CHAPTER-V
SUMMARY AND CONCLUSIONS

5.1 INTRODUCTION

This chapter includes an overview of the present research. It includes the need and significance of the study, statement of the problem, the objectives and hypothesis of the study and the methodology followed, major findings, implications and suggestions for further research.

5.2 NEED AND SIGNIFICANCE OF THE STUDY

Education system is undergoing good number of changes and transformation due to LPG and C (Liberalization, Privatization, Globalization and corporisation). This naturally expect corresponding changes in its various aspects such as administration, curriculum designs, mode of transaction, evaluation system, teacher related factors, student related factors and factors related to management too. As a result of it, teachers have to shoulder greater responsibility. Thus, they need to reshape their behaviours in order to fit into the modern dynamic system. Then only, they will be able to manage themselves successfully and can tactfully handle adolescent learners and help them to enhance their performances. Science Subjects are quite abstract when compared to other subjects. Therefore Science Teachers of Secondary School are always at risk. So they need to imbibe emotional competencies. These competencies help them to handle adolescent boys and girls successfully through appropriate interactions and transact abstract concepts of science subjects successfully.

It is said that Emotional Intelligence orient their heart and mind to create enthusiastic and creative learning atmosphere, shaping of one’s emotions which leads to academic success and social interactions are strengthened.

Some of the studies indicated that personality of the individuals also influence the performance and quality of work. Not only this, some studies showed its relationship with Emotional Intelligence and Teacher Effectiveness at
varying degree. It is said that teachers who are Extroverts are quite Effectiveness Teachers and can manage school related factors successfully, can like and encourage learners to achieve success. But Aggarwal observed that more effective teachers are more prone to emotional disturbances. Some studies shows varying results. That means relationship between Emotional Intelligence and other demographic variables as well as Personality Type and Teacher Effectiveness are not so clear.

There is need to know how Personality Type contribute to the quality of performance of Secondary School Science Teachers. We know that quality of teaching can be enhanced when personality traits of the teachers are emulated. As set of related traits results in specific Personality Type, teacher’s personality can be reshaped to fit into the modern education system. Thus the Personality Type of teacher has its impact on the performance teachers as well as on learners.

Teacher Effectiveness being one of the significant school related factors can influence learning of learners to a greater extent. The reviews related to Teacher Effectiveness initiates curiosity to some extent. Harden (1946) found personal qualities and teaching success is not closely associated with teacher effectiveness. Symodas (1954) reported that superior teachers like children, personally secured, self assured and possessed well integrated personality than inferior teachers. Heil etal (1960) revealed that well integrated teachers are the most effective with all types of children than ineffective teachers but Aggarwal found that more effective teachers possess more emotional problems. Like this there are some findings which doesn’t give clarity about the relationship of Teacher Effectiveness with Emotional Intelligence and Personality Type. To fill this gap researcher has made an attempt to study the relationship of Teacher Effectiveness with Emotional Intelligence and Personality Type of Secondary School Science Teachers.
5.3 OPERATIONAL DEFINITIONS OF KEY TERMS

Teacher Effectiveness

Teacher Effectiveness refers to “the impact of that classroom factors such as teaching method teacher expectations, classroom organization and use of classroom resources which have impact on students performance.”

In the present study, Teacher Effectiveness refers to “competencies of teachers in relation to Preparation and planning for teaching, Classroom management, discipline, motivation, interaction and evaluation, Knowledge of subject, its delivery and presentation including Black-board summary, Personality characteristics of teachers, Interpersonal relations of teachers with others”.

In the present study, level of Teacher Effectiveness of teachers is represented by the categories derived based on the total scores obtained by the teachers on ‘Kulsm Teacher Effective Scale’ by Umme Kulsum (adopted by the investigator).

Emotional Intelligence

Emotional Intelligence refers to “the capacity for recognizing our own feelings and those of others, for motivating ourselves and for managing emotions well in ourselves and in our relationships.” It includes five basic components which are classified under personal competence (self-awareness, self-regulations, Motivation) and social competencies (Empathy and social skills).

In the present study, Emotional Intelligence refers to “Competencies of teachers in relation to Personal competence which includes 03 dimensions namely self- awareness, self- regulations and self-motivation And Social competence which includes 02 dimensions namely empathy and social skills”.

In the present study, level of Emotional Intelligence of teachers is represented by the categories based on the total scores obtained by the teachers on ‘Teachers’ Emotional Intelligence Scale’ developed by the investigator (developed on the basis of Danial Golman’s model of Emotional Intelligence).
Personality Type

Personality Type refers to “A collection of personality traits which are thought to occur together consistently, especially as determined by a certain pattern of response to a personality inventory.”

In the present study Personality Type refers to three components viz., “Extroverts, Introverts and Ambiverts” on Extroversion-Intraversion dimension and “Neurotics, Normal and Emotionally stable” on Neuroticism dimension

In the present study, Secondary School Science Teachers are classified on the basis of total scores obtained by teachers on Extroversion-Intraversion dimension and Neuroticism dimension of personality inventory by Hans Eysenck (Published by PSYCHOTRONICS, A LABORATORY WORK BOOK FOR TEACHER EDUCATORS, 2012, page no. 129,130).

Teaching Experience

It refers to total number of experience put in teaching from the beginning of their career (irrespective of the type of institution) to the date. The Secondary School Science Teachers are categorized into two groups based on their teaching experiences.

1. Junior Science Teachers (Less than 15 years)
2. Senior Science Teachers (Greater than 15 years)

Type of Schools

Secondary School were classified on the basis of establishment, funding and management. Thus, Government Secondary School were established funded and managed by the Government. Private aided Secondary School are those which are established and managed by Private Management but funded by the Government. Whereas Private Unaided Secondary School are established, managed and funded by the Private Management.
Subject Stream and Teachers

It refers to the science subjects taught by teachers of Secondary School level. Science Subjects are categorized into two major categories. Physical Science Teachers are those who teach Chemistry, Physics and Mathematics at Secondary Schools. Biological Science Teachers are those who teach Biology Subject at Secondary Schools.

5.4 STATEMENT OF PROBLEM

The study was undertaken with an intention of making “A study of Teacher Effectiveness in relation to Emotional Intelligence and Personality Type of Secondary School Science Teachers”

5.5 OBJECTIVES OF THE STUDY

The following objectives were established to progress with the research work

1) To examine the level of Teacher Effectiveness, Emotional Intelligence and Personality Type of Secondary School Science Teachers and categories Secondary School Science Teacher into Personality Type.

2) To examine the difference in Teacher Effectiveness with respect to the following categories related to Secondary School Science Teachers.
   a) Gender: Male and Female Teachers
   b) Type of School: Government, Private aided and Private unaided Secondary Schools
   c) Teaching Experience: Junior(<15 years) and Senior (>15 years)
   c) Subject Stream: Physical Science and Biological Science

3) To examine the difference in Emotional Intelligence with respect to the following categories related to Secondary School Science Teachers.
   a) Gender: Male and Female Teachers
   b) Type of School: Government, Private-aided, Private unaided Secondary Schools
c) Teaching Experience: Junior (<15 years) and Senior (>15 years)

d) Subject Stream: Physical Science and Biological Science.

4) To examine the difference in Personality Type with respect to the following categories related to Secondary School Science Teachers.

a) Gender: Male and Female Teachers

b) Type of School: Government, Private-aided, Private unaided Secondary School Teachers

c) Teaching Experience: Junior (<15 years) and Senior (>15 years)

d) Subject Stream: Physical Science and Biological Science.

5) To examine the relationship between Teacher Effectiveness of Secondary School Science Teachers with their

   a) Emotional Intelligence

   b) Personality Type

6) To examine the relationship between Emotional Intelligence and Personality Type of Secondary School Science Teachers

7) To find whether Emotional Intelligence and Personality Type are significant predictors of Teacher Effectiveness

5.6 HYPOTHESES OF THE STUDY

In the purview of derived objectives the following null hypotheses were formulated:

1) There is no significant difference between Male and Female Science Teachers of Secondary School in their level of Teacher Effectiveness

2) There is no significant difference between Government, Private Aided and Private unaided Science Teachers of Secondary School in their level of Teacher Effectiveness

3) There is no significant difference in Junior and Senior Science Teachers of Secondary School in their level of Teacher Effectiveness.
4) There is no significant relationship between Physical Science and Biological Science Teachers of Secondary School in their level of Teacher Effectiveness

5) There is no significant relationship between Male and Female Science Teachers of Secondary School in their level of Emotional Intelligence

6) There is no significant relationship between Science Teachers of Government, private aided and private un-aided Secondary School in their level of Emotional Intelligence

7) There is no significant relationship between Junior and Senior Science Teachers of Secondary School in their level of Emotional Intelligence

8) There is no significant relationship between Physical Science and Biological Science Teachers of Secondary School in their level of Emotional Intelligence

9) There is no significant relationship between Male and Female Science Teachers of Secondary School in their Personality Type

10) There is no significant relationship between Science Teachers of Government, Private aided, Private unaided Secondary School in their Personality Type

11) There is no significant relationship between Junior and Senior Science Teachers of Secondary School in their Personality Type

12) There is no significant relationship between Physical Science and Biological Science Teachers of Secondary School in their Personality Type

13) There is no significant relationship between Teacher Effectiveness and Emotional Intelligence of Secondary School Science Teachers

14) There is no significant relationship between Teacher Effectiveness and Personality Type of Secondary School Science Teachers.

15) There is no significant relationship between Emotional Intelligence and Personality Type of Secondary School Science Teachers.

16) There is no significant influence of Emotional Intelligence and Personality Type on Teacher Effectiveness.
5.7 VARIABLES CONSIDERED FOR THE PRESENT STUDY

- **Main Variables**
  
  a) Teacher Effectiveness
  b) Emotional Intelligence
  c) Personality Type

- **Background Variables:**
  
  a) Gender: Male and Female Science Teacher
  c) Teaching Experience: Junior (<15 years) and seniors (>15 years)
  d) Subject Stream: Physical Science and Biological Science

5.8 METHODOLOGY OF THE STUDY

In the present study Descriptive Survey Method is adopted. Analysis is carried out based on quantitative techniques.

5.9 SAMPLING DETAILS

5.9.1 Population of the study

There were total of 428 Secondary School {Government, private-aided and Private un-aided} in Mandya District. Science Teachers of all the 07 taluks (Mandya, Maddur, Nagamangala, K R Pet, Malavally, Srirangapatna and Pandavpura) belonging to 08 educational blocks (Mandya North block, Mandya South block, Malavally block, Nagamangala block, Pandavapura block, K R Pet block and Sriranga Patna block) were constituted the population.

5.9.2 Sampling Procedure

Multistage sampling technique was used.
Sampling size

Sampling size was calculated by using formula derived by creative research systems. Thus approximately 71.49% Secondary School (306) were selected.

Sample

Totally 306 Secondary School were selected by using Simple Random Technique. Then the Science Teachers of all the 306 Secondary School were selected by using Purposive Sampling Technique. Thus, 610 Science Teachers were selected as Sample for the study.

5.9.3 Measuring Tools used for Data collection

The tools which are mentioned in the following table were used for the data collection in the present study.

5.9.1 Table: Measuring tools used for Data Collection

<table>
<thead>
<tr>
<th>Variables to be measured</th>
<th>Tools used</th>
<th>Remarks</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Teacher Effectiveness</td>
<td>‘Kulsum Teacher Effectiveness Scale’ by Umme kulsum</td>
<td>Adopted self rating scale of ‘Kulsum Teacher effectiveness Scale’ with five points scale and translated into kannada by the investigator.</td>
</tr>
<tr>
<td>2. Emotional Intelligence</td>
<td>Was prepared by the investigator By considering 5 dimensions of Daiel Goleman</td>
<td>Constructed and translated to kannada language by the investigator.</td>
</tr>
<tr>
<td>4. Personal Data of Teachers</td>
<td>Personal Data Sheet</td>
<td>Prepared by the Investigator both in English and Kannada</td>
</tr>
</tbody>
</table>
5.9.3.1 Teacher Effectiveness Scale:

Kulsum Teacher Effectiveness Scale (KTES) by Umme Kulsum is a self-anchoring scale. It includes 05 areas of teachers functions namely:

- Preparing and planning for teaching
- Classroom management, discipline, motivation, interaction and evaluation
- Knowledge of subject-matter, its delivery and presentation including blackboard summary
- Personality characteristics of teachers
- Interpersonal relation of teachers with others.

All these areas cover all the aspects of teachers functions and have the merits of adequate conceptual framework and content validity. For this scale three types of criterion validity was established. It was found to be 0.85.

Its reliability was established by test-retest and split-half reliability techniques. Its reliability coefficient was found to be 0.94.

In the present study researcher used self-rating scale of Kulsum Teacher Effectiveness Scale with modifications. Researcher used all the 60 items of self-rating of ‘Kulsum Teacher Effectiveness Scale’. Reduced rating to 05 points from 11 points. Thus, rating ranged from 01 to 05. Its total score ranged from 60 to 300.

Its reliability was established on a Random sample of 60 Science Teachers of Secondary School of Mandya district, Karnataka state, India. Its reliability was established by using split half reliability (Brown prophecy formula). Cronbach’s Alpha reliability was found to be 0.944 and Guttman split-half reliability was found to be 0.722.

5.9.3.2 Eysenck Personality Inventory (EPI)

To study the Personality Type of Secondary School Science Teachers, investigator has used ‘Eysenck Personality Inventory’. Its reliability established by
test-retest and split-half techniques. Its validity was established by using the method of nominated groups.

It consists of 57 items for which Secondary School Science Teachers were expected answer either ‘Yes’ or ‘No’. They were instructed to answer quickly as soon as they read and understand the statement.

In the present study, investigator has used Eysenck Personality Inventory published by PSYCHOTRONICS- A laboratory workbook for Teacher Educators 2012. Investigator classified Secondary School Science Teachers into Extroverts, Introverts and Ambiverts on the basis of their total score on Extraversion-Introversion Dimension. Similarly, they were classified into Neurotics, Normal and Emotionally stable on the basis of their total score on Neuroticism Dimensions.

5.9.3.3 Teachers’ Emotional Intelligence Scale:

To collect the data related to Emotional Intelligence of Secondary School Science Teachers, investigator has constructed ‘Teachers’ Emotional Intelligence Scale’. Investigator developed this scale by considering Daniel Goleman’s model of Emotional Intelligence. This model includes 05 major dimensions. They were classified under two major competence viz., Personal Competence and Social Competence. The Personal Competence includes 03 basic dimensions namely, Self-awareness, Self-regulation and Motivation. Social Competence includes 02 dimensions namely, Empathy and social skills. Investigator has constructed 64 items by giving due importance to 25 competencies which are categorized under 05 dimensions.(Self awareness 03 Competencies, self-regulation 05 competencies, motivation 04 competencies, Empathy 05 competencies and social skills 08 competencies)

The positively worded items (43) were scored 5,4,3,2,1 and negatively worded items (21) were scored 1,2,3,4,5 for Strongly Agree, Agree, Undecided, Disagree and Strongly Disagree respectively. The sum total of the score on the 64 items in the scale indicates the Emotional Intelligence of a teacher. Thus the total score ranged from 64 to 320. Higher scores in the scale indicates higher level of
Emotional Intelligence and lower score indicates lower level of Emotional intelligence. The tool possessed high content, construct, face validity and reliability of the scale was found to be .747 (Cronbach’s Alpha) and .724 (Spearman-Brown co-efficient)

5.9.4 Personal Data Sheet

Personal data sheet was prepared by the investigator and it consisted of item on the information about the personal details like Name of the teacher, Name of the school, Address of the school, Gender, Designation, Subject stream, Type of organization, Length of Service/Teaching experience, Residential address, Contact number.

5.10 STATISTICAL TECHNIQUES USED:

To analyze the collected data from 610 teachers SPSS package version 21 was used and the following statistical techniques were employed.

- Descriptive statistics i.e, Mean and standard deviation (SD) to report the level of Teacher Effectiveness, Emotional Intelligence of Secondary School Science Teacher and to categorized Secondary School Science Teachers into respective Personality Type.

- ‘t’ test of significance was used to find difference between mean scores and to test the hypotheses on the difference between Male and Female Teachers, Junior and Senior Teachers, Physical Science and Biological Science Teachers in Teacher Effectiveness, Emotional Intelligence and Personality Type.

- One way ANOVA and Tukey’s HSD post hoc procedures were used to find out the difference among teachers of different categories based on Type of School i.e., Government, Private-aided and Private-unaided in the level of Teacher Effectiveness, Emotional Intelligence and Personality Type.

- Regression analysis to predict the impact of Emotional Intelligence and Personality Type on Teacher Effectiveness together as well as individually.
5.11 MAJOR FINDINGS OF THE STUDY:

- Male and Female Secondary School Science Teachers do not differ in their level of Teacher Effectiveness

- Female and Male Secondary School Science Teachers do not differ in their level of Emotional Intelligence

- Female and Male Secondary School Science Teachers differ with respect to Personality Type

- Government and Private unaided Science Teachers differ in their Teacher Effectiveness. Similarly Government and Private aided Science Teachers do not differ in their Teacher Effectiveness.

- Government and Private aided Science Teachers differ in their Emotional Intelligence. Likewise Government and Private unaided Science Teachers differ in their Emotional Intelligence. Private aided and Private –unaided Science Teachers of Secondary School differ in their level of Emotional Intelligence

- There is difference between Private aided and Private-unaided Science Teachers with respect to Personality Type. There is significant difference between Private-unaided and Government Secondary School Science Teachers with respect to Personality Type

- There is significant difference between Junior and Senior Science Teachers of Secondary School in their Teacher Effectiveness

- Juniors and Senior Science Teachers of Secondary School differ in their Emotional Intelligence

- Juniors and Seniors Science Teachers of Secondary School differ with respect to Personality Type

- Male and Female Secondary school Science Teachers differ in their Teacher Effectiveness

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• Physical Science and Biological Science Teachers of Secondary Schools do not differ in their Emotional Intelligence

• Physical Science and Biological Science Teachers of Secondary School do not differ in their Personality Type

• There is moderate positive relationship between Teacher Effectiveness and Emotional Intelligence of Secondary School Science Teachers

• There is high positive relationship between Teacher Effectiveness and Personality Type- Extroversion-Introversion dimension of Secondary School Science Teachers. Similarly, there is high negative correlation between Teacher Effectiveness and Personality Type- Neuroticism dimension of Secondary School Science Teachers.

• There is no relationship between Emotional Intelligence and Personality Type (Extroversion-Introversion dimension) of Science Teachers of Secondary School. There is high inverse relationship between Emotional Intelligence and Personality Type (Neuroticism dimension) of Science Teachers of Secondary Schools.

• Emotional Intelligence and Personality Type (Neuroticism dimension) influence Teacher Effectiveness to 34.5% at 0.01 level.

5.12 DISCUSSION OF THE FINDINGS

4.2 Distribution of sample is continuous and normal

4.3 Level of Secondary School Science Teachers in their Teacher Effectiveness, Emotional Intelligence and categories of Personality Type

The present study revealed that 18.2% of Science Teachers of Secondary School possess high level of Teacher Effectiveness and 68.2% of Science Teachers of Secondary School possess medium level of Teacher Effectiveness and further only 13.6% of Science Teachers of Secondary School possess low level of Teacher Effectiveness. Likewise 15.08% of Science Teachers of Secondary School possess high Emotional Intelligence, 66.88% of Science Teachers of Secondary School
possess medium Emotional Intelligence and 18.03% of Science Teachers of Secondary School possess low Emotional Intelligence.

Further 20.65% of Science Teachers of Secondary School were Introverts, 23.27% of Science Teachers of Secondary School were Extroverts and 56.06% of Science Teachers of Secondary School were Ambiverts. Similarly 27.7% of Science Teachers of Secondary School were Neurotics, 51.1% of Science Teachers of Secondary School were Normal. 21.1% of Science Teachers of Secondary School were Emotionally stable.

This result reflects the fact that majority of the Science Teachers are having average level of Teacher Effectiveness, Emotional Intelligence. More than 50% of Secondary School Science Teachers are Ambiverts and Emotionally Normal in the sample studied. Thus majority of the Science Teachers are Effective in their classroom transaction because of their level of Emotional Intelligence as well as their basic Personality Type. Science Teachers have to play dynamic role in the educative process. So they have to understand and handle the situations tactfully. It’s the Emotional Intelligence which can add to the basic Personality Type of Science Teachers to enhance their Teacher Effectiveness. There by it energies them to be quite different and effective as well as meaningful in their interactions with students, colleagues, administrators and parents.

One can’t change his/her basic Personality Type but their Personality Traits which can constitute a Type can be emulated in such a way that they can be more effective in classroom transaction and can sharpen their Teacher Effectiveness to make their presentation more impressive. Motivate students through their Emotional stability and Personality Type to achieve more, make learners life meaningful and add colours to their life too. Thus, there is urgent need for the appropriate measures to improve their Emotional Intelligence and Personality Type in order to enhance their level of Teacher Effectiveness for the benefit of learners as well as society.

Review of literature reflects supporting as well as contradictory results in this regard. Ryans (1960) concludes that high teachers were intelligent, generous,
emotionally stable and cheerful than low teacher. Hwang (2007) revealed that emotional skills were significantly related to Teaching Effectiveness among the teachers. Sridhar and Badhei (2007) found that level of Teacher Efficacy and Emotional Intelligence of primary school were placed under moderate category. Symodas (1954) superior teachers possessed well integrated personality organization. Pathan (2004) revealed that almost all the Secondary School Teachers under study possessed low category of Emotional Intelligence. Tyagi (2003) Emotional Intelligence of Secondary School Teachers was extremely low.

4.4 Difference between/among different categories of Secondary School Teachers Teacher in their Teacher Effectiveness.

4.4.1. This study revealed that there is no significant difference in the level of Teacher effectiveness between Male and Female Science Teachers of Secondary Schools. Most of the reviews supported this result.

Dhillan and Navdeep (2010), Sawhney and Kaur (2011), Nair (1974), Passi B K and Sharma (1982), Subbarayan (1985), Moha patre (1987), Pradhan (1997), Indira (1997), Tyagi (2003), Adegbile and Adeyeni (2008) Biswas and De (1995) found contradicting result that is Male and Female Teachers differed significantly on Teacher Effectiveness and Female Teachers were comparatively much effective than their counter parts. Also Lian H Wong (1972) found that Male Teachers rated more than Female Teachers on a self-rating Scale.

4.4.2 With respect to Type of School present study revealed interesting result. The level of Teacher Effectiveness of Government and Private-unaided science teachers differed significantly but Government and private-aided Science teachers do not differ significantly. Similarly, Private aided and Private unaided Science Teachers do not differ significantly in their level of Teacher Effectiveness. The studies of Indira (1997) and Dhillan and Navdeep (2010) support the result that there is no significant difference between Government and Private aided Teachers in their level of Teacher Effectiveness.
4.4.3. The result regarding Experience of Science Teachers of Secondary Schools with respect to level of Teacher Effectiveness revealed that there is no significant difference between Junior Science Teachers and Senior Science Teachers of Secondary School with respect to level of Teacher Effectiveness. It contradicts the finding of Lian H Wong (1972), Padmanabhaiah (1980), Rusen holtz (1986).

4.4.4. In this study researcher observed that Physical Science and Biological Science Teachers of Secondary School do not differ in their level of Teacher Effectiveness. Study conducted by Indira (1997) supported this result.

To sum up Teacher Effectiveness of Secondary School Science Teachers is not influenced by Gender, Experience and Subject Stream in the present study. Where as, in case of type of Schools there is mixture of result when pair wise comparison was made. Significant difference was found between Government and Private-unaided science teachers of secondary schools. Whereas no significant difference was found between Government and Private aided as well as Private aided and Private unaided Science Teachers of Secondary Schools. Further it is observed that the relationship between Gender and Teacher Effectiveness is still a matter of controversy as the results are inconsistent. The result obtained regarding Experience also contradicting with the earlier research work. So researcher felt the need of further research regarding these aspects.

4.5. Difference between/among different categories of Science Teachers of Secondary School in their Emotional Intelligence:

4.5.1 In the present study it was observed that there was no significant difference between Male and Female Science Teachers of Secondary School with respect to their level of Emotional Intelligence.

4.5.2 Present study revealed the fact that there was significant difference between Government and Private-aided as well as Government and Private unaided Secondary School Science Teachers with respect to level Emotional Intelligence. There was significant difference between Private aided and Private-unaided Science Teachers of Secondary School with respect to level of Emotional Intelligence.

Researcher could not find any reviews regarding the relationship between Type of Schools and Emotional Intelligence. Thus felt the need of further research.

4.5.3 In the present study it was found that there was significant difference between the Junior and Senior Science Teachers of Secondary School with respect to Emotional Intelligence.

This result contradicts with the result obtained by Okech (2004). As the researcher couldn’t find much research work in this area, prefers to suggest further research in this regard.

4.5.4 Present study revealed that there was no significant difference between Physical Science and Biological Science Teachers of Secondary School with respect to Emotional Intelligence. As the researcher could not find reviews to trace out the earlier work regarding the relationship of Subject Stream and Emotional Intelligence, would like to suggest fill the research gap.

In toto, researcher would like to suggest further research work to fill the gap and identify the interaction effect of Emotional Intelligence in relation to background variable considered in this study.

4.6 Difference between/among different categories of Science Teachers of Secondary School in Personality Type: - A. Extroversion-Introversion dimension.

4.6.1 Both Male and Female Science Teachers of Secondary School showed significant differences with respect to Personality Type.
4.6.2 With respect to Personality Type the Science Teachers of Private-aided and Private-unaided Science Teachers of Secondary School differed significantly. Similarly, Private-unaided and Government Science Teachers of Secondary School differed significantly. Whereas there was no significant difference between Personality Type of Government and Private aided Secondary School Science Teachers.

4.6.3 Present study revealed that there is significant difference between the Junior and Senior Science Teachers of Secondary School.

4.6.4 This study reflected that there was no significant difference between Physical Science and Biological Science Teachers of Secondary School with respect to Personality Type.

4.6 Difference between/among different categories of Science Teachers of Secondary School in Personality Type: - B. Neuroticism dimension

4.6.5 Both Male and Female Science Teachers of Secondary School showed significant differences with respect to Personality Type.


4.6.7 Present study revealed that there is significant difference between the Junior and Senior Science Teachers of Secondary School.

4.6.8 The study reflected that there was no significant difference between Physical and Biological Science Teachers of Secondary Schools.

Researcher could not find reviews regarding the results obtained with respect to Personality Type of Secondary School Science Teachers. So, researcher likes to suggest further studies regarding this area.
4.7.1 Present study revealed that there is moderate positive relationship between Teacher Effectiveness and Emotional Intelligence of Science Teachers of Secondary School.


Barr (1961) found that good teachers were emotionally more stable. Wangoo (1984) revealed that emotional stability was one of the main characteristics of Teacher Effectiveness.

Thus, emotional stability of Science Teachers influences the Teacher Effectiveness to the greater extent. Interaction of Science teachers with students, parents and administrators can influence to the greater extent because of the level of Emotional Intelligence. Thus teachers concern for students, institution and preference to profession, affective behaviours such as commitment, devotion and dedication are emotional ones which may contributes towards a greater professional commitment also.

4.7.2 Present study reflected that there is high positive relationship between Teacher Effectiveness and Personality Type (Extroversion-Introversion dimension) of Science Teacher of Secondary Schools. There is high negative relationship between Teacher Effectiveness and Personality Type (Neuroticism) of Science Teachers of Secondary School.

This result is supported by the following studies. Comb (1964) interpreted that good teacher was primary unique personality. Fuston et al (1983) effective teachers were extroverts. Murray et al (1990) inferred that Effective Teachers were friendly, gregarious, flexible, adaptable and open to change. Dakshinamurthy (2010) found that teachers with Introversion Personality Type influenced higher on the academic achievement of student. Kumar (1991) resulted with contradicting finding while studying relationship between Teacher Effectiveness and Personality Traits. He concluded that they are negatively correlated.whereas Vashishta and Varma (1991) inferred from their study that effective teachers possessed Introverts Type of Personality.
To sum up, researcher found contradictions in the research results. Thus, suggests further research regarding the relationship of Teacher Effectiveness and Personality Type.

4.7.3 In the present study researcher found no correlation between Emotional Intelligence and Personality Type (Extroversion-Introversion dimension) of Science Teachers of Secondary Schools. There is high negative relationship between Emotional Intelligence and Personality Type (Neuroticism), of Science Teachers of Secondary School.

Law and Song (2004) interpreted that Emotional Intelligence may be related to but separate from Personality. And Liang (2007) found that there is a significant relationship between Personality Type and Emotional Intelligence skills. Engstorn (2005) found that there is a particular relationship is found between Psychological Type and Emotional Intelligence. Thus, it is clear that there exists relationship between Personality Type and Emotional Intelligence.

4.8 In the present study researcher noticed that Emotional Intelligence and Personality Type (Neuroticism) have influence on Teacher Effectiveness:

Personality Type (Neuroticism) and Emotional Intelligence does influence Teacher Effectiveness together to 34.5%. Thus, one can infer from this that Emotional Intelligence and Personality Type (Neuroticism) are significant predictors of Teacher Effectiveness.


Thus, from the above discussion it is clear that Teacher Effectiveness is influenced by Emotional Intelligence and Personality Type to greater extent. It depends on various other factors such as content, pedagogical competencies, interest in the subject and teaching, skills acquired, materials used in the class. Thus, more attention should be given to these factors along with emulating
Personality Traits to reshape Personality Type and train Science Teachers to manage emotional stability in adverse situations as well as motivate students to greater extent. Teachers should be motivated to hike their level of Teacher Effectiveness to enhance the achievement level of learners.

5.13. EDUCATIONAL IMPLICATIONS OF THE STUDY:

Research effort would become meaningful if its educational implications are specified clearly. Present study has explored certain important and useful educational implications for teachers, teacher educators, parents, counselors, administrators and the management.

1. The present study shows that majority of Science Teachers of Secondary School possess medium level of Teacher Effectiveness, Emotional Intelligence and more than 50% of Science Teachers belonged to Ambivert Personality Type. Therefore it is very essential to identify the level of Teacher effectiveness, Emotional Intelligence and Personality Type to enhance their performance in order to motivate students to improve their academic level and overall performance.

2. Science Teachers should be allowed to be innovative in their effort to concretise Science concepts in students. This can be done by providing congenial and conducive environment for teaching. As the study reveals, the positive relationship among Teacher effectiveness, Emotional Intelligence and Personality Type of Science Teachers of Secondary School, they should be trained to identify their emotions and manage them successfully to handle the situation. They should be aware of their Personality type to reshape the required Personality Traits to manage students effectively. The findings of the study on Teacher Effectiveness indicated that Male and Female, Government and Private-aided, Private-aided and Private-unaided science Teachers of Secondary School do not differ significantly in their level of Teacher Effectiveness. But there is significant difference between Government and Private-aided Science Teachers, Junior and Senior Science Teachers, Physical and Biological Science Teachers. Therefore Education system should pay focus attention on Science Teachers at all the levels. It is said that teachers are assets of the society. Properly trained
teachers can contribute much to the society. It can be done by providing equal opportunity and appropriate facilities.

3. Results related to Emotional Intelligence and background variables reveals that there is no significant difference between Male and Female, Physical and Biological Science Teachers of Secondary School with respect to Emotional Intelligence. Whereas there is significant difference in Science Teachers of Government, Private-aided and Private-unaided Secondary School with respect to Emotional Intelligence. There is significant difference between Junior and Senior Science Teachers of Secondary School. Thus Science Teachers should be trained to enhance their level of their Emotional Intelligence to complete educational endower successfully and set a model before the students. Effective management of emotions always results in effective transactions in the class and makes interaction with students and colleagues meaningful.

4. It is said that Personality Type of teachers has positive impact on the personality of the students. Well integrated Personality of Science Teachers can shape the behaviours of the students to the greater extent. Present study reveals that the selected sample posses 56.06% of Ambivert Type Teachers. Therefore challenging educational programmes can be organized to enhance those Personality Traits which can benefit the learners. Findings of the study reveals that Male and Female Science Teachers, Private-aided, Government and Private-unaided Science Teachers, and a Junior and Senior Science Teachers of Secondary School do differ with respect to the Personality Type. There is no significant difference found between Physical Science and Biological Science Teachers Secondary School. Therefore Science Teachers should be aware of their Personality Type to excel well in their profession. At the teacher training institution itself they should be made to know about their Personality Type to control those Personality traits which distract the learning of learners. It also shape those Personality Traits, which helps science teachers to improve their level of Teacher Effectiveness. Studies revealed the fact that teachers who are actively commited are dynamic in manipulating school related factors and more effective than teachers who are passive, less social and less commited.
5. In the present study researcher finds moderate positive relationship between Teacher Effectiveness and Emotional Intelligence. Similarly, high positive relationship between Teacher Effectiveness and Personality Type (Extroversion, Introversion dimension). There is high negative relationship between Teacher Effectiveness and Personality Type (Neuroticism). This clearly indicates that awareness about this help them to plan themselves to reach students successfully. Emotional Intelligence can be acquired at any time in one’s own life to improve Personal and Professional life. Along with this, if Science Teachers are encouraged to draw the attention of learners on class room activities and engage dynamically then learners can achieve. Not only this Science Teachers should be trained enough to improve their inter personal and intra personal relationship. The study also reflects that Emotional Intelligence and Personality Type (Neuroticism) are significant predictors of Teacher Effectiveness of Science Teachers of Secondary Schools. Both at pre-service level and post-service level training programmes which can help teachers to develop personal competence and professional competence should be organized. They should be encouraged to make deliberate efforts to enhance Emotional Intelligence, shape Personality Type to improve their level of Teacher Effectiveness. Therefore care should be taken to provide general facilities, create good physical atmosphere and scope for establishing harmoniol relationship with students, fellow teachers, appropriate social environment and work load. All these can become advantageous to Science Teachers. Organizing personality development programmes, workshops, seminars frequently at various levels can help Science Teachers to invest their time and service for the benefit of their Personal and Professional life. As a result of it Science Teachers can glorify their classroom presentation. One can clearly confirm that enhancement of Emotional Intelligence and shaping of Personality Type can help Science Teachers of Secondary School to be very smart in contributing qualitative output both at the school level and at the society level.
5.14 SUGGESTIONS FOR FURTHER RESEARCH

The following suggestions are given on the basis of investigator’s observations, review of literature, analysis and interpretation of results of the present study.

1. A study may be repeated involving large sample of Teachers.

2. Emotional Intelligence Scale for teachers or general population can be standardized on Indian population.

3. Extension of study to find the interaction effect of selected variables on Teacher Effectiveness of Teachers teaching different Subjects at Secondary School can be studied.

4. Extention of same study on ‘Teacher Educators’ involving Teacher Effectiveness, Emotional Intelligence and Personality Type as variables.

5. To study the impact of Educational programmes on the performance of teachers at Secondary School Level and Primary School Level.