacher Efficacy.

 The t-value obtained for Average Self concept Group and Low Self concept Group is 3.122 which is significant at 0.01 level of significance. This indicate that these groups differ in their Teacher Efficacy.

**4.2.10 Effect of Self Concept on Teacher Efficacy for the Unaided Sample**

 Data and results of effect of Self Concept on Teacher Efficacy for the Unaided sample is given in Table 26.

**TABLE 26**

**Data and Results of One-Way ANOVA**

**for Teacher Efficacy by Self Concept for Unaided Sample**

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| **Source of Variation** | **Sum of Squares (SS)** | **Degrees of Freedom (df)** | **Mean Squares (MS)** | **F-ratio** | **Level of significance (LS)** |
| Between groups | 40.93244 | 2 | 20.46622 | 0.108135 | NS |
| Within groups  | 7192.092 | 38 | 189.2656 |
| **Total** | **7233.0244** | **40** |  |  |  |

**Discussion**

 The obtained value for the effect of self concept on Teacher Efficacy for the unaided sample is 0.108135 is less than the table value 3.25, which is not significant at 0.01 level or even at 0.05 level of significance. This indicates that the effect of Self Concept on Teacher Efficacy have no significant effect for the Unaided sample.

**4.2.11 Effect of Self Concept on Teacher Efficacy for Below 5 years Experienced Teachers Sample**

 Data and results of effect of Self Concept on Teacher Efficacy for the Below 5 years experienced teachers sample is given in Table 27.

**TABLE 27**

**Data and Results of**

**One-Way ANOVA for Teacher Efficacy by**

**Self Concept for the Below 5 years Experienced Teachers Sample**

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| **Source of Variation** | **Sum of Squares (SS)** | **Degrees of Freedom (df)** | **Mean Squares (MS)** | **F-ratio** | **Level of significance (LS)** |
| Between groups | 466.6057 | 2 | 233.3029 | 1.17584 | NS |
| Within groups  | 8730.203 | 44 | 198.4137 |
| **Total** | **9196.8087** | **46** |  |  |  |

**Discussion**

 The obtained value for the effect of self concept on Teacher Efficacy for the below 5 year experienced teachers sample is 1.17584 is less than the table value 3.22 which is not significant at 0.01 level or even at 0.05 level of significance. Therefore the effect of self concept on Teacher Efficacy for the below 5 years experienced teachers sample have no significant effect.

**4.2.12 Effect of Self Concept on Teacher Efficacy for Between 5 and 10 years Experienced Teachers Sample**

 Data and results of effect of self concept on Teacher Efficacy for Between 5 and 10 years experienced teachers sample is given in Table 28

**TABLE 28**

**Data and Results of**

**One-Way ANOVA for Teacher Efficacy by**

**Self Concept for Between 5 and 10 years Experienced Teachers Sample**

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| **Source of Variation** | **Sum of Squares (SS)** | **Degrees of Freedom (df)** | **Mean Squares (MS)** | **F-ratio** | **Level of significance (LS)** |
| Between groups | 673.4718 | 2 | 336.7359 | 2.020952 | NS |
| Within groups  | 10330.59 | 62 | 166.6224 |
| **Total** | **11004.062** |  **64** |  |  |  |

**Discussion**

 The obtained value for the effect of Self Concept on Teacher Efficacy for between 5 and 10 years experienced teachers sample is 2.020952, which is below the table value 3.14 which is not significant at 0.01 level or even at 0.05 level of significance. Therefore the effect of self concept on Teacher Efficacy for between 5 and 10 years experienced teachers sample have no significant effect.

**4.12.13 Effect of Self Concept on Teacher Efficacy for the Above 10 Years Experienced Teachers Sample**

 Data and results of effect of self concept on teacher efficacy for the above 10 years experienced teachers sample is given Table 29.

**TABLE 29**

**Data and Results of**

**One-Way ANOVA for Teachers Efficacy by**

**Self Concept for the Above 10 Years Experienced Teachers Sample**

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| **Source of Variation** | **Sum of Squares (SS)** | **Degrees of Freedom (df)** | **Mean Squares (MS)** | **F-ratio** | **Level of significance (LS)** |
| Between groups | 2528.09 | 2 | 1264.045 | 4.108673 | 0.05 |
| Within groups  | 53223.95 | 173 | 307.6529 |
| **Total** | **55752.04** | **175** |  |  |  |

**Discussion**

 The obtained value for the Effect of Self Concept on Teacher Efficacy for the Above 10 years experienced teachers sample is 4.108673 is more than the table value 3.05 which is significant at 0.05 level of significance. Therefore the effect of self concept on Teacher Efficacy for the above 10 years experienced sample have significant effect.

**4.12.13.1 *Difference in Mean Scores of Teacher Efficacy Among the Three Self Concept Groups for Above 10 years Experienced Teachers******Sample***

 The data and results of t-test between the mean scores of Teacher Efficacy among three different Self Concept Groups for Above 10 years Experienced Teachers sample are given in Table 30.

# TABLE 30

**Data and Results of t-test Between**

**the Mean Scores of Teacher Efficacy Among Three**

**Self Concept Group for Above 10 years Experienced Teachers Sample**

|  |  |  |  |
| --- | --- | --- | --- |
|  | **Teacher Efficacy** | **t value** | **Level of Significance** |
| High Self Concept Group | M1 | 196.482 | 1.253 | NS |
| σ1 | 17.782 |
| N1 | 27 |
| Average Self Concept Group | M2 | 191.771 |
| σ2 | 16.919 |
| N2 | 118 |
| High Self Concept Group | M1 | 196.482 | 2.602 | 0.01 |
| σ1 | 17.782 |
| N1 | 27 |
| Low Self Concept Group | M2 | 183.71 |
| σ2 | 19.589 |
| N2 | 31 |
| Average Self Concept Group | M1 | 191.771 | 2.095 | 0.05 |
| σ1 | 16.919 |
| N1 | 118 |
| Low Self Concept Group | M2 | 183.71 |
| σ2 | 19.589 |
| N2 | 31 |

## Discussion

 The mean scores of Teacher Efficacy of different Self Concept Groups taken in pairs of the Above 10 years experienced teachers sample were compared.

 The t-value obtained for High Self concept Group and Average Self Concept Group is 1.253, which is not significant at 0.01 level or even at 0.05 level of significance, which reveals that these two groups are identified with their Teacher Efficacy

 The t-value obtained for High Self Concept Group and Low Self Concept group is 2.602, which is significant at 0.01 level of significance. This indicates these groups differ their Teacher Efficacy.

 The t value obtained for Average Self Concept group is 2.095 which is significant at 0.05 level of significance. This indicate that these groups differ in their Teacher Efficacy.

SUMMARY

 This chapter contains a brief account of the study, the major findings, their educational implications and suggestions for further research in this area.

**5.1 STUDY IN RETROSPECT**

 The various aspects in the different stages of the present investigation like the problem, variables, objectives, hypotheses and the methodology used are as follows:

**5.1.1 Restatement of the Problem**

 The problem of the present study was stated as “**EFFECT OF SELF CONCEPT ON TEACHER EFFICACY OF SECONDARY SCHOOL TEACHERS OF KERALA**”.

**5.1.2 VARIABLES**

 Variables selected fro the study are

**5.1.2.1 Independent Variable**

 Independent variable include in the study are self concept

**5.1.2.2 Dependent Variable**

 Teacher Efficacy as the dependent variable

**5.1.3 OBJECTIVES**

1. To find out if there exists any significant effect of self concept on teacher efficacy of secondary school teachers of Kerala.
2. To find out whether there exists any significant effect of self concept on teacher efficacy of secondary school teachers for the subsamples based on
	1. Gender
	2. Locale
	3. Type of School Management
	4. Teaching Experience

**5.1.4 HYPOTHESES**

 The hypotheses formulated for the presented study are

1. There will be a significant effect of self concept on teacher efficacy of secondary school teachers of Kerala.
2. These will be a significant effect of self concept on teacher efficacy of secondary school teachers for the relevant subsamples based on
	1. Gender
	2. Locale
	3. Type of Management
	4. Teaching Experience

 **5.1.5 Methodology**

 The methodology adopted for the present study is briefly as follows:

**5.1.5.1 Sample for the Study**

 The study was conducted on a sample of 288 secondary school teachers of six districts of Kerala state. This sample was selected by stratified sampling procedure giving due representation to factors like gender, locale, type of management of schools and teaching experience.

**5.1.5.2 Tools Used**

 The following tools were used to measure the independent variable and the dependent variable.

1. Teacher Efficacy Scale (Musthafa & Abidali, 2007)
2. Self Concept Scale for Teachers ( Pillai,1989)

**5.1.5.3 Statistical Techniques**

 The entire processing of data was done by using computer facilities. The statistical techniques used for the analysis of data were

1. Preliminary Analysis
2. Classification Techniques
3. One-Way ANOVA
4. Mean Difference Analysis

**5.2 MAJOR FINDINGS**

 The major findings of the present investigation are summarized and presented below:

**5.2.1 Effect of Self Concept on Teacher Efficacy for Total Sample and Subsamples**

 Results of the effect of self concept on Teacher Efficacy were studied for the total and relevant subsamples.

**5.2.1.1 Effect of self concept on teacher efficacy for the total sample**

 Self Concept have significant effect on Teacher Efficacy. Among the three different Self Concept Groups, High Self Concept Group and Low Self Concept Group and Average Self Concept Group and Low Self Concept Group are found differ their Teacher Efficacy. But the High Self Concept Group and Average Self Concept Group are no difference in their Teacher Efficacy.

**5.2.1.2 Effect of self concept on teacher efficacy for male sample**

 Self concept have no significant effect on Teacher Efficacy.

**5.2.1.3 Effect of self concept on teacher efficacy for female sample**

 Self concept have significant effect on Teacher Efficacy. Among the three Self concept Group High Self concept Group and Low Self concept Group and Average Self concept Group and Low Self concept Group are found differ in their Teacher Efficacy. But the High Self concept Group and Average Self concept Group are no difference in their Teacher Efficacy.

**5.2.1.4 Effect of self concept on teacher efficacy for urban sample**

 Self Concept have no significant effect on Teacher Efficacy.

**5.2.1.5 Effect of self concept on teacher efficacy on rural sample**

 Self Concept have significant effect on Teacher Efficacy. Among the three Self Concept Groups, High Self Concept Group and Low Self Concept Group is found differ their Teacher Efficacy. The High Self Concept Group and Average Self Concept Group and Low Self Concept Group are no difference in their Teacher Efficacy.

**5.2.1.6 Effect of self concept on teacher efficacy for government sample**

 Self Concept have significant effect on Teacher Efficacy. Among the three Self Concept Groups High Self Concept Group and Average Self Concept Group and High Self Concept Group and Low Self Concept Group are found differ in their Teacher Efficacy. Average Self Concept Group and Low Self Concept Group is no difference in their Teacher Efficacy.

**5.2.1.7 Effect of self concept on teacher efficacy for aided sample**

 Self concept have significant effect on Teacher Efficacy. Among the three self concept Groups High Self Concept Group and Low Self Concept Group Average Self-Concept Group and Low Self Concept Group are found differ in their Teacher Efficacy. The High Self Concept Group and Average Self Concept Group is no difference in their Teacher Efficacy.

**5.2.1.8 Effect of self concept on teacher efficacy for unaided sample**

 Self Concept have no significant effect on Teacher Efficacy.

**5.2.1.9 Effect of self concept on teacher efficacy for below 5 years experienced teachers sample**

 Self Concept have no significant effect on Teacher Efficacy.

**5.2.1.10 Effect of self concept on teacher efficacy for between 5 and 10 years experienced teachers sample**

Self Concept have no significant effect on Teacher Efficacy.

**5.2.1.11 Effect of self concept on teacher efficacy for above 10 years experienced teachers sample**

 Self Concept have significant effect on Teacher Efficacy. Among the three self concept groups High Self Concept Group and Low Self Concept Group and Average Self Concept Group and Low Self Concept Group are found differ in their Teacher Efficacy. The High Self Concept Group and Average Self Concept Group is no difference in their Teacher Efficacy.

**5.3 TENABILITY OF HYPOTHESES**

 Based on the findings the tenability of hypotheses set for the present study were examined.

 **Hypothesis 1** states that there will be a significant effect of Self concept on Teacher Efficacy of Secondary School Teachers of Kerala. The findings reveal that there have significant effect of self concept on Teacher Efficacy of Secondary School Teachers. Therefore hypothesis 1 is fully accepted.

 **Hypothesis 2(a)** states that there will be a significant effect of Self Concept on Teacher Efficacy of Secondary School Teachers for the Relevant Subsample based on Gender. The findings reveals that there is no significant effect of Self concept on Teacher Efficacy for Male subsample. The findings reveal that there have a significant effect of self concept on Teacher Efficacy for Female subsample. Therefore hypothesis 2(a) is partially accepted.

 **Hypothesis 2(b)** states that there will be a significant effect of Self concept on Teacher Efficacy of secondary school teachers for the relevant subsamples based on Locale. The findings reveal that there have no significant effect of Self concept on Teacher Efficacy for Urban sample. The findings reveal that there have a significant effect of Self concept on Teacher Efficacy for Rural subsample. Therefore hypothesis 2(b) is partially accepted.

 **Hypothesis 2(c)** states that there will be a significant effect of self concept on Teacher Efficacy of Secondary School Teachers for the relevant subsamples based on Type of Management. The findings revealed that there have significant effect of Self concept on Teacher Efficacy of Secondary School Teachers for Government subsample. The findings revealed that there have significant effect of self concept on Teacher Efficacy of Secondary School Teachers for Aided subsample. The findings revealed that there have no significant effect of Self concept on Teacher Efficacy of Secondary School Teachers for Unaided subsample. Therefore hypothesis 2(c) is partially accepted.

 **Hypothesis 2(d)** states that there will be a significant effect of self concept on Teacher Efficacy of Secondary School Teachers for the relevant subsample based on Teaching Experience. The findings reveal that there have no significant effect of Self concept on Teacher Efficacy of Secondary School Teachers for Below five years Experienced Teachers subsample. The findings revealed that there have no significant effect of Self concept on Teacher Efficacy of Secondary School Teachers for Between 5 and 10 years Experienced teachers subsample. The findings revealed that there have significant effect of self concept on Teacher Efficacy of Secondary School Teachers for Above 10 years Experienced teachers subsample. Therefore hypothesis 2(d) is partially accepted.

**5.4 EDUCATIONAL IMPLICATIONS**

 The present study showed the Effect of Self Concept on Teachers. The major findings of the study and conclusion drawn from the findings helped the investigator to frame some measures to improve the Self Concept on Teacher Efficacy of secondary school teachers. The Self Concept favourably affect the Teacher Efficacy of Teachers.

 Based on the findings, following practical methods are suggested for improving Teacher Efficacy.

1. Teachers should be made aware of importance of self concept to improve their teacher efficacy.
2. Teachers must continue to acknowledge the fact that teaching and learning is an interdependent relationship.
3. The classroom teaching made teachers aware of students strengths and weakness in managing, instructing and engaging in lessons.
4. Curriculum should be provided with opportunities to reflect on their ideas related to teaching in general as well as on their own teaching and learning experiences.

**5.5 SUGGESTION FOR FURTHER RESEARCH**

 Further research is possible in areas suggested are the following.

1. This study can be replicated in primary teachers.
2. The study can be conducted on the effect of other personality variable on teacher efficacy of teachers.
3. A study can be conducted on the comparison of Teacher Efficacy of Teachers of different occupational level.
4. A study can be conducted on the effect of some familial variables on Teacher Efficacy.
5. Relationship between Personality characteristics and teacher Efficacy of Primary, Secondary and Higher Secondary teachers.

BIBLIOGRAPHY

Atkinson, J. Berne, E., & Woodworth, R.S. (1996). *Dictionary of Psychology (4th ed.)*. Goyl Saab Publishers, Jawahar Nagar, Delhi.

Bandura, A. (1997). *Self-Efficacy: The Exercise of Control*. New York: W.H. Freeman.

Berman, P., McLaughlin, M., Bass, G., Pauly, E., & Zellman, G. (1977). Federal programs supporting educational change, Vol. VII. Factors affecting implementation and continuation (Rep. No. R- 1589/7-HEW). Santa Monica, C.A.: RAND. (ERIC Document Reproduction Service No. 140432).

Best, J.W., & Kahn, J.V. (2001). *Research in Education (7th ed.)*. New Delhi: Prentice Hall of India Ltd.

Buch, M.B. (1991). *Fourth Survey of Research in Education*. New Delhi: NCERT.

Clifford, et. al. (1956). *Introduction to Psychology*. New Delhi: McGraw Hill.

Devi, S.M. (1993). *The relationship of creativity with self concept and some selected sociological variables of standard IX pupils*. M.Ed. Dissertation, University of Calicut.

Emmer, E., & Hickman, J. (1991). *Teacher Decision making as a function of efficacy, attribution and reasoned action*, paper presented at the annual meeting of the American Educational Research Association. Boston: MA.

Feist, J., & Fiest, J.G. (2002). *Personality*. New York: McGraw Hill.

Fenwick, T.D. (1998). Managing space, energy and self: Junior High School Teachers’ experiences of classroom management. *Teaching and Teacher Education, 14*, 619-631.

Ferguson, G.A. (1971). *Statistical Analysis in Psychology and Education (3rded.)*. Tokyo: McGraw Hill Kogakusha, Ltd.

Garret, H.E. (1961). *Statistics in Psychology and Education*. Bombay: Vakil, Feffer and Simons Ltd.

Garrett, H.E. (1982). *Statistics in Psychology and Education*. Bombay: Vakil, Feffer and Simons Ltd.

Gergen, K.J. (1971). The Concept of Self. New York: Holt, Rinhart and Winston, INC.

Gibson, S., & Dembo, M.H. (1984). Teacher Efficacy: A construct validation. *Journal of Educational Psychology, 76(4)*, 569-582.

Good, C.V. (1959). *Dictionary of Education*. New York: McGraw Hill Book Company.

Gupta, L.D. (1987). *Educational Administration*. New Delhi: Oxford & IBH Publishing Co. Pvt. Ltd.

Husen, T., & Postheth Waite, T.N. (Eds.). (1985). *International Encyclopaedia of Education: Research and Studies*. New York: Pergamom Press.

Jayalatha, C. (1991). *Attitude towards teaching profession and teachers self-concept as correlates of teachers, perception of effective classroom teaching of secondary school teachers*. Unpublished M.Phil. Dissertation, University of Calicut.

Lewandowski, K. (2005). A study of the relationship of teachers self-efficacy and impact of leadership and professional development. *Journal of Psychology, 138*, 233-252.

Mohammed Nisar, T.A. (2005). *Relationship between Perceived Leadership Behaviour of Head of Institution and Job Commitment of Teachers in Secondary Schools*. Unpublished M.Ed. Dissertation, University of Calicut.

Ross, J. (1994). *Beliefs that Make a Difference: The Origins and Impact of Teacher Efficacy*. (ERIC Document Reproduction Service No. ED 379316).

Sasikumar. (2005). *Teacher commitment and teachers’ Self Concept as correlates of Job Satisfaction*. Published M.Ed. Dissertation, University of Calicut.

Sharma, B.M. (1977). *Theory of Educational Administration*. New Delhi: Commonwealth Publishers.

Sorenson, H. (1948). Psychology in Education. New York: McGraw Hill Company

Ushasree, S. (1989). Job satisfaction in relation to self regard among teachers in different age groups. *The Creative Psychologist, 1(2)*, 24-27.

Woolfolk, A. (2004). *Educational Psychology*. Singapore: Pearson Education.

Woolfolk, A.E., Rosoff, B., & Hoy, W.K. (1990). Teachers’ sense of efficacy and their believes about managing students. *Teaching and Teacher Education, 18*(ERI), 5-22.

Appendix IV

FAROOK TRAINING COLLEGE

FAROOK COLLEGE

TEACHER EFFICACY SCALE –FINAL

Dr. Mohameduni Alias Musthafa Abidali. E

Lecturer in Education M.Ed. Student

Farook Training College

SECTION A

Personal Information

1. Name :

2. Age and Sex :

3. Locale (Urban/Rural) :

4. Native District :

5. Educational Qualification :

6. Teaching Experience :

7. Subject/Subjects Taught :

8. Type of Management :

Information Regarding the Institution

1. Name of the Institution :

2. Place :

3. Locale (Urban/Rural) :

4. Type of Management :

 (Govt./Aided/Unaided)

SECTION B

You have to respond each statements in columns described below:

 A- Strongly Agree B- Agree

 C- Undecided D-Disagree

 E- Strongly Disagree

 This information use only for research purpose

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
|  |  | A | B | C | D | E |
|  | I resort methods which are suitable to the lesson. |  |  |  |  |  |
|  | I collect feedback from the students to improve teaching  |  |  |  |  |  |
|  | I take classes after much planning much preparations  |  |  |  |  |  |
|  | I ensure the participation of pupils in learning activities  |  |  |  |  |  |
|  | I make my classes more effective, I incline on teaching aids  |  |  |  |  |  |
|  | I don’t consider the mental states of students while teaching  |  |  |  |  |  |
|  | The homeworks which are assigned to the students make the learning process simple  |  |  |  |  |  |
|  | I am very affectionate to my students  |  |  |  |  |  |
|  | I keep high sincerity in my dealings to pupils  |  |  |  |  |  |
|  | I try to develop leadership qualities in the students  |  |  |  |  |  |
|  | If I have any doubts regarding the subject I clarify it with the experts  |  |  |  |  |  |
|  | I recognize the strength and weaknesses of pupils in my dealings with them  |  |  |  |  |  |
|  | I don’t scold my students for silly matters  |  |  |  |  |  |
|  | I can understand the problems of my students  |  |  |  |  |  |
|  | I help the students of poor financial background. |  |  |  |  |  |
|  | I don’t motivate students who are indifferent to studies  |  |  |  |  |  |
|  | In encourage each and every student on the basis of their abilities  |  |  |  |  |  |
|  | I take measures to improve the result than the previous year  |  |  |  |  |  |
|  | I find opportunities for the intellectual development of the students during learning process  |  |  |  |  |  |
|  | I don’t consider students opinion whenever decision into be taken in the class  |  |  |  |  |  |
|  | I get enough consideration from the society as a teacher  |  |  |  |  |  |
|  | I don’t feel any difficulties in taking extra time classes  |  |  |  |  |  |
|  | I behave as a model teacher among my students  |  |  |  |  |  |
|  | I apply creative strategies in the teaching process  |  |  |  |  |  |
|  | I utilize library to improve my teaching  |  |  |  |  |  |
|  | I utilize those opportunities which a good mastery of the subject  |  |  |  |  |  |
|  | I am not able to exhibit my talents in teaching  |  |  |  |  |  |
|  | I provide right direction to my student in any situation  |  |  |  |  |  |
|  | I don’t interfere the students affairs outside the school  |  |  |  |  |  |
|  | I don’t enquire to the parents of those students who are irregular in the class  |  |  |  |  |  |
|  | I don’t attempt the classes of other teachers when they are in leave  |  |  |  |  |  |
|  | I give special attention to the below average students also |  |  |  |  |  |
|  | I don’t disclose my students’ inabilities before others  |  |  |  |  |  |
|  | I clarify the doubts of the students even outside the classroom  |  |  |  |  |  |
|  | I complete the portions in times and make revisions  |  |  |  |  |  |
|  | My students show obedience in every matters  |  |  |  |  |  |
|  | I miss the classroom management when learning activities are provided  |  |  |  |  |  |
|  | I sometimes loose my temper  |  |  |  |  |  |
|  | I admit my ignorance before others  |  |  |  |  |  |
|  | I succeed in maintaining discipline in the classroom with effective communication.  |  |  |  |  |  |
|  | I am not hesitate to admit my fault before my pupils  |  |  |  |  |  |
|  | I can attain the curricular objectives while the new lessons are introduced  |  |  |  |  |  |
|  | I suggest measures for the students progress in PTA meetings  |  |  |  |  |  |
|  | I make use instances to clarify facts which are too confusing  |  |  |  |  |  |
|  | I make teaching to foster the social awareness  |  |  |  |  |  |

Appendix II

FAROOK TRAINING COLLEGE

FAROOK COLLEGE P.O

TEACHER EFFICACY SCALE –DRAFT

Dr. Mohameduni Alias Musthafa Abidali. E

Lecturer in Education M.Ed. Student

Farook Training College

SECTION A

Personal Information

1. Name :

2. Age and Sex :

3. Locale (Urban/Rural) :

4. Native District :

5. Educational Qualification :

6. Teaching Experience :

7. Subject/Subjects Taught :

8. Type of Management :

Information Regarding the Institution

1. Name of the Institution :

2. Place :

3. Locale (Urban/Rural) :

4. Type of Management :

 (Govt./Aided/Unaided)

SECTION B

You have to respond each statements in columns described below:

 A- Strongly Agree B- Agree

 C- Undecided D-Disagree

 E- Strongly Disagree

 This information use only for research purpose

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
|  |  | A | B | C | D | E |
|  | I resort methods which are suitable to the lesson. |  |  |  |  |  |
|  | I collect feedback from the students to improve teaching  |  |  |  |  |  |
|  | I take classes after much planning much preparations  |  |  |  |  |  |
|  | I ensure the participation of pupils in learning activities  |  |  |  |  |  |
|  | I make my classes more effective, I incline on teaching aids  |  |  |  |  |  |
|  | I don’t consider the mental states of students while teaching  |  |  |  |  |  |
|  | The homeworks which are assigned to the students make the learning process simple  |  |  |  |  |  |
|  | I am very affectionate to my students  |  |  |  |  |  |
|  | I keep high sincerity in my dealings to pupils  |  |  |  |  |  |
|  | I try to develop leadership qualities in the students  |  |  |  |  |  |
|  | If I have any doubts regarding the subject I clarify it with the experts  |  |  |  |  |  |
|  | I recognize the strength and weaknesses of pupils in my dealings with them  |  |  |  |  |  |
|  | I don’t scold my students for silly matters  |  |  |  |  |  |
|  | I can understand the problems of my students  |  |  |  |  |  |
|  | I help the students of poor financial background. |  |  |  |  |  |
|  | I don’t motivate students who are indifferent to studies  |  |  |  |  |  |
|  | In encourage each and every student on the basis of their abilities  |  |  |  |  |  |
|  | I take measures to improve the result than the previous year  |  |  |  |  |  |
|  | I find opportunities for the intellectual development of the students during learning process  |  |  |  |  |  |
|  | I don’t consider students opinion whenever decision into be taken in the class  |  |  |  |  |  |
|  | I get enough consideration from the society as a teacher  |  |  |  |  |  |
|  | One who like the teaching profession should get it  |  |  |  |  |  |
|  | I don’t feel any difficulties in taking extra time classes  |  |  |  |  |  |
|  | I behave as a model teacher among my students  |  |  |  |  |  |
|  | I apply creative strategies in the teaching process  |  |  |  |  |  |
|  | I don’t accept teachers who disregard their family matters  |  |  |  |  |  |
|  | I utilize library to improve my teaching  |  |  |  |  |  |
|  | I utilize those opportunities which a good mastery of the subject  |  |  |  |  |  |
|  | I am not able to exhibit my talents in teaching  |  |  |  |  |  |
|  | I provide right direction to my student in any situation  |  |  |  |  |  |
|  | I don’t interfere the students affairs outside the school  |  |  |  |  |  |
|  | I offer special coaching to students below average in studies  |  |  |  |  |  |
|  | I don’t enquire to the parents of those students who are irregular in the class  |  |  |  |  |  |
|  | I don’t attempt the classes of other teachers when they are in leave  |  |  |  |  |  |
|  | I often question my students to confuse them  |  |  |  |  |  |
|  | I give special attention to the below average students also |  |  |  |  |  |
|  | I don’t disclose my students’ inabilities before others  |  |  |  |  |  |
|  | I clarify the doubts of the students even outside the classroom  |  |  |  |  |  |
|  | I complete the portions in times and make revisions  |  |  |  |  |  |
|  | My students show obedience in every matters  |  |  |  |  |  |
|  | I miss the classroom management when learning activities are provided  |  |  |  |  |  |
|  | I sometimes loose my temper  |  |  |  |  |  |
|  | I admit my ignorance before others  |  |  |  |  |  |
|  | I succeed in maintaining discipline in the classroom with effective communication.  |  |  |  |  |  |
|  | I am not hesitate to admit my fault before my pupils  |  |  |  |  |  |
|  | I can attain the curricular objectives while the new lessons are introduced  |  |  |  |  |  |
|  | All the students cannot attain high score in my subjects  |  |  |  |  |  |
|  | I take any attempt to reduce the problems of my students  |  |  |  |  |  |
|  | I suggest measures for the students progress in PTA meetings  |  |  |  |  |  |
|  | I make use instances to clarify facts which are too confusing  |  |  |  |  |  |
|  | I make teaching to foster the social awareness  |  |  |  |  |  |