CHAPTER IX
SUMMARY AND CONCLUSIONS
planning for teaching (PP), classroom management (CR), knowledge of subject matter (KS), teacher characteristics (TC), interpersonal relations (IR) and total teacher effectiveness TE (total) were significant at .01 level of significance.

- The coefficients of correlation of formal authority (FA) teaching style with different components of teacher effectiveness, namely, preparation and planning for teaching (PP), classroom management (CR), knowledge of subject matter (KS), teacher characteristics (TC), interpersonal relations (IR) and total teacher effectiveness TE (total) were significant at .01 level of significance.

- The coefficients of correlation of personal model (PM) teaching style with components of teacher effectiveness i.e. preparation and planning for teaching (PP), classroom management (CR), knowledge of subject matter (KS), teacher characteristics (TC), interpersonal relations (IR) and total teacher effectiveness TE (total) were significant at .01 level of significance.

- The coefficients of correlation of facilitator (FC) teaching style with various components of teacher effectiveness, namely, preparation and planning for teaching (PP), classroom management (CR), knowledge of subject matter (KS), teacher characteristics (TC), interpersonal relations (IR) and total teacher effectiveness TE (total) were significant at .01 level of significance.

- The coefficients of correlation of delegator (DE) teaching style with different areas of teacher effectiveness i.e. preparation and planning for teaching (PP), classroom management (CR), knowledge of subject matter (KS), teacher characteristics (TC), interpersonal relations (IR) and teacher effectiveness total TE (total) were significant at .01 level of significance.
Relationship of Teacher Effectiveness with Personality Types

- The correlation of preparation and planning (PP) area of teacher effectiveness with social warmth (Sw), enthusiasm (En), boldness (Bo), competition (Co) and introversion–extraversion (Total) dimensions of personality types were not statistically significant at any level except the correlation of preparation and planning (PP) area of teacher effectiveness with self-sufficiency (Ss) dimension of personality type which was significant at .05 level of significance.

- The coefficients of correlation of classroom management (CR) area of teacher effectiveness with social warmth (Sw), enthusiasm (En), boldness (Bo), self-sufficiency (Ss), competition (Co) and introversion–extraversion (Total) dimensions of personality types were not statistically significant at any level of significance.

- The coefficients of correlation of knowledge of subject matter (KS) component of teacher effectiveness with social warmth (Sw), boldness (Bo), self-sufficiency (Ss), competition (Co) and introversion–extraversion (Total) dimensions of personality types were not significant at any level of significance. However, correlation of KS with enthusiasm (En) dimension of personality type was negative in direction and significant at .05 level of significance.

- The coefficients of correlations of teacher characteristics (TC) component of teacher effectiveness with social warmth (Sw), enthusiasm (En), boldness (Bo), self-sufficiency (Ss), competition (Co) and introversion–extraversion (Total) dimensions of personality types were not significant at any statistical level of significance.

- The coefficients of correlations of interpersonal relations (IR) component of teacher effectiveness with social warmth (Sw), enthusiasm (En), boldness (Bo), self-sufficiency (Ss), competition (Co) and introversion–extraversion (Total) dimensions of personality types were not significant at any level of significance.
• The coefficients of correlation of teacher effectiveness TE (total) with different dimensions of personality types namely, social warmth (Sw), boldness (Bo), self-sufficiency (Ss), competition (Co) and introversion-extraversion (Total) were not significant at any level. However, the coefficient of correlation of total teacher effectiveness with enthusiasm (En) dimension was negative and significant at .05 level of significance.

**Relationship of Teaching Styles with Personality Types**

• The coefficients of correlation of social warmth (Sw) dimension of personality type with various teaching styles, namely, expert (EX), personal model (PM), facilitator (FC) and delegator (DE) were negative but significant at .01 level and the coefficient of correlation of (Sw) dimension with formal authority (FA) teaching style was negative and significant at .05 level of significance.

• The coefficients of correlation of enthusiasm (En) dimension of personality types with expert (EX) and facilitator (FC) teaching styles were negative and significant at .01 level of significance. But the coefficients of correlation of enthusiasm (En) dimension with formal authority (FA), personal model (PM) and delegator (DE) teaching styles were not significant at any statistical level of significance.

• The coefficients of correlation of boldness (Bo) dimension of personality types with expert (EX), formal authority (FA), personal model (PM), facilitator (FC) and delegator (DE) teaching styles were not significant at any level of significance.

• The coefficients of correlation of self-sufficiency (Ss) dimension of personality type with expert (EX), formal authority (FA), personal model (PM), facilitator (FC) and delegator (DE) teaching styles were not significant at any statistical level of significance.

• The coefficients of correlation of competition (Co) dimension of personality types with expert (EX), formal authority (FA), personal
model (PM), facilitator (FC) and delegator (DE) teaching styles were not significant at any statistical level of significance.

- The coefficients of correlation of introversion-extraversion (Total) dimension of personality types with expert (EX), personal model (PM) and facilitator (FC) teaching styles were negative and significant at .01 level of significance. However, the coefficients of correlation with formal authority (FA) and delegator (DE) teaching styles were not significant at any statistical level of significance.

**Differential Analysis**

**School wise Comparison of Teacher Effectiveness, Teaching Styles and Personality Types of Secondary School Teachers**

- The mean differentials calculated between the mean scores of government and private secondary school teachers with regard to different components of teacher effectiveness i.e., preparation and planning for teaching (PP), classroom management (CR), knowledge of subject matter (KS), teacher characteristics (TC), interpersonal relations (IR) and teacher effectiveness total TE (total) were significant at .01 level of significance.

- The mean differentials calculated between the mean scores of government and private secondary school teachers with regard to various teaching styles namely, expert (EX), formal authority (FA), facilitator (FC) and delegator (DE) were significant at .01 level except the calculated t-value for personal model (PM) teaching style which was not statistically significant at any level of significance.

- The mean differentials between government and private secondary school teachers with respect to different dimensions of personality types, namely, enthusiasm (En) and boldness (Bo) were statistically significant at .01 level of significance, but the mean differentials between the two groups with respect to social warmth (Sw), self-sufficiency (Ss), competition (Co) and introversion-extraversion (Total) were not statistically significant at any level of significance.
• The mean differentials between male and female government school teachers with respect to various components of teacher effectiveness i.e., preparation and planning for teaching (PP), classroom management (CR), teacher characteristics (TC), interpersonal relations (IR) and teacher effectiveness total (TE total) were not statistically significant at any level of significance but the mean differential of two groups with respect to knowledge of subject matter (KS) component of teacher effectiveness were significant at .05 level of significance.

• The calculated t-values between male and female teachers of government schools regarding different teaching styles, namely, expert (EX), formal authority (FA), facilitator (FC) and delegator (DE) were not significant at any level of significance but the mean differential between two groups with respect to personal model (PM) teaching style was significant at .05 level of significance.

• The mean differentials between male and female teachers of government schools with respect to different dimensions of personality types, i.e. social warmth (Sw), enthusiasm (En), boldness (Bo), self-sufficiency (Ss) and introversion-extraversion (Total) were not statistically significant at any level of significance. However, the mean differentials between two groups regarding competition (Co) dimension was significant at .05 level of significance.

• The calculated t-values between male and female teachers of private schools with regard to various components of teacher effectiveness namely, preparation and planning (PP) and classroom management (CR) were not significant at any level of significance but the t-values calculated for two groups with respect to teacher characteristics (TC) and interpersonal relations (IR) components of teacher effectiveness were significant at .05 level of significance. The mean differentials regarding knowledge of subject matter (KS) and total teacher effectiveness TE (total) were significant at .01 level of significance.
• The mean differentials between male and female teachers of private schools with respect to various teaching styles, namely, expert (EX), formal authority (FA), personal model (PM) and delegator (DE) were not significant at any level of significance. But calculated t-value regarding facilitator (FC) teaching style was significant at .05 level of significance.

• The calculated t-values between male and female teachers of private schools with respect to different dimensions of personality types, namely, social warmth (Sw), enthusiasm (En), boldness (Bo), self-sufficiency (Ss), competition (Co) and introversion-extraversion (Total) were not significant at any level of significance.

Stream wise Comparison of Teacher Effectiveness, Teaching Styles and Personality Types of Secondary School Teachers

• The mean differentials between school teachers teaching humanities and science subjects with respect to various components of teacher effectiveness, namely, classroom management (CR), teacher characteristics (TC) and teacher effectiveness total TE (total) were significant at .05 level of significance, but the mean differentials between the two groups with respect to various components of teacher effectiveness i.e. preparation and planning for teaching (PP), knowledge of subject matter (KS) and interpersonal relations (IR) were not significant at any level of significance.

• The calculated t-values between school teachers teaching humanities and science subjects regarding different teaching styles, namely, expert (EX), formal authority (FA), personal model (PM), facilitator FC and delegator (DE) were not significant statistically at any level of significance.

• The mean differentials between school teachers teaching humanities and science subjects with regards to dimensions of personality types, namely, social warmth (Sw), self-sufficiency (Ss) and introversion-extraversion (Total) were significant at .01 level, but the mean
differentials with regard to enthusiasm (En), boldness (Bo) and competition (Co) dimensions were not significant at any level of significance.

- The mean differentials between male and female science teachers with respect to various components of teacher effectiveness i.e. preparation and planning for teaching (PP), classroom management (CR), knowledge of subject matter (KS), teacher characteristics (TC), interpersonal relations (IR) and total teacher effectiveness TE (total) were not statistically significant at any level of significance.

- The calculated t-values between male and female science teachers with respect to different teaching styles i.e. expert (EX), formal authority (FA), personal model (PM), facilitator (FC) and delegator (DE) were not statistically significant at any level of significance.

- The mean differentials calculated between male and female science teachers with respect to different dimensions of personality types, namely, social warmth (Sw), self-sufficiency (Ss) and introversion-extraversion (Total) were not significant at any level of significance but the mean differentials of the two groups regarding enthusiasm (En), boldness (Bo) and competition (Co) dimensions of personality types were significant at .05 level of significance.

- The calculated t-values between male and female humanities teachers on various components of teacher effectiveness, namely, preparation and planning for teachers (PP), classroom management (CR), knowledge of subject matter (KS) and total teacher effectiveness TE (total) were significant at .01 level of significance and regarding teacher characteristics (TC) and interpersonal relations (IR) dimensions, t-values were significant at .05 level of significance.

- The mean differentials between male and female humanities teachers with respect to different teaching styles i.e., expert (EX), formal authority (FA), personal model (PM), facilitator (FC) and delegator (DE) were not statistically significant at any level of significance.
• The calculated t-values between male and female humanities teachers with regard to different dimensions of personality types, namely, social warmth (Sw), enthusiasm (En), boldness (Bo), self-sufficiency (Ss), competition (Co) and introversion-extraversion (Total) were not statistically significant at any level of significance.

Teacher Effectiveness in relation to Teaching Styles, Personality Types and Teaching Experience.

• The mean differentials between school teachers scoring low and high in expert (EX) teaching style with respect to different components of teacher effectiveness namely, preparation and planning for teaching (PP), classroom management (CR), knowledge of subject matter (KS), teacher characteristics (TC), interpersonal relations (IR) and total teacher effectiveness TE (total) were significant at .01 level of significance.

• The calculated t-values between school teachers scoring low and high in formal authority (FA) teaching style with respect to different components of teacher effectiveness namely, preparation and planning for teaching (PP), classroom management (CR), knowledge of subject matter (KS), teacher characteristics (TC), interpersonal relations (IR) and total teacher effectiveness TE (total) were significant at .01 level of significance.

• The mean differentials between school teachers scoring low and high in personal model (PM) teaching style with respect to different components of teacher effectiveness, namely, preparation and planning for teaching (PP), classroom management (CR), knowledge of subject matter (KS), teacher characteristics (TC), interpersonal relations (IR) and total teacher effectiveness TE (total) were statistically significant at .01 level of significance.

• The calculated t-values between school teachers scoring low and high in facilitator (FC) teaching style with respect to different components of teacher effectiveness, namely, preparation and planning for teaching
(PP), classroom management (CR), knowledge of subject matter (KS),
teacher characteristics (TC), interpersonal relations (IR) and total
teacher effectiveness TE (total) were statistically significant at .01 level
of significance.

• The mean differentials between school teachers scoring low and high in
delegator (DE) teaching style with respect to different components of
teacher effectiveness, namely, preparation and planning for teaching
(PP), classroom management (CR), knowledge of subject matter (KS),
teacher characteristics (TC), interpersonal relations (IR) and total
teacher effectiveness TE (total) were significant at .01 level of
significance.

• The calculated t-values between teachers teaching through teacher-
centered teaching styles and teachers teaching through learner-
centered teaching styles in relation to various components of teacher
effectiveness, namely, knowledge of subject matter (KS), teacher
characteristics (TC) and teacher effectiveness total TE (total) were
significant at .01 and t-value regarding interpersonal relations (IR) was
significant at .05 level but the mean differentials between two groups
regarding preparation and planning for teaching (PP) and classroom
management (CR) components of teacher effectiveness were not
significant at any level of significance.

• The mean differentials between school teachers scoring low and high in
social warmth (Sw) dimension of personality types with respect to
different components of teacher effectiveness namely, preparation and
planning for teaching (PP), classroom management (CR), knowledge of
subject matter (KS), teacher characteristics (TC), interpersonal relations
(IR) and total teacher effectiveness TE (total) were not significant at any
statistical level of significance.

• The mean differentials between school teachers scoring low and high in
enthusiasm (En) dimension of personality types with respect to different
components of teacher effectiveness namely, preparation and planning
for teaching (PP), classroom management (CR), knowledge of subject matter (KS), teacher characteristics (TC), interpersonal relations (IR) and total teacher effectiveness TE (total) were not significant at any statistical level of significance.

- The mean differentials between school teachers scoring low and high in boldness (Bo) dimension of personality types with respect to different components of teacher effectiveness namely, preparation and planning for teaching (PP), classroom management (CR), knowledge of subject matter (KS), teacher characteristics (TC), interpersonal relations (IR) and total teacher effectiveness TE (total) were not significant at any statistical level of significance.

- The mean differentials between school teachers scoring low and high in self-sufficiency (Ss) dimension of personality types with respect to different components of teacher effectiveness namely, preparation and planning for teaching (PP), classroom management (CR), knowledge of subject matter (KS), teacher characteristics (TC), interpersonal relations (IR) and total teacher effectiveness TE (total) were not significant at any statistical level of significance.

- The mean differentials between school teachers scoring low and high in competition (Co) dimension of personality types with respect to different components of teacher effectiveness namely, preparation and planning for teaching (PP), classroom management (CR), knowledge of subject matter (KS), teacher characteristics (TC), interpersonal relations (IR) and total teacher effectiveness TE (total) were not significant at any statistical level of significance.

- The mean differentials between school teachers scoring low and high in introversion-extraversion (Total) dimension of personality types with respect to different components of teacher effectiveness namely, preparation and planning for teaching (PP), classroom management (CR), knowledge of subject matter (KS), teacher characteristics (TC),
interpersonal relations (IR) and total teacher effectiveness TE (total) were not significant at any statistical level of significance.

- The calculated F-values among three groups of teachers i.e. Group I (teaching experience below 10 years), Group II (teaching experience between 10 to 20 years) and Group III (teaching experience above 20 years) with respect to components of teacher effectiveness namely, PP, CR, KS and total teacher effectiveness were significant at .05 level of significance. However, the F-values with respect to TC and IR components were not significant at any statistical level of significance.

- The mean differentials between teachers of Group I and Group II on components of teacher effectiveness i.e. PP, CR, KS, TC, IR and total teacher effectiveness were not significant at any level of significance.

- The mean differentials between teachers of Group II and Group III with respect to CR and KS components of teacher effectiveness were significant at .01 level of significance and mean differentials with respect to TC and total teacher effectiveness were significant at .05 level of significance. The mean differentials with respect to PP and IR components were not significant at any statistical level of significance.

- The mean differentials between teachers of Group I and Group III with respect to PP, CR components of teacher effectiveness and total teacher effectiveness were significant at .05 level of significance and the calculated t-value regarding KS component was significant at .01 level. However the t-values with respect to TC and IR components of teacher effectiveness were not significant at any level of significance.

**Interactional Analysis**

**Main Effects**

- The calculated F-ratio regarding the main effect of type of school (government and private schools) on teacher effectiveness of school teachers was significant at .01 level of confidence.
• The calculated F-ratio regarding the main effect of teaching stream (humanities and science) on teacher effectiveness of school teachers was not significant at any level of significance.

• The F-ratio regarding the main effect of teaching styles (teacher-centered and learner-centered) on teacher effectiveness was significant at .01 level of significance.

• The F-value regarding the main effect of personality types (introvert and extrovert) of teachers in relation to teacher effectiveness was not statistically significant at any level of significance.

**First Order Interactions**

• 2X2 interactional effect of teaching styles and personality types on teacher effectiveness was not significant at any level of significance.

• The interactional effect of teaching styles and teaching stream on teacher effectiveness was not significant at any level of significance.

• The interactional effect of personality type and teaching stream on teacher effectiveness was not significant at any level of significance.

• The interactional effect of teaching styles and type of school on teacher effectiveness was not significant at any level of significance.

• The interactional effect of personality type and type of school on teacher effectiveness was not significant at any level of significance.

• The interactional effect of teaching stream and type of school on teacher effectiveness was not significant at any level of significance.

**Second Order Interactions**

• 2X2X2 interactional effect of teaching styles and personality types and type of school on teacher effectiveness was not significant at any level of significance.

• The interactional effect of teaching styles and personality types and teaching stream on teacher effectiveness was not significant at any level of significance.
• The interactional effect of teaching styles and teaching stream and type of school on teacher effectiveness was statistically significant at .05 level of significance.

• The interactional effect of personality types and teaching stream and type of school on teacher effectiveness was statistically significant at .05 level of significance.

Third Order Interaction
• 2X2X2X2 interactional effect of type of school and teaching stream and teaching styles and personality types on teacher effectiveness was not significant at any statistical level of significance.

CONCLUSIONS
In the light of findings of the present study, following major conclusions have been drawn:

Correlational Analysis
Relationship of Teacher Effectiveness with Teaching Styles
• Different teaching styles, namely expert, formal authority, personal model, facilitator and delegator possess significant positive relationship with different components of teacher effectiveness, namely, planning and preparation for teaching, classroom management, knowledge of subject matter, teacher characteristics, interpersonal relations and total teacher effectiveness.

• Teachers scoring high in expert teaching style possess higher abilities pertaining to preparation, planning and organizing for teaching, classroom management, knowledge of subject matter and its presentation, teacher characteristics, maintaining cordial interpersonal relations and in total teacher effectiveness.

• Teachers scoring high in formal authority teaching style are having higher abilities pertaining to preparation, planning and organizing for teaching, classroom management through successful communication,
knowledge of subject matter and delivery of course content, teacher characteristics in seeking active participation of students, adapting to maintain cordial interpersonal relations with others and in total teacher effectiveness.

- Teachers scoring high in personal model teaching style are higher in their abilities pertaining to preparation, planning and organization of teaching as per course objectives, classroom management, interpretation and presentation of subject matter, teacher characteristics in seeking pupil participation, interacting and maintaining cordial interpersonal relations and in total teacher effectiveness.

- Teachers scoring high in facilitator teaching style possess higher abilities pertaining to preparation, planning and organizing for teaching, successful communication and motivating pupils in classroom, knowledge of subject matter and its presentation, teacher characteristics through the level of acceptability in teaching profession, in maintaining cordial interpersonal relations and in total teacher effectiveness.

- Teachers scoring high in delegator teaching style exhibit higher abilities pertaining to preparation, planning teaching in accordance with the course objectives, classroom management, knowledge of subject matter and delivery of course content, teacher characteristics, in interacting and maintaining cordial relations with others and in total teacher effectiveness.

Relationship of Teacher Effectiveness with Personality Types

- Teacher effectiveness and its various components i.e. preparation and planning for teaching, classroom management, knowledge of subject matter, teacher characteristics and interpersonal relations do not have significant relationship with any of the dimensions of personality types, namely, social warmth, boldness, self sufficiency, competition and extraversion – introversion.
• Enthusiasm dimension of personality types bears a negative and significant relationship with preparation and planning for teaching, knowledge of subject matter dimensions of teacher effectiveness and total teacher effectiveness. This suggest that highly enthusiastic teachers being active, expressive, effervescent and carefree possess less abilities pertaining to preparation, planning and organizing teaching as per course objectives, less capable in acquiring, retaining, interpreting and delivery of course contents and on the overall teacher effectiveness because these aspects are the essential constituents of teaching learning process and amounts to teacher effectiveness.

Relationship of Teaching Styles with Personality Types

• The correlations of various dimensions of personality types i.e. social warmth, enthusiasm, boldness, self-sufficiency, competition and introversion-extraversion with different teaching styles namely, expert, formal authority, personal model, facilitator and delegator have conclusively established that social warmth dimension of personality types has negative but significant relationship with various teaching styles. Significant and negative correlations of social warmth indicate that more ability of social warmth in a teacher will tend to develop less inclination and binding towards various teaching style preferences. Teachers scoring high on social warmth dimension strive less to maintain status as an expert among students by displaying detailed knowledge, in setting standards and defining acceptable ways, have less flexibility with focus on students’ needs and goals and are less concerned with developing students’ capacity to work independently and autonomously.

• Enthusiasm dimension has negative but significant correlation with expert and facilitator teaching styles. This indicates that enthusiastic teachers being active, expressive, effervescent and carefree and have a less preference towards these teaching styles because enthusiastic
teacher are less concerned with transmitting information and insuring that students are well prepared and are not concerned with developing students’ ability to function independently in an autonomous fashion and are less focused on students initiative, needs and goals.

- Boldness, self sufficiency and competition dimensions of personality types have no significant relationship with any of the teaching styles.

- Introversion-extraversion dimension of personality types has negative but significant relationship with expert, personal model and facilitator teaching styles. This means that introvert teachers have more tendencies to teach through expert, personal model and facilitator teaching styles as compared to extrovert teachers. Thus, introvert teachers are better transmitter of knowledge, believe in teaching by personal examples and emphasize direct observations and develop in students the capacity for independent action, initiative and responsibility as compared to teachers possessing extraversion tendencies.

Differential Analysis

School wise Comparison of Teacher Effectiveness, Teaching Styles and Personality Types of Secondary School Teachers

- The teachers working in private schools possess higher teacher effectiveness on the areas namely, preparation and planning for teaching, classroom management, knowledge of subject matter, teacher characteristics, interpersonal relations and on total teacher effectiveness than the government school teachers. This difference can be due to different physical, infrastructural facilities and academic environments prevailing in government and private schools.

- Private school teachers strive to maintain status as an expert among students by displaying detailed knowledge and expertise, focus more on expectations and rules of conduct for students, give more emphasis on personal nature of teacher-student interaction through guidance, directions, suggestions and encouragement and were more concerned
with developing students’ capacity to work independently as compared to government school teachers. This difference can be because of better school facilities and the more exposure of teachers to various educational aspects in private schools. However, both government and private school teachers teach through personal model teaching style by establishing a prototype as how to think and behave. Expert teaching style is more predominant among private school teachers and personal model teaching style is more preferred by government school teachers.

- Government and private school teachers are equal in social warmth, self-sufficiency, competition dimensions of personality types and introversion-extraversion tendencies. But they differ significantly on enthusiasm and boldness dimensions of personality types. Government school teachers tend to be more cheerful, expressive effervescent and carefree as compared to private school teachers as they have more job stability. Further, government school teachers are more sociable, bold, ready to try new things and abundant in emotional response than their counterparts i.e. private school teachers.

- Male and female teachers of government schools do not differ on preparation and planning for teaching, classroom management, teacher characteristics, interpersonal relations components of teacher effectiveness and total teacher effectiveness. But they differ on knowledge of subject matter component of teacher effectiveness. Female teachers of government schools possess more developed ability in the delivery of course content and its presentation within the classroom situations than their counterparts i.e. male teachers.

- Male and female teachers of government schools are equal in their abilities to possess knowledge, skills and expertise that students need, in providing students the structure needed by them for learning, in providing support and encouragement to students and in developing student’s capacity to function independently. But the two groups differ significantly on personal model teaching style. Male teachers of
government schools emphasize more on direct observations and to follow a role model than the female teachers. Further, personal model teaching style is more preferred by male and female teachers of government schools.

- Male and female teachers of government schools are equal on social warmth, enthusiasm, boldness, self-sufficiency and introversion-extraversion dimensions of personality types but they differ on competition dimension of personality type. Male teachers of government schools are more competitive, assertive, independent minded and authoritarian than female teachers of government schools.

- Male and female teachers teaching in private schools are equal in their abilities pertaining to preparation, planning and organizing teaching according to course objectives. Further, male and female teachers of private schools are also equal in their abilities to successfully manage the classrooms through communication, motivation and by maintaining discipline.

- Female teachers of private schools are significantly higher on their abilities in acquiring, retaining, interpreting and in delivery of course content within classroom situations than their counterparts i.e. male teachers teaching in private schools.

- Female teachers of private schools are significantly higher on their abilities in seeking active participation from the pupils within classroom situations and in adapting themselves in maintaining cordial relations with others than their counterparts i.e. male teachers.

- Male and female teachers teaching in private schools do not differ significantly on expert, formal authority, personal model and delegator teaching styles but the two groups differ significantly on facilitator teaching style. Female teachers while teaching through facilitator teaching style emphasize more on the personal nature of teacher-student interactions, through guidance, suggestions, exploring options and encouragement than the male teachers of private schools. Further,
expert teaching style is more predominant in both male and female teachers of private schools.

- Male and female teachers teaching in private schools do not differ in any of the dimension of personality types, namely, social warmth, enthusiasm, boldness, self-sufficiency, competition and introversion-extraversion.

**Stream wise Comparison of Teacher Effectiveness, Teaching Styles and Personality Types of Secondary School Teachers**

- School teachers teaching humanities and science subjects do not differ in the preparation and planning, knowledge of subject matter and interpersonal relations dimensions of teacher effectiveness.

- Teachers teaching humanities stream are better in classroom management, communication with pupils, motivating the pupils and evaluating the teaching-learning process and in total teacher effectiveness than the teachers teaching science subjects.

- Teachers teaching humanities subjects possess higher teacher characteristics like ability to arouse a perceptive mass and in seeking active pupil-participation as compared to teachers teaching science stream. This difference can be attributed to different nature of contents, difficulty level and the type of instructional materials used in different streams.

- School teachers teaching humanities and science subjects possess equal preferences to teach through different teaching styles namely, expert, formal authority, personal model, facilitator and delegator. However, Expert teaching style is more preferred by school teachers teaching humanities subjects and personal model teaching style is more predominant among science teachers.

- School teachers teaching humanities subjects do not differ in the enthusiasm, boldness and competition dimensions of personality types from the school teachers teaching science subjects. However, humanities teachers and science teachers differ significantly in their
personality types on social warmth, self-sufficiency and introversion-extraversion dimensions. Humanities teachers prefer to work with other people, they depend on social approval and tend to be good natured, cooperative, emotionally expressive, attentive and kind hearted as compared to science teachers. Further, humanities teachers possess more extroversion tendencies and are dependable than science teachers.

- Male and female science teachers do not differ significantly in the preparation and planning for teaching, classroom management, knowledge of subject matter, teacher characteristics, interpersonal relations and total teacher effectiveness.

- Male and female science teachers are equal on the use of expert, formal authority, personal model, facilitator and delegator teaching styles. Out of all five teaching styles personal model teaching style is more predominant in both male and female science teachers.

- Male science teachers do not differ from female science teachers on social warmth, self-sufficiency and introversion-extraversion dimensions of personality types but they differ significantly on enthusiasm, boldness and competition dimensions of personality types. Male science teachers are more enthusiastic than the female science teachers. Male science teachers tend to be cheerful, active, talkative, frank, expressive, effervescent and carefree than the female science teachers. However, female science teachers are more bold, sociable, ready to try new things, spontaneous and abundant in emotional response than male science teachers. Male science teachers are more competitive, assertive, self-assured and authoritarian as compared to female science teachers.

- Male and female humanities teachers significantly differ on the components of teacher effectiveness i.e. preparation and planning, classroom management, knowledge of subject matter, teacher characteristics, interpersonal relations and total teacher effectiveness. Female humanities teachers possess more abilities pertaining to
preparation, planning and organizing teaching in accordance with course objectives, in communicating, in motivating and evaluating the teaching-learning process effectively and are better in acquiring, retaining, interpreting the subject matter within classroom situations than male humanities teachers. Female humanities teachers are also better in arousing and seeking active participation of pupils and are more capable of adapting themselves in making cordial relations with pupils, colleagues and community members than their counterparts i.e. male humanities teachers.

- Male humanities teachers do not differ from female humanities teachers in the use of different teaching styles. The five teaching styles i.e. expert, formal authority, personal model, facilitator and delegator are equally practised by male and female humanities teachers in their teaching. Personal model teaching style is more predominant among male teachers and expert teaching style is more preferred by female teachers teaching humanities subjects.

- Male teachers of humanities stream do not differ significantly from the female teachers of humanities stream in social warmth, enthusiasm, boldness, self-sufficiency, competition and introversion – extraversion dimensions of personality types.

Teacher Effectiveness in relation to Teaching Styles, Personality Types and Teaching Experience

- Teachers scoring high on various teaching styles, namely, expert, formal authority, personal mode, facilitator and delegator are better in preparation and planning for teaching, classroom management, knowledge of subject matter, teacher characteristics, interpersonal relations components and total teacher effectiveness than the teachers scoring low on these teaching styles.

- The two groups of teachers teaching through learner-centered and teacher-centered teaching styles differ significantly on knowledge of subject matter, teacher characteristics, interpersonal relations and total
presentation, teacher characteristics, maintaining interpersonal relations with others and in total teacher effectiveness

- Teachers having teaching experience more than 20 years (Group III) were better in successful communication and motivating pupils in maintaining discipline in the classrooms within democratic framework, in presentation of course contents, in seeking active participation from pupils and in total teacher effectiveness than the teachers having teaching experience between 10 to 20 years (Group II). However, the two groups were equal in abilities pertaining to preparing, planning and organizing teaching in accordance with course objectives and in maintaining cordial relations with others.

- However, teachers having teaching experience more than 20 years (Group III) are better in preparing, planning and organizing teaching in accordance with course objectives, in successfully communicating and motivating pupils in classroom situations, in presentation of course content and in total teacher effectiveness than the teachers having teaching experience below 10 years (Group I), but the two groups are equal in abilities of seeking active participation from the pupils and in maintaining cordial relations with others.

**Interactional Analysis**

**Main Effects**

- There is significant effect of type of school on teacher effectiveness of secondary school teachers.
- There is no significant effect of teaching stream on teacher effectiveness of secondary school teachers.
- There is significant effect of teaching styles on teacher effectiveness of secondary school teachers.
- There is no significant effect of personality types on teacher effectiveness of secondary school teachers.
First Order Interactions

- There is no significant interactional effect of teaching styles and personality types on teacher effectiveness of secondary school teachers.
- There is no significant interactional effect of teaching styles and teaching stream on teacher effectiveness of secondary school teachers.
- There is no significant interactional effect of Personality types and teaching stream on teacher effectiveness of secondary school teachers.
- There is no significant interactional effect of teaching styles and type of school on teacher effectiveness of secondary school teachers.
- There is no significant interactional effect of personality types and type of school on teacher effectiveness of secondary school teachers.
- There is no significant interactional effect of teaching stream and type of school on teacher effectiveness of secondary school teachers.

Second Order Interactions

- There is no significant interactional effect of teaching styles, personality types and type of school on teacher effectiveness of secondary school teachers.
- There is no significant interactional effect of teaching styles, personality types and teaching stream on teacher effectiveness of secondary school teachers.
- There is significant interactional effect of teaching styles, teaching stream and type of school on teacher effectiveness of secondary school teachers. It means that the three independent variables interact in a significant way to influence teacher effectiveness.
- There is significant interactional effect of type of school, personality types and teaching stream on teacher effectiveness. It means that the three independent variables interact in a significant way to influence teacher effectiveness of school teachers.

Third Order Interaction

There is no significant interactional effect of teaching styles, personality types, teaching stream and type of school on teacher effectiveness. It means
that all the four independent variables do not interact in a significant way to influence teacher effectiveness of secondary school teachers.

EDUCATIONAL IMPLICATIONS

Teaching is not simply a process of giving information. It is an interaction between teacher and learner wherein the teacher chisels the behavior of learner by bringing desired changes. Teachers are the vulnerable, significant and responsive unit of educational machinery. A teacher makes the classroom. In the school-context, children learn more from the teachers rather than the formal text books. Teacher plays a more progressive role in the teaching learning process. Teacher is the role model for their pupils and they try to copy and follow his/her activities, personality and behaviour patterns. Hence the personality as well as teaching style of a teacher should be appealing, attractive, inspiring, interesting and effective. In the present investigation teacher effectiveness of secondary school teachers was studied in relation to their teaching styles and personality types. The results of present study deserve consideration from teachers, educational planners, administrators, teacher educators and recruiting authorities.

The present study has implications for changing the perceptions of teachers, as if teachers change the ways they teach and the ways in which they think about teaching, then their reluctance to change can be overcome resulting in any meaningful and long lasting improvement in their teaching. A good teacher should know what to teach and how to teach. The lack of current knowledge about theory and applied research make the teacher adopt a "popular" practice and continue in it without ever knowing whether their procedures are effective or whether their instructions are improved or damaged. Teacher themselves internalize a low opinion of their work which could tend to depress their motivation and morale and thereby the lowering the effectiveness of their classroom performance.

The teaching strategy of teacher has a direct application and utility in making the teaching-learning process effective. Teachers can make their instructions more meaningful, diverse and interesting through their teaching styles. The results of present study have revealed positive and significant
relationship between teacher effectiveness and teaching styles of school teachers. Thus, the teachers who attain needed competence in their roles and functions such as preparation, planning and organization of teaching, classroom management, presentation of subject material, teacher characteristics such as seeking active participation from pupils and maintain interpersonal relations with others tend to possess high teacher effectiveness and all these aspects are desirable constituents in all teaching styles.

The findings of present study reflect that school teachers teaching through learner-centered teaching styles are more effective than the teachers teaching through teacher-centered teaching styles. Learner-centered teaching style is more likely to motivate students by engaging their interests and is more focused on student needs. Identifying the modes in which students learn best become useful in two ways first in helping students understand and become aware of how they themselves learn and study best and second in helping instructors achieve a more holistic approach to selecting and designing strategies, lessons and activities that maximize student learning and understanding resulting in high teacher effectiveness.

Further, the findings of this study have indicated that senior teachers were high in teacher effectiveness than juniors. It implies that there is a need of a common platform for senior and junior teachers where they can share their experiences with each other and get benefitted from it.

The gap between government and private secondary school teachers regarding the level of teacher effectiveness suggests that there should be improvement in the administration of government secondary schools through the professional growth of teachers. For this training and orientation programmes should be organized. Teachers can be motivated and guided how the classroom management system could be used to enhance communication and to make students feel closer and more comfortable with the instructor through learner-centered teaching styles.

The findings of the study bear significant implications for teacher educators. During teacher preparation programmes along with academic matters, the teachers should be exposed to appropriate training in interpersonal relations with learners, colleagues, parents and community members. Further,
teachers can be imparted knowledge concerning various teaching styles and about making them more acceptable to pupils, dynamic and more humane through curriculum transactions.

The results of the present study provide the evidence that effective teachers perform better on the areas, namely, preparation and planning for teaching, classroom management, knowledge of subject matter, teacher characteristics, interpersonal relations and in total teacher effectiveness. The recruiting authorities can take measures to appoint those individuals as teachers who are highly knowledgeable, extremely skillful and possess necessary personal qualities to be effective teachers.

RECOMMENDATIONS FOR FURTHER RESEARCH WORK
The present study, having its merits and limitations, paves the scope for further research work in the following areas:

1. The present study needs to be replicated by including secondary school from rural areas also. The present study was based predominantly on urban sample.
2. The present study can be extended to include students’ evaluations about teacher effectiveness along with teachers’ self evaluations to generalize more about teacher effectiveness.
3. Replicative follow up studies involving larger samples and different population (college teachers) may be undertaken to establish the validity of findings of present study.
4. The present study included school teachers at secondary level only. A more comprehensive study including teachers of senior secondary stage will contribute to the understanding of the relationships among teacher effectiveness, teaching styles and personality types.
5. The study can be extended to further explore the associations of learning styles of pupils and teaching styles of teachers with teacher effectiveness.