SUMMARY

INTRODUCTION

The education is the process of instruction and for the all round development of individual. It provides the necessary tools and knowledge to understand and participate in day to day activities of today’s world. Education is the backbone of the country and entire development process of any nation depends upon the quality of the education (Ponmelil, 2007).

Success of educational process to a great extent depends on the commitment, attitude, character, ability and personality of the teacher. A teacher has to have exceptional empathy, persistence, diligence, sincerity, research orientation, honesty and flexibility. A Teacher is the model in the classroom, whose attitude and personality are imitated by the students consciously and unconsciously. Role commitment has been identified as one of the most crucial factors for the success of a teacher in the field of education.

Commitment has assumed a great importance in the realm of education throughout the world. Commitment is defined as the degree of positive, affective bond between the teacher and the institution. It does not refer to a passive type of loyalty where teachers stay with their jobs, but are not really involved in the institution or their work rather it reflects the degree of internal motivation, enthusiasm and job satisfaction teachers derive from teaching and the degree of efficacy and effectiveness they achieve in their jobs (National Center for education Statistics, 1997).

In education the commitment is one of the most important aspects of the performance and quality of teacher. The teacher forms the nuclear of any system of education. The impact of teacher on the upcoming generation i.e. students, is very subtle and long lasting. It is necessary that he should feel committed, contended and devoted to their noble profession.
The teacher’s entire personality is reflected on the minds of students. If the teacher is honest, leads a balanced and disciplined life, the children adopt these virtues as ‘Ideal Conduct’ unconsciously. Teacher’s personality leaves an indelible mark in the young mind of the child. So, the teacher must be competent and able to steer the ships of destinies of those who are entrusted to him. The teacher is not only an instructor, but a model for his students at all levels of education. The role of the teacher has assumed greater significance with universalization of education.

People’s attitude towards their professions has an effect on their performance. This case is also valid for the profession of teaching. In teaching how a teacher performs his duty as a teacher depends to a great extent on his attitude. Attitude of a teacher towards teaching becomes influential so far as children can perceive the nature of feelings the teacher has towards them and there is evidence to show the presence of such a perception. If a teacher has dominant and autocratic attitude, the children are likely to be aggressive or over submissive. They show little pride in their work and do not cooperate well with one another. In a class where a teacher has democratic and socially integrative attitude, the children feel relaxed and friendly. They work together and they are interested in what they are doing. A warm, sympathetic, friendly and understanding teacher is more likely to have a positive influence on student as compared to the one who is cold, unfriendly and autocratic.

From the review of literature it is concluded that teachers exhibited a fair degree of commitment to teaching profession (Assam, 2000; Kaur, 2001; Bogler, 2004; Knobloch and Whilligton, 2007; Dhaliwal, 2011). Healthy school environment enhances commitment among teachers (Cheng, 1996; Punia, 2000; Shishupal, 2001; Parthiban, 2008). The teachers of urban schools are found to be significantly more committed than that the teachers of rural schools (Garg, 1983; Maheshwari, 2003). There is a significant difference made between male and female teachers on psychoticism dimension of personality make up (Som, 2004; kaur, 2005, kaur, 2009). Male
teachers have more neurotic tendency than female teachers (Kaur, 2005). Female teachers expressed a more favourable attitude towards teaching in comparison to male teachers (Mehotra, 1973; Singh, 1974; Rama, 2000; Gaurav, 2006). Private school teachers have favourable attitude than government teachers (Srinivason, 1992). There is correlation between attitude towards teaching and commitment of teachers. The teachers who have positive attitude towards teaching are also more committed to their profession. Attitude towards teaching is highly correlated with teacher's commitment (Kang, 1982; Mann, 1980; Kaur, 1998). A large number of research studies have been done in areas of personality and attitude towards teaching but much work has not been done in the area of role commitment, personality and attitude towards teaching. Hence the investigator is prompted to undertake a study on the problem in hand.

**NEED AND SIGNIFICANCE OF THE PRESENT STUDY**

The development of a nation along with a conscious and productive citizenry depends upon the standard of education. To a large extent, this depends on the standard of teachers because teachers are undoubtedly the most important component of our educational system and in fact teacher is the top most academic and professional personal in the educational pyramid under whose charge the destiny of our children is placed by the parents and society.

The word “School teacher” evokes a variety of images and ideas depending on the experiences a person recalls from his school life. These visions will range from a warm, kindly, sympathetic individual with a genuine interest in people, to a tyrannical taskmaster who understands little, and careless about the welfare and development of his pupils.

Students, who have pleasant memories of their teachers, usually recall individuals who took a personal interest in them, knew their subject thoroughly and came to class well prepared. These
teachers were well adjusted emotionally, and had excellent control of the class and themselves. Students who have unpleasant memories of their teachers usually remember individuals who were either too lax or too strict, who were not conscientious about their work, who did not inquire into their students problems or had no sense of humor (Drayer, 1970).

The factors that make a good teacher cannot be categorized. Successful teachers represent a variety of personalities, levels of mental ability, types of training and of course their commitment towards job. A competent and committed teacher is in demand for today’s revolutionary era. Teacher’s commitment has been identified as one of the most crucial factors for the success of the education, schools and colleges. Teacher’s commitment is closely associated with their work performance.

Teacher is expected to be committed to his profession, to learner, school, parents, society and nation. If quality education is a goal, it cannot be achieved without the sincere efforts of dedicated and committed teachers.

The role of science teacher has become very challenging and complex in new technological era. His qualities, teaching efficiency, personality, attitude and character help the pupils to become good human beings. A teacher can perform his duties if he has committed role towards students, school, profession, society and nation. It has been seen that strength of science students in government schools is decreasing day by day whereas the strength of science students in private schools is increasing in spite of the fact that private schools are more expensive. The reason for this may be that the science teachers in private schools are more dedicated and providing more quality oriented education. The results of Xth class (Meenakshi, 2003) have also revealed that private schools have better results than the government schools. There is a need to explore the reason, why science teachers are more committed to their roles in private schools.
than the government schools? Are science teachers in private schools more caring, dedicated, committed and get a lot of enjoyment from their work? There is another question, Are science teachers of government schools limit their commitment and engagement with their job for the survival only? These are three very relevant questions which this study will try to answer.

Personality of the teacher is another aspect which carries importance in quality education. Teachers who have balanced personalities can only help the students to develop their personalities. Role commitment has relationship to personality, but what relationship it carries is the need of the study.

Attitude towards education plays an important role in science teaching. The positive attitude may evoke brilliant and effective results in science teaching while negative attitude may evince diametrically the opposite. Hence, results of the present study will throw light on science teacher’s attitude towards teaching in our schools.

The significance of studying the role of science teacher in today’s scenario is very relevant in view of the fact that country is progressing and trying to compete the developed countries. The teachers can contribute much in this regard.

**STATEMENT OF THE PROBLEM**

The problem in measured language can be stated as under:

ROLE COMMITMENT AMONG SCIENCE TEACHERS IN RELATION TO PERSONALITY MAKE-UP AND ATTITUDE TOWARDS TEACHING.

**OBJECTIVES OF THE STUDY**

The study has been conducted on the basis of the following objectives:

1. To study incidence of role commitment, personality make-up and attitude towards teaching of male and female science teachers of private and government schools.
2. To study the personality make-up of male and female (separately and total) government and private (separately and total) science teachers at high, average and low levels of role commitment.

3. To study the attitude towards teaching of male and female (separately and total) government and private (separately and total) science teachers at high, average and low levels of role commitment.

4. To study role commitment as a function of personality make-up and attitude towards teaching of science teachers.

**HYPOTHESES**

1. There is no significant difference in personality make-up of science teachers at different levels of role commitment.

2. There is no significant difference in personality make-up of male and female science teachers at different levels of role commitment.

3. There is no significant difference in personality make-up of government and private school teachers at different levels of role commitment.

4. There is no significant difference in attitude towards teaching of science teachers at different levels of role commitment.

5. There is no significant difference in attitude towards teaching of male and female science teachers at different levels of role commitment.

6. There is no significant difference in attitude towards teaching of government and private school teachers at different levels of role commitment.
DELIMITATIONS OF THE STUDY

1. The study was confined to only four districts of Punjab.

2. The study was delimited to high school teachers only.

3. The study was delimited to science teachers only.

OPERATIONAL DEFINITION OF THE TERMS USED

Role commitment

Role commitment of teachers is the pledge or promise or obligations of teacher’s behaviour pattern according to certain rules and norms, concerning mainly with people own profession, school, society, parents and nation as measured by Role Commitment Scale by Dr. Meena Buddhisagar Rathod and Madhulika Varma.

Personality

Personality is that which permits a prediction on what a person will do in a given situation. A more or less stable and enduring organization of a person’s character, temperament, intellect and physique which determines his unique adjustment to the environment as measured by the Eysenck Personality Questionnaire-Revised (E.P.Q.-R) Scale by Eysenck (1968).

Attitude towards Teaching

Attitude towards teaching is an enduring perceptual organization of teacher’s belief and learned tendency to react favourably or unfavourably in different degrees which determines his response towards teaching as measured by Teaching Attitude Inventory (TAI) Scale by Dr. S.P. Ahluwalia.
The present study was conducted on 200 science teachers, of high schools of four different districts. These districts were further divided into two classes on the basis of government and private schools in which equal number of males and females were selected. Out of these four districts two were having high literacy rate and two were having low literacy rate. Two districts namely Ropar and S.B.S.Nagar were selected for high literacy rate and two districts namely Mansa and Sangrur were selected for low literacy rate. Out of four districts 200 science teachers were selected. It was decided to take 50% science teacher from high literacy and 50% from low literacy districts.

From Ropar District 52 schools were randomly selected. Out of 52 schools 26 were government and 26 were private. Out of 26 government schools 25 government science teachers were selected and out of 26 private schools 25 science teachers were selected. From these 25 private and 25 government science teachers, equal number of males and females were selected for the sample of the study.

For the selection of schools, random sampling technique was used and male and female teachers were given equal weightage.

From S.B.S.Nagar district 52 schools were randomly selected. Out of 52 schools 26 government schools were randomly selected and 26 private schools were randomly selected. Out of 26 government schools 25 government science teachers were selected and out of 26 private schools 25 private science teachers were selected. From these 25 government science teachers and 25 private science teachers equal number of males and females were selected for the sample of the study.

From Mansa district 52 schools were randomly selected. Out of 52 schools 26 government schools were randomly selected and 26 private schools were randomly selected. Out of 26 government schools 25 government science teachers were selected and out of 26 private schools 25 private science teachers were selected. From these 25
government science teachers and 25 private science teachers equal number of males and females were selected for the sample of the study.

From Sangrur district 52 schools were randomly selected. Out of 52 schools 26 government schools were randomly selected and 26 private schools were randomly selected. Out of 26 government schools 25 government science teachers were selected and out of 26 private schools 25 private science teachers were selected. From these 25 government science teachers and 25 private science teachers equal number of males and females were selected for the sample of the study.

RESEARCH TOOLS

The following standardized tools were used by the investigator in the study:

1. Teacher’s Role Commitment Scale (TRCS) has been developed by Rathod, M. B. and Varma, M. in 2003.

2. Eysenck Personality Questionnaire-Revised (E.P.Q.R) has been developed by Eysenck in 1978.

3. Teaching Attitude Inventory (TAI) has been developed by Dr. S.P. Ahluwalia in 2001.

METHOD AND PROCEDURE

In drawing out the results of the study, it is necessary to plan the procedure and method to be used as it helps the researcher in acquiring the result of the study. The purpose of the present study was to study personality make-up of science teachers at various levels of role commitment i.e. high, medium and low. Further, attitude towards teaching at various levels of role commitment i.e. high, medium and low was selected.
The study was conducted through descriptive method of research. The descriptive method has undoubtedly been the most popular and most widely used research method in education. The method requires certain sample and research tools for conduct of the study. The investigator has thoroughly studied the literacy rate in Punjab. According to that investigation two districts namely Ropar and S.B.S.Nagar were selected for high literacy districts and two districts namely Mansa and Sangrur were selected for lowest literacy districts.

The investigator studied the list of various schools from these four districts. Out of these four districts equal number of government and private schools were selected. The investigator visited the four districts to collect information from science teachers with regard to role commitment, personality make-up and attitude towards teaching. All these three tools employed in the study were administered to the science teachers by investigator herself. The principals of respective schools were requested for permission to collect data.

The testing conditions, environment and procedure for all the subjects were kept constant and uniform as far as possible to have true and correct required information. Every effort was made to create a good rapport with the teachers so that correctness of information could be assured. They were made clear about the purpose of collecting data and were told that the results of test would be kept strictly confidential so that they could respond to the test items without any hesitation.

The filled-in test booklets/answer sheets were collected from each teacher and grouped in their respective category for scoring. The answer sheets were kept consciously and studiedly by investigator according to the serial number.

The scoring of the answer sheets was done strictly according to the directions and instructions given in the respective test manuals.
This was also done with the help of scoring keys especially prepared and designed for this purpose.

Data were analyzed by using different techniques of statistics such as Mean, Median, Mode, S.D., t-ratio, ANOVA and Correlation.

**FINDINGS AND CONCLUSIONS**

The study puts forth the following conclusions

**SECTION-A**

**INCIDENCE OF DIFFERENT VARIABLES**

**I. ROLE COMMITMENT**

1. Role Commitment among Science Teachers

To study role commitment among science teachers of high schools in different districts, a test of TRCS (Teacher’s Role Commitment Scale) was administered to the science teachers. Out of 200 science teachers 34% science teachers of high schools have role commitment scores lying between scores 122-153 as compared to 54% science teachers scoring above mean interval i.e. 158-169 and only 12% science teachers lie in the mean interval i.e. 154-157 (according to the manual of role commitment scale TRCS). It indicates that most of science teachers of high schools have exhibited above average level of role commitment.

2. District Wise Role Commitment among Science Teachers

The science teachers of districts Roop Nagar and S.B.S. Nagar have role commitment scores above average i.e. 70%, 78% respectively which indicates that science teachers of high schools in district Roop Nagar and S.B.S. Nagar are highly committed. The role commitment scores of high schools science teachers of district Sangrur and Mansa
fall below average i.e. 48%, 66% respectively which indicates that these teachers are less committed.

II. PERSONALITY MAKE-UP

Personality make-up scores on three dimensions i.e. Psychoticism, Neuroticism and Extraversion.

1. Psychoticism Dimension of Personality make-up

To study psychoticism among science teachers of high schools in different districts, a test of EPQ-R was administered to the science teachers. Out of 200 science teachers only 2% science teachers of high schools have psychoticism scores lying between scores 0-1 as compared to 65% science teachers scoring above mean interval i.e. 4-13 and only 33% science teachers lie in the mean interval i.e. 2-3 (according to manual of EPQ-R scale). It indicates that most of science teachers of high schools have exhibited above average level of psychoticism.

2. District Wise Psychoticism Dimension of Personality make-up among Science Teachers

The high schools science teachers of districts Roop Nagar, S.B.S. Nagar, Sangrur and Mansa have psychoticism scores above average i.e. 50%, 86%, 66% and 68% respectively which indicate that science teachers of high schools of these four districts have high tendency of psychoticism. As per the manual norms those who are high on psychoticism are aggressive, ego centric, impersonal, creative and tough-minded.

3. Neuroticism Dimension of Personality make-up

To study neuroticism among science teachers of high schools in different districts, a test of EPQ-R was administered to the science teachers. Out of 200 science teachers 77.5% science teachers of high
schools have neuroticism scores lying between scores 0-11 as compared to 8.5% science teachers scoring above mean interval i.e. 14-21 and only 14% science teachers lie in the mean interval i.e. 12-13 (according to manual of EPQ-R scale). It indicates that most of science teachers of high schools have exhibited below average level of neuroticism.

4. District Wise Neuroticism Dimension of Personality make-up among Science Teachers

The science teachers of high schools of districts Roop Nagar, S.B.S. Nagar, Sangrur and Mansa have neuroticism scores below average i.e. 84%, 92%, 72% and 60% respectively which indicates that science teachers of high schools of these four districts have low tendency of neuroticism. As per the manual norms those who are lower on neuroticism are less tough-minded and tense or considered to be low on neuroticism. It is definitely clear that they feel relaxed and emotionally stable. They remain calm, even-tempered, high self-esteem, controlled and not suffering from guilty feelings.

5. Extraversion Dimension of Personality make-up

To study extraversion among science teachers of high schools in different districts, a test of EPQ-R was administered to the science teachers. Out of 200 science teachers 16% science teachers of high schools have extraversion scores lying between scores 6-11 as compared to 60% science teachers scoring above mean interval i.e. 14-21 and only 24% science teachers lie in the mean interval i.e. 12-13 (according to the manual of EPQ-R scale). It indicates that most of science teachers of high schools have exhibited above average level of extraversion.

6. District Wise Extraversion Dimension of Personality make-up among Science Teachers

Extraversion dimension of personality make-up of science teachers of districts Roop Nagar, S.B.S. Nagar, Sangrur and Mansa has scores
average i.e. 16, 24, 56 and 22 respectively and the percentage of scores at below average level is 14, 4, 14 and 34 respectively. The findings revealed that the science teachers of high schools of these four districts have above average or slightly above average extraversion tendency.

III ATTITUDE TOWARDS TEACHING

1. Attitude towards Teaching among Science Teachers

To study attitude towards teaching among science teachers of high schools in different districts, an inventory of T.A.I. (Teacher’s Attitude Inventory) was administered to the science teachers from different districts (Roop Nagar, S.B.S. Nagar, Sangrur and Mansa). Out of 200 science teachers 46% science teachers of high schools have attitude towards teaching scores lying between scores 217-251 as compared to 44% science teachers scoring above mean interval i.e. 259-307 and only 10% science teachers lie in the mean interval i.e. 252-258 (according to the manual of T.A.I. scale). It indicates that most of the science teachers of high schools have exhibited average level of attitude towards teaching.

2. District wise Attitude towards Teaching among Science Teachers at Different Levels

The high schools science teachers of districts Roop Nagar and S.B.S. Nagar have attitude towards teaching scores above average i.e. 78%, 64% respectively which indicates that science teachers of high schools in district Roop Nagar and S.B.S. Nagar have positive attitude towards teaching. The percentage of scores of high schools science teachers of districts Sangrur and Mansa was found below average i.e. 68%, 80% respectively which indicates that these teachers have low attitude towards teaching as compared to district Roop Nagar and S.B.S. Nagar.
SECTION-B

INTERRELATIONAL ANALYSIS

IV. ROLE COMMITMENT

1. Role Commitment among Science Teachers in relation to Gender

To compare role commitment among male and female of science teachers of high schools the mean score of male teachers is 153.960 and SD is 10.03. The mean score of female is 157.880 and SD is 8.00. The mean score of the female science teachers is higher than male science teachers. To find differentials between the two groups t-value was calculated. The t-value came out to be 3.054 which is significant at 0.01 level. This implies that there is a significant difference of role commitment among males and females science teachers of high schools. It indicates that female science teachers of high schools are more committed than the male teachers.

2. Role Commitment among Science Teachers in relation to Gender at Different Levels of Role Commitment

The findings show that no significant difference exists between male and female teachers of high schools at low, medium and high levels of role commitment. The female science teachers of high schools are more committed than male science teachers at three levels of role commitment but the difference is not significant. It indicates that there is no significant difference in male and female science teachers of high schools at any level of role commitment.

3. Role Commitment among Science Teachers in relation to Type of School

To compare role commitment among government and private science teachers of high schools, the mean score of government science teachers is 152.64 and SD is 10.32. The mean score of private science
teachers of high schools is 159.20 and SD is 6.64. The mean score of the private science teachers is higher than government science teachers. To find differentials between the two groups t-value was calculated. The t-value came out to be 5.342 which is significant at 0.01 level. This implies that there is a significant difference of role commitment among government and private science teachers of high schools. It indicates that private science teachers of high schools are more committed than the government science teachers.

4. Role Commitment among Science Teachers in relation to School Type at Different Levels of Role Commitment

A significant difference was found between government and private science teachers of high schools at low and medium level of role commitment. It indicates that private science teachers of high schools are more committed than government science teachers of high schools at low and medium levels of role commitment. No significant difference was found among science teachers of government and private schools at high level role commitment. The mean score of private science teachers of high schools is higher than government science teachers of high schools at high level of role commitment but the difference is not significant. It shows that the science teachers those are having high commitment, they are committed towards their duty whether it is a government or private institutions.

V. PERSONALITY MAKE-UP

Personality make-up scores on three dimensions i.e. Psychoticism, Neuroticism and Extraversion.

1. PSYCHOTICISM DIMENSION OF PERSONALITY MAKE-UP

1.1 Psychoticism Dimension of Personality make-up among Science Teachers in relation to Gender

To compare psychoticism among male and female of science teachers of high schools the mean score of male teachers is 4.760 and SD is
2.408. The mean score of female is 4.720 and SD is 2.272. The mean score of the male science teachers is slightly higher than female science teachers. To find differentials between the two groups t-value was calculated. The t-value came out to be 0.110 which is not significant. This implies that there is no significant difference of psychoticism among male and female science teachers of high schools.

**1.2 Psychoticism Dimension of Personality make-up in relation to Gender at Different Levels of Role Commitment**

No significant difference was found among male and female science teachers of high schools at medium and high levels of role commitment. The mean score of female science teachers of high schools is higher than male science teachers of high schools at high and medium levels of role commitment but the difference is not significant. A significant difference was found among male and female science teachers of high schools at low level of role commitment. This finding reveals that at low level of role commitment the male science teachers of high schools have more psychotic tendency than the female science teachers.

**1.3 Psychoticism Dimension of Personality make-up in relation to Type of School**

To compare psychoticism among government and private science teachers of high schools the mean score of government science teachers is 4.780 and SD is 2.410. The mean score of private science teachers of high schools is 4.700 and SD is 2.725. To find differentials between the two groups t-value was calculated. The t-value came out to be 0.220 which is not significant. The mean score of government science teachers is higher than the private science teachers of high schools but the difference is not significant. This implies that there is no significant difference of psychoticism among government and private science teachers of high schools.
1.4 Psychoticism Dimension of Personality make-up in relation to Type of School at Different Levels of Role Commitment

No significant difference was found between government and private teachers of high schools at low and medium levels of role commitment. The mean score of psychoticism among government is higher than private science teachers of high schools at low and medium level of role commitment but the difference is not significant. No significant difference was found between government and private teachers of high schools at high level of role commitment. The mean score of psychoticism among private is higher than government science teachers of high schools at high level of role commitment but the difference is not significant. It indicates that there is no significant difference in government and private science teachers of high schools at any level of role commitment.

1.5 Psychoticism Dimension of Personality make-up at Three Levels of Role Commitment

To compare psychoticism of high school teachers at different levels of role commitment, the sum of squares at between groups was 25.941 and within groups 1284.539. The mean sum of squares in between groups is 12.971 and within groups was 6.521 degree. To find the difference in psychoticism of science teachers at different levels of role commitment, F value was calculated the F-value come out to be 1.989 which is not significant. This implies that there is no significant difference in psychoticism of science teachers at different level of role commitment.

2. NEUROTICISM DIMENSION OF PERSONALITY MAKE-UP

2.1 Neuroticism Dimension of Personality make-up in relation to Gender

To compare neuroticism among male and female of science teachers of high schools the mean score of male teachers is 8.650 and SD is
3.862. The mean score of female is 8.370 and SD is 3.249. The mean score of male science teachers is higher than female science teachers. To find differentials between the two groups t-value was calculated. The t-value came out to be 0.555 which is not significant. This implies that there is no significant difference of neuroticism among male and female science teachers of high schools.

### 2.2 Neuroticism Dimension of Personality make-up in relation to Gender at Different Levels of Role Commitment

No significant difference was found in neuroticism dimension of personality make-up of male and female science teachers of high schools at high level of role commitment. At high level of role commitment male science teachers have more neurotic tendency than female science teachers but the difference is not significant. At medium level of role commitment female science teachers have more neurotic tendency than male science teachers but the difference is not significant. A significant difference was found in neuroticism dimension of personality make-up among male and female science teachers of high schools at low level of role commitment. At low level of role commitment male science teachers have more neurotic tendency than female science teachers.

### 2.3 Neuroticism Dimension of Personality make-up in relation to Type of School

To compare neuroticism among government and private science teachers of high schools, the mean score of government science teachers is 8.790 and SD is 3.488. The mean score of private science teachers of high schools is 8.230 and SD is 3.632. The mean score of government science teachers is higher than private science teachers of high schools. To find differentials between the two groups t-value was calculated. The t-value came out to be 1.112 which is not significant. This implies that there is no significant difference of neuroticism among government and private science teachers of high schools.
indicates that private science teachers of high schools are having same neuroticism tendency.

2.4 Neuroticism Dimension of Personality make-up in relation to Type of School at Different Levels of Role Commitment

At low level of role commitment government science teachers have more neurotic tendency than private science teachers but the difference is not significant. Mean score of neuroticism among private science teachers is more than government science teachers at medium level of role commitment. No significant difference was found between government and private science teachers of high schools at medium level of role commitment. At high level of role commitment government science teachers have more neurotic tendency than private science teachers but the difference is not significant. It indicates that there is no significant difference in neuroticism of government and private science teachers of high schools at low, medium and high levels of role commitment.

2.5 Neuroticism Dimension of Personality make-up at Three Levels of Role Commitment

ANOVA showed the neuroticism of high school teachers at different levels of role commitment. The sum of squares at between groups was 23.099 and within groups was 2502.881. The mean sum of squares in between groups was 11.550 and within groups was 12.705 degree. The F-value came out to be 0.909 which is not significant. This implies that there is no significant difference in neuroticism of science teachers at different level of role commitment.

3. EXTRAVERSION DIMENSION OF PERSONALITY MAKE-UP

3.1 Extraversion Dimension of Personality make-up in relation to Gender

To compare extraversion among male and female of science teachers of high schools, the mean scores of male teachers is 13.810 and SD is
The mean score of female is 13.800 and SD is 3.081. To find differentials between the two groups t-value was calculated. The t-value came out to be 0.022 which is not significant. This implies that male science teachers of high schools are slightly high extroverts than female counterparts but the difference is not significant.

3.2 Extraversion Dimension of Personality make-up in relation to Gender at Different Levels of Role Commitment

The findings show that the mean score of extraversion among male science teachers is slightly high than female science teachers of high schools at low level of role commitment but the difference is not significant. The mean score of extraversion among male science teachers is slightly high than female science teachers of high schools at medium level of role commitment but the difference is not significant. The mean score of extraversion among female science teachers is slightly high than male science teachers of high schools at high level of role commitment but the difference is not significant. No significant difference was found among male and female science teachers of high schools at low, medium and high levels of role commitment.

3.3 Extraversion Dimension of Personality make-up in relation to Type of School

To compare extraversion among government and private science teachers of high schools the mean score of government science teachers is 13.910 and SD is 2.903. The mean score of private science teachers of high schools is 13.700 and SD is 3.383. To find differentials between the two groups t-value was calculated. The t-value came out to be 0.471 which is not significant. This implies that the mean score of extraversion among government science teachers is slightly high than private science teachers of high schools but the difference is not significant.
3.4 Extraversion Dimension of Personality make-up in relation to Type of School at Different Levels of Role Commitment

The findings show that the mean score of extraversion among government science teachers is slightly higher than private science teachers of high schools at low, medium and high levels of role commitment but the difference is not significant. It indicates that no significant difference was found between government and private science teachers of high schools at low, medium and high levels of role commitment.

3.5 Extraversion Dimension of Personality make-up at Three Levels of Role Commitment

ANOVA showed the extraversion of high school teachers at different levels of role commitment. The sum of squares at between groups was 23.014 and within groups 1946.381. The mean sum of squares in between groups was 11.507 and within groups was 9.880 degree. The F-value came out to be 1.165 which is significant at 0.01 level. This implies that there is a significant difference in extraversion of science teachers at different levels of role commitment.

VI. ATTITUDE TOWARDS TEACHING

6.1 Attitude towards Teaching in relation to Gender.

To compare attitude towards teaching among male and female of science teachers of high schools the mean score of male teachers is 248.300 and SD is 25.553. The mean score of female is 257.390 and SD is 21.742. To find differentials between the two groups t-value was calculated. The t-value came out to be 2.709 which is significant at 0.01 level. This implies that there is a significant difference of attitude towards teaching among male and female science teachers of high schools. It indicates that female science teachers have favourable attitude towards teaching than male science teachers.
6.2 Attitude towards Teaching in relation to Gender at Different Levels of Role Commitment

The findings show that the mean score of attitude towards teaching of female science teachers is than male science teachers of high schools at low, medium and high levels of role commitment but the difference is not significant. It indicates that female science teachers have favourable attitude towards teaching than male science teachers of high schools at low, medium and high levels of role commitment but the difference is not significant. The results showed that there is no significant difference in attitude towards teaching among male and female science teachers of high schools at low, medium and high level of role commitment.

6.3 Attitude towards Teaching in relation to Type of School

To compare attitude towards teaching among government and private science teachers of high schools, the mean score of government science teachers is 250.700 and SD is 17.818. The mean sum of private science teachers of high schools is 254.990 and SD is 28.993. To find differentials between the two groups t-value was calculated. The t-value came out to be 1.261 which is not significant. It indicates that private science teachers have favourable attitude towards teaching than government science teachers of high schools but the difference is not significant. This implies that there is no significant difference of attitude towards teaching among government and private science teachers of high schools.

6.4 Attitude towards Teaching in relation to Type of School at Different Levels of Role Commitment

A significant difference was found in attitude towards teaching among government and private science teachers of high schools at low level of role commitment. It shows that government science teachers have more favourable attitude towards teaching than private science
teachers of high schools at low level of role commitment. The mean score of government science teachers is higher than private science teachers of high schools at medium level of role commitment but the difference is not significant. A significant difference was found in attitude towards teaching among government and private science teachers of high schools at high level of role commitment. It shows that private science teachers have more favourable attitude towards teaching than government science teachers of high schools at high level of role commitment.

6.5 Attitude towards Teaching at Three Levels of Role Commitment

ANOVA showed the attitude towards teaching of high school teachers at different levels of role commitment. The sum of squares at between groups was 13035.27 and within groups 4047.44. The mean sum of squares in between groups was 6517.63 and within groups was 20.54 degree. The F-value came out to be 317.23 which is significant at 0.01 level. This implies that there is a significant difference in attitude towards teaching of science teachers at different level of role commitment.

6.6 Comparison of Means of Attitude towards Teaching at Three Levels of Role Commitment

To compare means of attitude towards teaching at three levels of role commitment t-value was calculated. The science teachers who have medium level of level of role commitment have more attitude towards teaching as compare to low committed teachers (236.70; 251.54, t-value 4.030 P<.01).Science teachers with high level of role commitment have more attitude towards teaching as compare to low committed teachers (236.70; 271.56, t-value 8.868 P<.01). Those science teachers who have high level of role commitment have more
attitude towards teaching as compare to medium committed teachers (251.54; 271.56, t-value 6.021 P<.01).

SECTION-C
CO-RELATIONAL ANALYSIS

VII. ROLE COMMITMENT

7.1. Relationship between Role Commitment and Dimensions of Personality make-up

There are three dimension of personality make-up i.e. Psychoticism Neuroticism and Extraversion

7.2 Relationship between Role Commitment and Psychoticism Dimension of Personality make-up

A relationship was found between role commitment and psychoticism dimension of personality make-up which is not significant. The role commitment among science teachers is not affected by their psychotic tendency.

7.3 Relationship between Role Commitment and Neuroticism Dimension of Personality make-up

A negative correlation was found between role commitment and neuroticism dimension of personality make-up which is significant at 0.05 level. This finding reveals that low tendency of neuroticism helps to increase role commitment among science teachers.

7.4 Relationship between Role Commitment and Extraversion Dimension of Personality make-up

A positive relationship was found between role commitment and extraversion dimension of personality make-up which is not significant. It shows that extraversion tendency of science teachers does not affect their role commitment.
7.5 **Relationship between Role Commitment and Attitude towards Teaching**

A positive and highly significant correlation was found between role commitment and attitude towards teaching which is significant at 0.01 level. It indicates that highly committed science teachers are having high attitude towards teaching.

**VIII. PERSONALITY MAKE-UP**

8.1 **Relationship between Dimensions of Personality make-up and Attitude towards Teaching**

There are three dimension of personality make-up i.e. Psychoticism Neuroticism and Extraversion

8.2 **Relationship between Psychoticism Dimension of Personality make-up and Attitude towards Teaching**

A relationship was found between psychoticism dimension of personality make-up and attitude towards teaching which is not significant. It indicates that the psychotic tendency of science teachers does not affect their attitude towards teaching.

8.3 **Relationship between Neuroticism Dimension of Personality make-up and Attitude towards Teaching**

A negative correlation was found between neuroticism dimension of personality make-up and attitude towards teaching. This finding reveals that low tendency of neuroticism helps to increase attitude towards teaching among science teachers.

8.5 **Relationship between Extraversion Dimension of Personality make-up and Attitude towards Teaching**

A relationship was found between extraversion dimension of personality make-up and attitude towards teaching which is
significant. It shows that extraversion tendency of science teachers affect their attitude towards teaching.

**VERIFICATION OF THE HYPOTHESES**

On the basis of the above discussion of the results and conclusions drawn regarding role commitment, personality make-up and attitude towards teaching, the hypotheses have been verified as under:

**First Hypothesis:** The first hypothesis stated is ‘There is no significant difference in personality make-up at different levels of role commitment’.

From the investigation it is found that there are three dimensions of personality make-up. The psychoticism dimension of personality make-up has no significant difference at different levels of role commitment. There is no significant difference in neurotic dimension of personality make-up at different levels of role commitment. The extroversion dimension of personality make-up has significant difference at different levels of role commitment. Hence this hypothesis is partially accepted and partially rejected.

**Second Hypothesis:** The second hypothesis stated is ‘There is no significant difference in personality make-up of male and female science teachers at different levels of role commitment’.

From the investigation it is found that there is a significant difference in psychoticism and neuroticism dimensions of personality of males and females teachers have significant difference at lower level of role commitment. Psychoticism and neuroticism dimensions of personality of male and female teachers have no significant difference at medium and high level of role commitment. There is no significant difference in extraversion dimension of personality of male and female
teachers at different levels of role commitment. Hence this hypothesis is partially accepted and partially rejected.

**Third Hypothesis:** The third hypothesis stated is ‘There is no significant difference in personality make-up of government and private school teachers at different levels of role commitment’.

From the investigation it is found that there is no significant difference of psychoticism, neuroticism and extraversion dimensions of personality make-up between government and private science teachers of high schools at different levels of role commitment. Hence this hypothesis is accepted.

**Forth Hypothesis:** The forth hypothesis stated is ‘There is no significant difference in attitude towards teaching of science teachers at different levels of role commitment’.

From the investigation it is found that there is a significant difference in attitude towards teaching of science teachers at different levels of role commitment. Hence this hypothesis is rejected.

**Fifth Hypothesis:** The fifth hypothesis stated is ‘There is no significant difference in attitude towards teaching of male and female science teachers at different levels of role commitment’.

From the investigation it is found that there is no significant difference of attitude towards teaching between male and female science teachers of high schools at low, medium and high levels of role commitment. Hence this hypothesis is accepted.

**Sixth Hypothesis:** The sixth hypothesis stated is ‘There is no significant difference in attitude towards teaching of government and private school teachers at different levels of role commitment’.

From the investigation it is found that a significant difference exists between government and private science teachers of high schools in attitude towards teaching at low and high level of role
commitment. There is no significant difference exists of attitude towards teaching at medium level of role commitment. Hence this hypothesis is partially accepted and partially rejected.

RECOMMENDATIONS

1. The results of present study reveal that on the whole, teachers have above average level of role commitment. Moreover in the study of four districts, two districts (Mansa and Sangrur) lack in teacher’s commitment as compared to other two districts (Ropar and S.B.S. Nagar). It is recommended that in service teachers should be given lectures to enhance their role commitment. They should be made conscious about this issue in seminars, lectures, extension talks etc.

2. Training colleges which prepare teachers for this noble profession should also inculcate this basic value in the pupil teachers. In curriculum more ethical values toward the teaching profession should be included. Government policy should also be made to appreciate, to give rewards to the teachers who work very sincerely, dedicatedly and have high level of consciousness about their duty. Teachers having high level of role commitment should be sent to the schools for interaction with the teachers who have low commitment.

3. The study reveals that government and private school teachers differ on the incidence of role commitment. Private school teachers carry higher level of role commitment than the teacher of government institutions. Supervision, appreciations, encouragement are some of the factors which affect this aspect of teachers. It is generally found that private schools hold parent teacher meetings more often in which the progress, the
academic record and personality of the child is discussed and these schools ensure that parents definitely attend the meeting, this helps the parents to know their children and enhances their expectations from the teachers also. In such a situation the teachers have to remain conscious about their duty and responsibility. It is a fact that in the private institutions more attentive supervision is there and it is highly recommended that this attribute of private schools should be picked up by the government institutions also.

4. Science is definitely a very important and a little difficult subject. Students need more motivation and interest in learning the different concepts. Hence the teachers have to be more hardworking. They need to spend more time to locate more innovative methods for teaching. This makes them stressful and burdened. Stress management program should be organized to lesser their psychotic tendency. Yoga can also be beneficial in these various situations.

5. Work becomes easier and yields good results if a person has positive attitude towards it. Teaching also become interesting and hassle free if teacher have positive attitude for it. Training colleges and in service centers also should keep this thing in mind and they should always do efforts to enhance the attitude of in service and pre service teachers.

SUGGESTIONS FOR FURTHER STUDY

1. Similar study may be conducted on a large sample.

2. Role commitment may be studied in relation to variables of job satisfaction, self actualization and leadership behaviour of teachers.
3. The study can also be conducted on the arts and commerce teachers.

4. Such studies can be conducted on different levels i.e. primary, secondary, senior secondary, college and university.

5. The study comparing science and non science teachers may also be carried out.

6. The study can also be conducted on rural and urban science teachers and comparison of two groups also give valuable results.

7. Similar study may be conducted on different districts.