EFFECTIVENESS OF SECONDARY SCHOOL TEACHERS IN RELATION TO PERCEIVED ORGANISATIONAL CLIMATE, PSYCHOLOGICAL CAPITAL AND LEARNING ORIENTATION

Thesis Submitted for the Award of the Degree of

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in

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Transforming Education Transforming India

LOVELY PROFESSIONAL UNIVERSITY
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DECLARATION

I do hereby declare that the dissertation entitled, "Effectiveness of secondary school teachers in relation to perceived organisational climate, psychological capital and learning orientation", submitted for awarding the degree of Doctor of Philosophy in Education to School of Education, Lovely Professional University under the accomplished supervision of Dr. Anshu Narad, Associate Professor, Lovely Professional University, is an original work and all ideas and references have been duly acknowledged. It does not contain any work that has been submitted for the award of any degree or diploma of any other university.

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ABSTRACT

The study investigated the "effectiveness of secondary school teachers in relation to perceived organisational climate, psychological capital and learning orientation" in state of Punjab. Effectiveness of teachers refers to "the competences in the teachers needed for their function and roles as well as planning and preparation for teaching, classroom management and knowledge of subject matter etc, teacher characteristics and their interpersonal relation" (Kulsum, 2011). "Perceived organisational climate refers to a set of perceived attribute of an organisation and its sub system as reflected in the way an organisation deals with its members, groups and issues" (Pethe, Chaudhari & Dhar, 2010). "Psychological capital is visualized as a positive frame of mind set of an individual for development, which is specified by self-efficacy, hope, optimism and resilience" (Luthans etal. 2007). "Learning orientation refers to individual's general disposition to learn and assess how individuals may enjoy or want to learn" (Martinez, 2001). With the study's goals in mind the investigator employed descriptive survey method. The sample included the 500 teachers from government and private secondary schools situated in rural and urban areas of three regions of Punjab state, viz. Doaba (Jalandhar), Majha (Pathankot) and Malwa(Ludhiana) selected by employing stratified multistage random sampling method. Following were the objectives of the study:(a) to study the levels of effectiveness of secondary school teachers and psychological capital;(b)to study the perception of teachers towards organisational climate of secondary schools; (c) to find out difference in effectiveness of secondary school teachers, perceived organisational climate, psychological capital and learning orientation with respect to gender, locality, teaching experience and type of school;(d) to examine the relationship of effectiveness of secondary school teachers with perceived organisational climate, psychological capital and learning orientation; and (e)to analyze the role of perceived organisational climate, psychological capital and learning orientation in the effectiveness of secondary school teachers. Four tools, namely, "teacher effectiveness scale" (2011) by Kulsum; "organisational climate scale" (2010) by Pethe, Chaudhari and Dhar; "psychological capital questionnaire" (2007) by Luthans, Avolio, Avey and Norman; and "learning orientation questionnaire" (2005) by Martinez were employed. Statistical techniques, viz. M, SD,

and percentage analysis were employed to analyse the nature of data, while t-test, One-way ANOVA, correlation 'r' and multiple regression were used to draw inferences and conclusions from data. Conclusions drawn were (a)majority of teachers were at "moderately "effective level, followed by below average, above average, highly effective, highly ineffective, most effective and no teacher was found at most ineffective level for overall effectiveness of secondary school teachers' and its dimensions; (b) majority of teachers were at "high level" followed by "medium level," and none of the teachers were found at "low level" for overall psychological capital and its dimensions; (c)majority of teachers perceived organisational climate as "medium". favourable, followed by "low" i.e., less favourable; and "high" i.e. highly favourable for overall perceived organisational climate and its dimensions; (d)female teachers were more effective in "preparation for teaching and planning, classroom management, knowledge of subject-matter etc., teacher characteristics and interpersonal relations" dimensions and overall effectiveness of teachers as compared to their male counterparts;(e) teachers teaching in urban and rural schools; in government and private schools and with 0-5 years, 5-10 years and 10 years & above of teaching experience were similar and equally effective in all dimensions and overall effectiveness of teachers; (f) female teachers had a better perception of "organisational processes and altruistic behaviour" in schools as compared to their male counterparts; (g) teachers teaching in urban schools perceived more "altruistic behaviour" in schools as compared to their rural school counterparts: (h)teachers with 0-5years, 5-10 years and 10 years& above of teaching experience had similar perception for all the dimensions and overall perceived organisational climate in schools; (i) teachers teaching in government schools had a better perception of "results, rewards and interpersonal relations and organisational processes" and overall organisational climate in schools as compared to their private school counterparts; (j) both male and female secondary school teachers exhibited similar "self-efficacy, hope, resilience, optimism" and overall psychological capital;(k)teachers teaching in rural schools exhibited better overall psychological capital as compared to their urban schools counterparts; (l)teachers with 0-5 years, 5-10 years and 10 years & above of teaching experience exhibited similar "selfefficacy, hope, resilience and optimism" and overall psychological capital; (m) teachers teaching in private schools exhibited more "optimism" and overall

psychological capital as compared to their government schools counterparts;(n) female teachers exhibited better "conative and affective learning focus, learning independence or autonomy" and overall learning orientation as compared to their male counterparts;(m)both teachers teaching in urban and rural secondary school teachers exhibited similar "conative and affective learning focus, learning independence or autonomy, committed strategic planning and learning effort" and overall learning orientation; (o)teachers with 0-5 years of teaching experience exhibited greater "learning independence or autonomy" in comparison to teachers with 10 years & above of teaching experience;(p)teachers teaching in private schools exhibited better "conative and affective learning focus, learning independence or autonomy" and overall learning orientation as compared to their government school counterparts; (q) positive and significant correlation was found in effectiveness of teachers with perceived organisational climate, psychological capital and learning orientation; and (r) perceived organisational climate, psychological capital and learning orientation were the significant predictors of effectiveness of secondary school teachers.

Keywords: "effectiveness of secondary school teachers", "perceived organisational climate", "psychological capital" and "learning orientation"

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ABBREVIATIONS

CFA	Confirmatory Factor Analysis
EFA	Exploratory Factor Analysis
TLI	Tucker Lewis Index
IFI	Incremental Fit Index
RMR	Root Mean Square Residual
RMSEA	Root Mean Square Error of Approximation
GFI	Goodness of fit index
Df	Degree of Freedom
PCQ	Psychological Capital Questionnaire
LOQ	Learning Orientation Questionnaire
NCERT	National Council for Educational Research and Training
SCERT	State council for Educational Research and Training
PSEB	Punjab School Education Board
Md	Median
Sk	Skewness
Kurtz	Kurtosis
w.r.t.	with respect to
ANOVA	Analysis of Variance
IEC	Indian Education Commission
AVE	Average Variance Extracted
CR	Composite reliability
M	Mean
SD	Standard deviation
AIC	Akaike Information Criterion
MECVI	Modified Expected Cross-validation Index
CITC	Corrected Item –To -Total Correlation
DEO	District Education Office
Sign.	Significant
VIF	Variance Inflation Factor
USC	Unstandardized coefficients
SC	Standardized coefficients
CS	Collinearity statistics
NCTE	National council for teacher education
GEC	General Educational Council
% age	Percentage
PsyCap	Psychological Capital
DV	Dependent Variable
IDV	Independent Variable
MS	Mean square
<u> </u>	-

CHAPTER -I

INTRODUCTION

"A teacher can never truly teach unless he is still learning himself. A lamp can never light another lamp unless it continues to burn its own flame. The teacher, who has come to an end of his subject, who has no living traffic with his knowledge, but merely repeats his lessons to his students, can only load their minds; he cannot quicken them" (Tagore, 1922). In this thought, Tagore desires teachers to be ever learners (as cited in Das, 2014).

Education develops the mind and empowers the individuals. The social, economic, political conditions and cultural milieu of any society has reflection in its educational system. Emphasizes on good standard of education, accountability of teachers, curriculum revision, embracing of new technologies, stakeholders' involvement, periodic assessment, role of regulatory bodies etc., are germane for the renovation and rejuvenation of any education system. The key figure in any education system is the teacher. "Without good teachers even the best of system is bound to fail and with good teachers even the defects of a system can be largely overcome" says Humayun Kabir (n.d). In a broader perspective, it is considered that the efficacy of any educational program to a greater extent depends upon the meritorious and effective teachers who implement it robustly. Indian Education Commission (1964-66 as cited in Tyagi, 2013) had "observed that of all different factors, which influence the quality of education and its contribution to the national development, the effectiveness of teachers and their character are undoubtedly the most significant".

For the nation to prosper it must have the capability of producing good citizens, which in turn is contingent upon quality teachers. The function of a teacher in society is peerless, pioneering and path-breaking. Teachers can either make or break the society. A nation prospers on the effort of its teachers. Kucukahmet (1999) (as cited in Malik and Kapoor, 2014) pointed out that, teachers can impact the students, positively as well as adversely, as reflected in their academic achievement, character and personality. Qualitative pedagogy largely depends on the excellence and traits of its dedicated teachers. Learning lies at the bottom, for a teacher to be creative and innovative. A teacher is that solid foundation upon which the entire structure of learning rests on.

A good quality teacher has an overarching role of imparting knowledge, exchanging of ideas, social engineering to eradicate the social evils prevalent in society from one generation to other. Kareem and Ravirot, 2014, (as cited in Dash and Barman, 2016), appropriately pinpointed that quality teachers play a momentous role in shaping the quality of education. That is, why teachers are known as firm pillars of the educational process. They are extremely important in the teaching-learning process. Teachers hold a strong position in the system of education (Afe, 2000 & Kiadese, 2011).

The teaching fraternity is like a pivot around which the growth of a country is riveted on. The teacher is a building block of education, behind every successful individual there is huge toiling contribution of a teacher to shape him/her. To meet the varying needs, interests and requirements of all individuals and ensuring a congenial environment in the classroom to actualize the aims of education, in the era where there is a shortage of teachers, overcrowded classes, increased administrative expectations, technological challenges, language barriers, and faulty transfer policies, no promotion, lesser salaries, etc. is great challenge for all teachers.

For many years, shortage of faculty and the state educational system not being able to employ and keep proficient teachers has posed hurdles to quality education, (Sheikh, 2017). For donkey's years, teaching that was considered as a noble profession has been intruded by hypocrites who have got no trucks with the business of classroom teaching. The scant employment chances prevailing across the nation has chipped in to flooded the class room with non-eligible teachers, who view teaching as a makeshift arrangement which would be streamlined as soon as they get the jobs of their dreams. The academic growth and development of an individual largely based upon the presence of an efficient teacher. With the reorganisation of teacher education across diverse contexts, policy contestations in the area are gradually rising, influenced by a lack of consensus on what constitutes adequate teacher preparation, (Whitty and Furlong, 2017, as cited in Sharma, 2019). Talented teachers receive the germane training in education for their hobby-horse subject up to a minimum level (Chako, 1981).

According to Postlethwaite (2007), academic excellence of a learner is totally dependent upon three factors namely, teacher, environment and school, among all these variables, which contribute mostly to enhance students learning is teacher effectiveness. Since the competition is increasing day by day, students must be able to

compete across the globe. Many countries have started showing their interest in student's learning outcomes. This increases the responsibility and accountability of teachers towards society.

In assuring learning outcome, the teacher is the most important aspect; therefore teachers' quality becomes centre stage to the improvement of whole education system. Himabindu (2012) justly said, the importance of education depends much on the effectiveness of teachers, as a teacher is deemed hub of teaching-learning process. This means that the responsibility of a teacher is significant and through his teaching skills, he/she can change the future of country. Teaching is a noble profession and the individuals involved in the process of teaching-learning are working for the welfare of others. In any educational system, role of teacher is dominating. There are many roles that the teacher must play very seriously, he must identify the weaknesses and strengths of his/her students, correct errors, know the basic problems, help students learn by imparting knowledge to them, and guide them to become socially useful and productive members of society. Dhar (2000) rightly pinpointed that lately teaching has gained growing importance, and it has been realized that teacher is the ultimate key to the school improvement and educational change.

From the aforesaid contemplation, teachers are considered a part and parcel of education system. It is impossible to imagine the success of teaching learning process without the presence of a good teacher. Indeed, there is a link between the teachers' factor and achievement of students (Olatoye, 2006; Adekola, 2006; and Kiadese, 2011).

1.1 Effectiveness of Secondary School Teachers

Phillips (2013) rightly stated that "teaching is complex and great practice, takes time, passion, high-quality materials, and tailored feedback designed to help each teacher continuously grow and improve." Although effectiveness of teaching is a well-established topic of study, numerous authors and individuals have attempted to describe the term "teaching effectiveness" in a variety of ways. Teacher effectiveness is a compound word, comprising of two words, "teacher" and "effectiveness". According to Dictionary of Education (1978) "teacher is one who teaches, especially a person employed."

While according to Collin's English Dictionary (1987), "effectiveness refers to when one has the capability of being successful in producing intended results; it is deemed as their effectiveness." Further, Good (1973) defined "teacher as an employee in an official capacity for guiding and directing the learning experiences of the learner in institutions." Rao and Rao (2011) stated that, "teacher is not merely a person who aims at creating a stall of educationalists. He is also the possessor of a certain expertise in doing so, lack of which justifies others in saying he is not a teacher."

Teacher effectiveness is a multi-dimensional concept. Good in 1959, rightly said, "teacher effectiveness as the ability and interaction between the physical, intellectual, and psychological interests of the students, content efficiency of the teachers and the social needs." While in Encyclopaedia of Indian Education (2004), "teacher effectiveness refers to the effects of teaching by a teacher on the pupils he teaches. It therefore, refers to the progress the pupils make in achieving specified educational objectives because of the teacher." The main function of a teacher is teaching, besides teaching, his role is also known as the change maker for society. According to Klausmeier and Ripple (1971), "teacher effectiveness, can be measured using three categories of criteria, namely, presage, product, and process (as cited in Sandhu, 2010). The individuals who prefer presage criterion includes teacher's personality or intellectual attributes such as adaptability, intelligence, character and performance in training, knowledge of achievement such as marks in education courses, success in student teaching, national teacher examination, knowledge of educational facts or one's in-service status characteristics such as tenure, years of experience or participation in professional organisations." While those who prefer product criterion, evaluate teacher effectiveness, through what the teacher does (teacher behavior), what the student do (student behavior), the interactions that occurred between the educator and pupils. Here, behaviour does not include actions that indicate mastery of the subject matter. Further those who prefer the third criterion, process measure teacher effectiveness as how well the students attain. According to this criterion, achievement tests and other measurements in the cognitive, psychomotor, and affective domains are used to assess teacher effectiveness (as cited in Thakur, 2017). Centra and Gaubatz (2000) found high relationship in student ratings of the material learnt and their overall ratings of the teacher. Indeed, "teacher effectiveness" is a multifaceted construct as it involves varied aspects of process of learning and teaching.

According to Ornstein (1991), the research on teaching effectiveness, or teacher effectiveness, is an assortment of imprecise and evolving conceptions (as cited in Malik, 2017). At York University, the Senate Committee (SCOTL, 2000) (as cited in Bandele & Oluwatayo, 2014) defined "teaching effectiveness as an activity, which brings about the most productive and beneficial learning experiences for students and motivates their development as learners." Wankat (2002) defined "teaching that fosters student learning is known as teaching effectiveness." According to Evans (2006), effective teaching is synonymous with teaching effectiveness, which can be characterized in three ways, namely, teacher-student interactions, teachers' personalities and teachers' influence on pupil behavior; also included pre-active stage, process, and product components of teaching.

Teachers' personalities and teacher-pupil relationships are directly related to the pre-active stage and process components of teaching. Similarly, the impact of the teacher on student behaviour is directly related to the product element. Further Evans (2006) defined "teaching effectiveness as a manifestation of content knowledge, abilities in course presentation, and generating a desirable learning environment." According to Evans (2006), "teaching effectiveness is described as a type of classroom transaction that occurs between teachers and students that results in an increase in students' knowledge."

The word "teaching effectiveness" relates to the "effectiveness of teaching" inside a unit, whereas the word "teacher effectiveness" refers to a single teacher's performance (as cited in Thakur, 2017). To different people, the term "teaching effectiveness" might signify many different meanings (as cited in Thakur, 2017). Despite the efforts of many scholars and professionals across the country, questions such as what makes instructors effective, what benefits and features effective teachers have, and how to identify these traits remain unsolved. Effective teaching should be evaluated in the context of effective learning only. The majority of research stressed that for an effective teacher while working with students, attributes such as subject matter expertise, instructional skills, and personal qualities are beneficial. When personal attributes are given more weight, effective teachers are described as lively, passionate, creative, witty, and so on. Effective teachers are seen as the one who are experts in the topics they cover, capable of clarifying ideas, establishing relationships, eliciting maximum engagement from students, creative and reasonable, and so on.

In addition to this, from the review of literature, it has been found that teacher effectiveness is very comprehensive word which includes the factors like knowledge of subject matter, preparation and planning for teaching, maintaining discipline in the schools, maintaining the relationship between various members of school like students, parents, colleagues and other stakeholders, personality characteristics like; adjustment, thinking, attitude and job satisfaction etc.

In the present study, "effectiveness of secondary school teachers refers to teacher effectiveness as measured through teacher effectiveness scale by Kulsum" (2011). Kulsum (2011), stated that "teacher effectiveness refers to the competences in teachers, needed for their function and roles as well as planning and preparation for teaching, classroom management and knowledge of subject matter, teaching characteristics and their interpersonal relations." "Teacher effectiveness can be thought in terms of characteristics of a teacher, his personality, attitudes, process (teacher-pupil interaction) and production variable (outcomes of teaching-learning process, namely pupil achievement)". In the present study "teacher effectiveness" includes five areas namely "preparation and planning for teaching", "classroom management, discipline, motivation, interaction, evaluation", "knowledge of subjectmatter its delivery and presentation including black board summary", "personality characteristics of teachers" and "inter-personal relations of teachers with others" (Kulsum, 2011). These five domains had the benefit of an accepted theoretical background and content validity because they encompassed every aspect of teaching. These five areas are: a)"preparation and planning for teaching refers to the ability of teacher to prepare, plan and organize for teaching, keeping in mind the course objective by utilizing the different resources"; b)"classroom management, discipline, motivation, interaction, evaluation refers to the classroom management which includes the ability of the teacher to successfully maintain the discipline, communicate, motivate, encourage the students and evaluate the teaching learning process"; c)"knowledge of subject-matter its delivery and presentation including B. B. Summary focused on the ability of the teacher in acquiring, retaining and interpreting the contents of the subject he/she is dealing within the classroom situation, presentation and delivery of the content matter including black board summary which are the essentials of the teaching learning process"; d)"personality characteristics of teachers refer to personality make-up and its behavioral manifestations that have their own level of acceptability or unacceptability in the

teaching profession"; and e) "inter-personal relations of teachers with others, refers to the ability of the teacher to adopt him/her to maintain cordial relations with his/her colleagues, students their parents and other persons in the community with whom he/she is to interact as part and parcel of his/her profession" (Kulsum,2011).

The teacher plays varied roles in society he is a friend, logician, guide and a parent to the students. In achieving the instructional goals, proper planning and training is required on behalf of the teacher. Thakur (1976) highlighted the qualities of a teacher as perceived by the students, as regular, punctual, good teaching, kind, good advice, equal treatment and guidance to all students. Similarly, in 1990, Cruickshank stressed the teacher's characteristics as, what teachers perceive, what and how much the teacher delivers, and hopes, as well as how he/she relates to pupils, and administers the classroom(as cited in Bandele, & Oluwatayo, 2014).

Effective teaching should kindle students' inquisitiveness and active participation in learning, persuade reasoned, rational and imaginative thoughts and upsurge both their yearning and capability for future learning (Kullburt, 1989& Baker, 1990). Mahaesvari (2000) asserted that teachers have always played an important role in preparing communities and societies to explore new frontiers and achieve higher levels of progress and development. They are the prime agents of change. Effective teaching leads students to progress and help them to attain the aims of education. The studies on teacher effectiveness by Biddle & Dunkin (1974) focused largely on the direct effects of teaching, such as changes in pupil knowledge or attitudes. Ali (2012) indicated that the whole system of education revolves around the teacher. They are the foundation stones of any society.

Any educational entity with enormous material assets like basic infrastructure, good library, and a well-framed program of study is not likelihood to meet its target if the teachers are hopeless, archaic and apathetic toward their accountability. In the educational system, a teacher lies on the top rung of a ladder. There is no match for this apex position of a teacher. Mathews (2005) also highlighted the importance of quality teachers, he has kept the position of a teacher on the top rung of the ladder, he further added no academic structure, curricula, or material assets, can grow beyond the superiority of its teachers.

New Policy on Education, (1986) echoed the same, "the status of the teacher reflects the socio-cultural ethos of the society; it is also said that no people can rise above the level of its teachers." Similarly, several research studies on educational

system efficiency have stressed the importance of excellent instructors in modelling and moulding educational system's quality (Hanushek & Kain, 2005; Clotfelter, Ladd & Vigdor, 2007 as cited in Misigo, Kodero, &Too, 2014).

Teaching is a relentless social process, in which one individual manifests something, learned earlier, to another individual, learning it later on or may be at the same time. Teaching is a dialog process between a teacher and a taught. Teaching is always an interactive process. Teaching is not about a monologue of a teacher in-side the classroom rather its two-way traffic. Effective teaching is combination of numerous components including the purposes, the learner, the study material, and the teacher (McKeachie, 1997). Secondary Education Commission (1952-53) favored a dynamic way of teaching. The commission stated that the technique of teaching in schools should intend not only at efficiently transferring knowledge, but also at inculcating enviable values, suitable attitudes, and work habits in students. It went on to say that in the teaching of all disciplines, a focus on clear thought and expression, both in voice and writing, should be emphasized. The method of activity and project method should be incorporated into school practice. Elmore (2009) proposed "to improve student learning, you do not change the structure. You change the instructional practices of teachers. The schools that seem to do best are those that have a clear idea of what kind of instructional practice they wish to produce, and then design a structure to go with it." Further, Kane (2013) asserted that "if we want students to learn more, teachers must become students of their own teaching. They need to see their own teaching in a new light."

The Report of Mudaliar Commission (1952-1953) indicated that, "we are convinced that the most important factor in the contemplated educational reconstruction is the teacher, his personal qualities, his educational qualifications, his professional training and the place that he occupies in the community." National Council for Teacher Education (NCTE, 1987) acknowledged the following ten interrelated teaching competencies, namely, "contextual competencies", "conceptual competencies", "content competencies", "transactional competencies", "competencies related to other educational activities", "competencies to develop teaching learning materials", "evaluation competencies", "management competencies", "competencies related to working with parents" and "competencies related to working with community and other agencies" to empower future teachers to perform their roles and responsibilities with professional confidence and insight.

National Education Policy (2020) stresses the importance of establishing some professional standards for teachers in its report, including a consistent set of rules of "National Professional Standards for Teachers" (NPST) to be prepared by the "National Council for Teacher Education" (NCTE) in its renovated new appearance as a "Professional Standard Setting Body" (PSSB) under the "General Education Council" (GEC) by 2022, in a conversation with NCERT, SCERTs, and teachers at all levels, regions as well as proficient organisations in education field. Ideas regarding the teacher's role at various levels of expertise/stages, as well as the skills necessary for each stage, are included in the standards. It will also embrace principles for performance appraisal at all levels, which will be conducted on a routine basis. The NPST will also help states design, pre-service teacher education programmes and evaluate all areas of teacher careers administration, such as seniority, individual improvement programs, compensation enhancements, advancements, and other factors. (Source: www.mhrd.gov.in)

Comprehensive review of research on teacher effectiveness indicated diverse findings with reference to demographic variables (Bhardwaj, 2009; Kumari & Padhi 2014; Toor, 2016; Kumar, 2019; Nabi, 2019, Visweswari & Amuthavalli 2019). Further, Toor (2016) and Bhardwaj (2009), found significant differences in the teacher efficiency with regard to type of school, while (Kumari & Padhi, 2014; and Roy and Halder, 2018) found significant differences in the teacher effectiveness with respect to locale. Further, considerable research has been conducted by various researchers (Ghali, 2002; Singh, 2009; Hanspal & Sahu 2008; Tyagi, 2013 & Mohalik, 2020) regarding the teacher effectiveness with regard to experience and reported significant differences.

Hence it can be deduced that, for effectiveness of teachers, teaching should be well planned, based on objectives, selection of suitable teaching methods, seeking active learner's participation, and optimum use of learning resources to reach the desired goals. In this context in 2000, Darling-Hammond pointed that "the more knowledge and skills acquired by a teacher in planning, delivering, instructing and evaluating learning, the better the students learn and achieve" (as cited in Bandele, & Oluwatayo, 2014). Nevertheless, the effectiveness of teachers being an individual factor, is also dependent on several organisational and administrative factors such as leadership styles, structured distance, environmental empowerment, availability of resources, organisational climate etc.

1.2 Perceived Organisational Climate

The quality and success of the education system is associated with the organisational climate of the school. Organisational climate is an amalgamation of attributes considered over time. According to Cambridge Advanced Learners Dictionary (1995) "organisation refers to a group of people who work together in an organized way for a shared purpose" while "climate refers to the type of situation that exists at a particular time, including the feelings and opinions that are common." Schneider (1973) defined "climate as individual's perception towards his work environment." Babu and Kumari (2013), "climate represents a composite of the mediating variables that intervene between the climate of an organisation and the style and other characteristics of leaders and teachers performance, effectiveness and satisfaction." Schein (1992) defined "climate as the feeling that is conveyed in a group by the physical layout and how members of the organisations interact with each other, customers, or with other outsiders" (as cited in Boateng, Kanyandewe & Sassah,2014).

Various researchers of organisational climate have referred to some common terminologies in defining the organisational climate such as perception, assumptions/postulates, individuals' behaviour, individual relation with organisation etc. The origin of the concept of organisational climate is difficult to trace. Lewin, Lippit, and White (1939) mentioned the organisational climate in their experimental research on social climate, though they didn't come up with anything substantial in terms of a conceptual framework or a procedure for measuring the organisational climate. However, it is Lewin's Field Theory in Social Science (1951) that is being credited with coining the term "organisational climate" and defined "organisational climate as a result of a person's relationship with the environment in which they work". The main concept organisational climate evolved from the prominent theories purported by Gestalt psychology, structuralism, the individual environment fit model and Lewinian field theory. Both Gestalt psychologists and structuralism focused that both perceived forms (Gestalten) and the experienced world are already structured wholes. Further, Lewin's field theory (1951) proposed that "behaviour is the result of the individual and the environment. This theory had a major impact on social psychology, supporting the notion that our individual traits and environment interact to cause behaviour."

Alternatively Babu and Kumari (2013) defined "organisational climate as the formal system of task and reporting relationships that controls, coordinates, and motivates employees so that they cooperate to achieve an organisation's goals." Dastmalchian, Blyton & Adamson (1989); Glick (1985); Lawler, Hall & Oldham (1974); Schneider & Synder, (1975) highlighted that different definitions of organisational climate reiterated it as a perceptual flexible factor reflecting organisational members' individual feelings of their environment (as cited in Boateng, Kanyandewe & Sassah, 2014). Katoch (2013) defined "organisational climate as the enduring quality of the internal environment of an organisation that is experienced by its members, influences their behavior, and can be described in terms of the values of a particular set of characteristics or attributes of the organisations." Mullins(1993) (as cited in Katoch, 2013) further explained "that organisation climate is relatively enduring quality of the internal environment of an organisation that (a) is experienced by its members (b) influences their behavior and (c) can be described in terms of values of a particular set of characteristics or attributes of the organisation." Schneider & Payne (1990) defined "organisational climate as shared perceptions of the way things are around here."

According to Eustace & Martins (2014), "organisational climate is a set of characteristics that describes an organisation, distinguishes one organisation from another, is relatively stable over time and can influence the behavior of the organisation's members." Owens, (1998) described the organisational climate as "the study of perceptions that individuals have of various aspects of the environments in the organisations." According to Stern (1970) "organisational climate reflects a person's perception of the organisation to which he belongs. It is a set of unique characteristics and features that is perceived by the employees about their organisation, which serves as a major force in influencing their behavior." Litwin & Stringer (1968), "stated that shared beliefs and values of organisational members constitute the perceived work environment." In a broad sense, organisational climate refers to social environment of the organisation. Forehand & Gilmer (1964) defined "organisational climate as the set of characteristics that describes an organisation and that (a) distinguishes one organisation from the other organisation, (b) is relatively enduring over time and (c) influence behavior of the people in the organisation."

In present study, perceived organisational climate refers to organisational climate as perceived by secondary school teachers and measured through Pethe et al., (2010) organisational climate scale. "Organisational climate refers to a set of perceived attribute of an organisation and its sub system as reflected in the way an organisation deals with its members, groups and issues" (Pethe et al., 2010). Organisational climate comprises of the following four factors, namely, "results, rewards and interpersonal relations", "organisational processes", "clarity of roles and sharing of information" and "altruistic behaviour" (Pethe et al., 2010). "Results, rewards and interpersonal relations included items related with the interpersonal relations, the outcomes of the results they achieved and whether merit is rewarded or not; organisational processes included communication among the various members of the organisation, resources available in the organisation, abilities of the individuals, recognition of the individual as well as team work and empathy with the individual members; clarity of roles and sharing of information consisted of the variables including the roles of the individual, constrictive criticism and whether the problems of the members of the organisation were shared or not; and altruistic behaviour meant that the people of the organisation help each other or not"(Pethe et al., 2010).

Katoch (2013) emphasized that contemporary society is an organisational society, and an individual's wellbeing and growth are based on the different organisations wherein individuals engage and perform their respective roles and responsibilities. Thompson (2015) described the school as an organisation charged with responsibility of developing in the students certain cherished values, norms, attitudes and fulfillment of expectations of society. The accomplishment of these goals to a largely depends upon the joint effort all concerned in the school system, namely, the principal, teachers, and the students and even the community. Katz & Khan, (1978) observed that "organisations with different forms and functions may share bureaucratic activities and norms, but develop different and distinct normative climates" (as cited in Andar, 1971).

The review of literature revealed significant differences with respect to gender (Ch &Rashid, 2021; Meena, 2017; Babu &Venkatesh 2016), locality (Meena, 2017), and teaching experience and organisational climate. While the researchers like (Sodhi 2010; Kaur, 2018; Jothi & Kanmani 2019, Karve (2018) found no differences in the organisational climate with regard to gender, stream, teaching experience and school type. Further, organisational climate was positively and significantly related with

teachers' competence and effectiveness (Raman, Ling &Khalid (2015); Babu, et al. 2013; Ch &Rashid (2021). Studies of Sodhi (2010) and Mishra & Acha (2011) reported that teachers exhibited higher level of teacher effectiveness in autonomous, open and familiar type as compared to closed climate schools. Similarly Eboka (2017) revealed that positive working environment in schools moderately promoted teachers' morale, effectiveness, productivity and job satisfaction.

According to (Babu & Kumari, 2013) a comprehensive review of research on the subject, the importance of organisational climate to a teacher's efficacy is absolutely critical, as it reveals how successfully the teacher manages to accomplish his or her fullest capacity. In an organisation with good level of humanitarian relationship, coordination, and involvement, teaching effectiveness is rated the highest, resulting in educational achievement in general. Thompson (2015) urged that "managing the teachers is the central concern of the school." Both the teaching and organisational climate as perceived by the teachers has a complementary relation with each other. Favourable organisational climate of the school has an impact on teaching. The teacher factor and school factor both have an interactive role which ultimately has an effect on teacher effectiveness (Verma, 1998; Bhardjwaj, 2004; Woolfolk, 2004). Henceforth, the present piece of study was directed towards investigating the effectiveness of secondary school teachers in relation to perceived organisational climate.

1.3 Psychological Capital

Apart from the above-mentioned organisational factors, the teacher must be physically and mentally healthy and psychologically strong and sound. There are certain individual factors, such as intelligence, creativity, aptitudes, etc. that occupies a key role in the effectiveness of teachers and one of such factor is psychological capital. Neuroscience has proved the importance of psychological capital in the well-being of individuals. Happier people (who experience a lot of pleasant emotions like joy, contentment, pleasure, zeal, and curiosity) are more likely to take risks, be relentless, and pursue new goals with greater levels of inquiry as pinpointed by leading neuroscientist, Richard Davidson (1992) with reference to how the brain handles emotions.

Within the developing field of positive organisational behaviour, psychological capital has become a considerable topic of research (Luthans & Youssef, 2004). A distinctive feature of psychological capital is that it is "state-like"

and hence can be developed and measurable. Luthans, (2002) defined "psychological capital as the study and application of positive oriented human resource strengths and psychological capacities that can be measured, developed, and effectively managed for performance improvement in today's workplace." "Psychological capital has been conceptualized as a second-order construct comprising of four elements" viz. "selfefficacy" (Bandura, 1986), "optimism" (Carver & Sheier, 2003), "hope" (Snyder, Cheavens & Sympson, 1997), and "resilience" (Masten, 2001). Luthans et al., (2004); &Luthans et al., (2007) also defined as "psychological capital is a mixture of two concepts positive psychology and capital and there are four constructs in it viz. selfefficacy, hope, optimism and resilience". Positive psychology emerged as a new branch of psychology. Positive psychology was developed by prominent psychologist Martin Seligman (1998), who thought that the "study of human strengths, virtues, and positivity should be given at least as much emphasis as the study of human weakness, pathology, and pessimism." Positive psychology helped the people in identifying the happiness from moment to moment. While "capital" in British Dictionary (n.d.) means any assets or resources, especially when used to gain profit or advantage. In the language of economics, "capital" is critical possession for individual and societies with the help of which they create a treasure trove.

"Psychological capital could be visualized as a positive frame of mind set of an individual for development, which is specified by (a) having conviction (self-efficacy) to confront and apply some significant endeavors to accomplish the mission of daunting tasks(b) making a worthwhile attribution (hope) about pulling off desired breakthrough now and in the offing (c) persisting toward aims and whenever necessary, reorienting ways to ambitions in order to triumph and (d) when saddled by problems and hardships, enduring and making a comeback and way beyond (resiliency) to secure success" (Luthans et. al., 2007).

Luthans et,al., in 2004 held that in the globalized and technologically innovative 21st century, the competitive advantage for a long haul of social, economic and human capital is difficult to maintain as it was in the past. Urbanization, globalization and technological innovations have brought new challenges for all workers of different organisation. History revealed that whenever huge technological changes occur in the society profound changes occurs in the life of human being. To manage these changes psychological capital plays its important role. As per studies, all four factors "self-efficacy, hope, optimism and resilience" of psychological capital

encompass positive relations with production, delight, happiness, and consistency of employees. "Self-efficacy" has a positive bearing on performance (Stajkovic & Luthans, 1998, Legal& Meyer, 2009) (as cited in Mortazavi, Shalbaf Yazd & Amini, 2012). Employees' optimism had a relation to their production, satisfaction, and contentment (Luthans et al., 2007). Individuals' achievement, pleasure, enjoyment, and persistence were all linked to hope (Luthans et al., 2007). Further, employees' progress, engagement/happiness, and fulfillment were all linked to resilience (Luthans et al., 2007).

Psychological capital came into being from the sphere of positive organisational endowment, which hypothesizes on the faith that unlocking invisible possibilities in individuals and putting a focus on their excellence benefits not only the individual but also for organisation too. Goldsmith, Veum and Darity (1997) affirmed that psychological elements affect workplace performance and henceforth earnings (as cited in Gohel, (2012). "Psychological capital includes individual strengths and good qualities of a person that leads to the betterment of individual, society and organisation" (Luthans, 2004). Psychological capital refers to personal psychological attributes and it talks about "who you are." Its developmental sense is "what you can become" (Luthans Youssef, & Avolio, 2007). "Psychological capital is an intrinsic quality it cannot be purchased from market. It is different from human capital and social capital which are governed by high purchase costs or human migration" (Li, 2009). To create more competitive benefits in the organisation the presence of psychological capital is a must. In case of individual employee, psychological capital plays its indispensable role in promoting performance level and personal growth and development. "Psychological capital refers to the individual attributes chipping in the personal output by psychologists" (Gohel, 2012). Psychological capital could be considered as a source, which exceeds a lot more than human capital (experience, mastery, expertise & propensity) and social capital (associations and web.). It approaches "who you are right here and right now" and "who can you be in the coming times", if your PsyCap capabilities are thrived and reared in the place of work (Luthans et.al., 2004).

We learn by our relationships with individuals in the social environment, according to founder of Cognitive Theory, Albert Bandura (1986). Separately, people acquire interrelated habits from observing the behaviors of others. After observing

another person's behaviour, people prefer to assimilate and replicate it, especially if the observational experience is positive or incorporates rewards that are tied to the observed actions. According to Bandura (1977), imitation involves accurately replicating observed motor actions. Luthans (2002) propounded the notion of self-efficacy from the Social Cognitive Theory given by Bandura (1997), as positive organisational behavior. Bandura (1997) defined "self-efficacy as the ability an individual exhorts his own inspiration; use cognitive resources, take immediate actions to reach the goal, in other words it is a type of self-reliance of being able to finish particular task." Luthans et.al.,(2007) thought "that such reliance is a type of self-efficacy, which can help an individual to put in the necessary effort to complete a challenging work successfully." It is supposed that individuals, who score maximum on self-efficacy, feel a sense of confidence, certainty and assertion in their skills and knowledge, which motivates them to successfully complete the work and be in control of certain situations (Stajkovic & Luthans, 1998).

Stajkovic and Luthans (1998) defined "self-efficacy is the conviction of an individual about his/her capabilities to collect the inspiration, cognitive resources and courses of action required to successfully implement a particular work right within a given reference". "Self-efficacy" is a person's supposition to do the task prolifically and fulfill inspirational discernible and functional resources. Individuals with high "self-efficacy" prefer exigent tasks and device intricate method to curb hurdles, (Kells, 2011) and become relentless and predicated toward accomplishment in terms of hardships" (Shah, Nawaz & Jafri, 2009).

Snyder et.al., (2003) defined "hope as a positive state of provocation, a sense of prosperity arises from a target-oriented effectiveness and ways planned to attain goals". In simple words, it is a positive psychological condition in which goals are followed through clear thinking and pathways. "Hope" is a pleasant inspiring state formed on an interactively created sense of being prolific. "Hope is a conviction to overarching motives" (Cetin & Basim, 2011). Snyder et.al., (1996) however, recounted "hope as an inspiration state by which two components, agency (aiminclined willpower) and tracks (or blueprint to get those aims), collaborate". "Hope is what makes it viable swallow the barriers during target achievement with the might of motivation" (Snyder et al. 1991).

"Optimism is a way of positive thinking that good things will happen very soon" (Scheier& Carver, 1985). Seligman (2002) believed "that optimism is an elucidation and attribution". Things which differentiate an optimist from pessimist, is their clarification about their surroundings at individual or general level. Optimistic individuals habitually internalize positive events and externalize negative events (Seligman, 1998). Seligman's (1998) definition of optimism comes from Attribution Theory, about two crunch aspects of one's style of explaining of good or debacle: durability and ubiquity. According to Peterson et al., (2011) "optimism means positive hopes about your future". Snyder et al. (1991) defined "optimism in a generalized form of expectations about which a person hopes for the best and continuity for reaching your goal." Where on the one hand, optimist relies on their efforts to meet aims and try their level best; simultaneously on the other hand, pessimists are impatient when they grapple with problems. Compared to pessimist fellow optimists take advantage of opportunities related to their career at a higher pedestal and chase their aim under inhospitable and trying conditions (Wrosch & Scheier, 2003).

Resilience as defined by Masten (2001) refers to "as personal related behaviour that occurs when facing significant damage and the capability to recuperate from annoyance rapidly." According to Coutu (2002) "resilience refers to the common themes/profiles of resilient people; highlights their traits to be recognized as (a) strong acceptance of actuality (b) a profound conjecturing, often propped up by staunchly held values that life is purposeful and (c) mysterious talent to extemporize and insinuate into crucial change." According to Meng (2011) "resilience is the ability to get settled and cope with the circumstances when exposed to adversity and risky situation." Wagnild &Young (1993) suggested that "this type of propensity related to coming back in the same situation after facing problems is an individual quality of adapting to worst-case scenario."

In this study, "psychological capital refers to the state of individual's psychological capital through the four constructs" viz. "self-efficacy", "hope", "optimism" and "resilience" (Luthans et., al. 2007). In the psychological capital questionnaire "self-efficacy has been defined as believing in one's ability to mobilize cognitive resources to obtain specific outcomes; hope has been defined as having the willpower and pathways to attain one's goals; optimism refers to explanatory style that attributes positive events to internal, permanent and pervasive causes, and

negative events to external, temporary, and situation-specific ones; and resilience refers to having the capacity to bounce back from adversity, failure or even positive but apparently overwhelming changes such as increased accountability" (Luthans et al. 2007).

In-depth review of literature, suggested that PsyCap which comprises of "selfefficacy", "hope", "resilience" and "optimism" emerged as important constructs for the growth and development of organisation. Nafei (2015) also proposed the importance of construct and stressed to give due consideration to the psychological capital components, as vital source for organisations to enhance employee performance. As the cases of violence and bullying behaviour of students in schools increased very rapidly so need of optimistic, resilient and self-efficacious teacher has become the need of the hour. The teacher has to face multiple challenges pertaining to diversity of students in classroom, knowledge and technological advancement, performance pressure, linking of school and community and maintaining good interpersonal relationship, which implies that a teacher must possess psychological capital. Fully confident, hopeful, optimistic and resilient teachers can easily cope up with the growing challenges in the actual teaching learning situations. The studies have also found that psychological capital significantly decreases the inconvenience, irritation and planning of leaving the jobs and the job search behavior, rather it increases pleasure, organisational commitment and wellbeing in workplace (Avey et.al., 2015). Since psychological capital is a developmental in nature so it can be used for every individuals of the organisation. Principals and the managers of the various organisations can use various strategies and techniques to boost the level of psychological capital among the individuals.

Various studies have shown that psychological capital has changed the performance, achievement, and view of life of the individuals. Psychological capital is associated to teacher effectiveness in a recent approach, work culture, organisational commitment, job performance, job satisfaction and quality of life (Li, 2009; Huang, 2012; Lin,2012; Yo,2012; Yalcin, 2016). Review of literature revealed psychological capital as an attribute for the effectiveness of teachers, and also revealed that self-efficacy was the most effective dimension of PsyCap followed by optimism, hope and then resilience in influencing the teacher effectiveness skills (Huang, 2015; Varadwaj & Varadwaj 2021). Parthi & Gupta, (2016); Demirtas & Kucuk, (2019) reported that levels of teachers' psychological capital differed for the sub-dimension "resilience,"

hope and self-efficacy" in regard to gender and teaching experience. Similarly Mvana &Louw (2020) revealed that educational qualification, teaching experience and high school teachers' age contributed in explaining their psychological capital. Studies by Parthi & Gupta (2016), Raj, Tiwari &Rai (2019); and Kaur (2018) reported significant differences in males and females for various dimensions of PsyCap. Literature review highlighted that PsyCap is indeed a constructive and dynamic force that enhances quality of teachers' work and leads to the benefit of organisations.

A self-efficacious, hopeful, resilient and optimistic teacher can bring desirable changes in the behaviour of the students. Much work has been done on psychological capital in different fields and organisations but there is dearth of investigation in the field of education, especially schools. Therefore the present study was directed towards investigating the relation of effectiveness of secondary school teachers and their psychological capital.

1.4 Learning Orientation

For enhancing the effectiveness of secondary school teachers learning orientation may play an important role. Learning plays indispensable role in the life of every human being. It is a comprehensive term that leaves a lasting imprint on people and cannot be limited to classroom learning, reading, writing, or arithmetic. It's a never ending, lifelong process. Whenever a change, modification or development occurs in the behaviour of some individuals learning occurs. Teaching and learning are the two sides of the same coin. Professional growth of any teacher, including his learning orientation is likely to influence the effectiveness of teachers.

Learning orientation is a compound term made up of two words "learning" and "orientation". According to Boaz (1984) "learning is a process by which the individuals acquire various habits, knowledge and attitude that are necessary to meet the demands of life, in general." According to Cambridge Dictionary (1995) orientation refers to "the particular things that a person prefers, believes, thinks, or usually does; the type of interests, activities or aims that an organisation, business or project has or the act of giving attention to a particular thing"; while learning refers to "the activity of getting knowledge". Hence the word learning orientation means the act or process of showing interest or giving attention to learning. Liepe and Sakalas, (2008) noted that "learning is the internal mind-set that stimulates an individual to

improve their knowledge base." "Learning whether for individuals or groups, is an active process of collecting information, knowledge and competence" (Edmondson, 2002; Garvin, 2000 & Senge, 1990). Learning is a critical resource for organisations that authorize the organisation to keep up the ruthless advantage by uninterrupted growth in its function. Senge (1990) advocated that "learning is a natural process, which is most fruitful when knowledge obtained from learning is based on experiential matter." Behaviorists believe that learning is observable change in the behavior of the individual. Cognitive learning theory by Piaget (1967) focused on how the information is processed by the human brain and how the learning takes place through that processing of information.

The concept of learning orientation has originated from Social Learning Theory by Bandura (1977). Albert Bandura (1977) proposed "Social Learning Theory consisted of importance of observing, modelling and imitating the behaviour, attitudes and emotional reactions of others". This theory highlighted that both cognitive factors and environment interact to influence human learning and behaviour. According to Bandura (1977), learning takes place in various ways like imitating the people, observing others actions and acquires the mental picture of others' act.

Sinkula et. al., (1997) defined "learning orientation in terms of commitment to learning, shared vision and purpose, and open mindedness." According to Mavondo, Chimhanzi, & Stewart, (2005) "learning orientation is the manifestation of an individuals' propensity to learn and adapt." "Learning orientation stands for an individual's proclivity to seek knowledge" (Dweck & Legget, (1988) and Kohli et.al., (1998). Bennet (1998) gave the following characteristics of "learning orientation that included commitment to learning, openness to the outside world, motivation to learn, and overall commitment to knowledge". "A learning orientation provokes employees to think outside the box and has an undeviating impact on the level to which higher learning occurs" (Baker & Sinkula 1999). According to Martinez (2001) "learning orientations are how individuals, with varying beliefs and levels of ability, will intentionally and emotionally approach, commit and expend effort to some extent, and then experience learning to progress and attain goals. It is described as the individual's proclivity to take control, expend strategic effort, manage resources, and take risks to learn" Martinez, (2001). "Learning orientation describes how an individual usually wants and choose to control their brain during the learning process. Individually, those who place a higher priority on acquiring new skills and developing their proficiency and abilities have a higher level of learning orientation" (Deshon &Gillespie, 2005). Those with a high level of learning orientation respond to demanding or difficult situations with activities that are responsive and problem-solving (Elliott and Dweck,1988). Learning oriented employees enjoy working on complex and novel tasks (Vande, Walle, 2003). Kohli (1998) asserted "learning orientation as the conception of the world that learner carries to investigate new dimensions of topics and techniques." Persons with a learning orientation exhibited commitment to study for an extended period of time about a subject matter and its strategies and attain proficiency. A learning-oriented learner possesses permanent inspiration to enlarge his/her sphere of understanding. Just as "all individuals, teachers are expected to embrace life-long learning" (Knight, 2002 as cited in Eekelen, Vermunt & Boshuizen, 2006).

Researchers have shown that successful learners are more strategic managers, self- directed and well planned about their learning goals. The learning orientation research evaluated how learner understands and knows how to focus on emotions and intensions, entrust deliberate efforts to set and achieve aims and objectives and capably self-manage learning improvement, and accomplishment (Martinez 1999). Teachers want students to have more learning orientations as it is viewed positively (Ames 1992: Laverie et al. 2008) and contributes to originality and resourcefulness (Calantone et.al., 2002) as compared to performance orientation viewed as negatively.

According to Martinez, (1999) "learning orientation focused on whole-person perspective and can be used as a framework to examine the dynamic flow between deep-seated psychological factors, past and future learning experiences, subsequent choices about cognitive learning preferences, styles, strategies and skills, and responses to treatment, and lastly, learning and performance outcome". In (2001), Martinez gave the model of learning orientation and suggested that "learning orientation is the degree that individuals, following a desire and intention to learn, generally extend effort to set goals, enjoy and manage the learning process, reflect upon the progress, and use reflections to improve future learning." "These learning orientations represent a measure of our belief, need, and intent to grow, transform, and improve our lives. Using the intentional learning construct as the foundation, the learning orientations describe an individual's complex, intrinsic manipulation of psychological variables(conative, affective, and cognitive influences) to approach and experience learning" (Martinez, 1999).

In this study, "learning orientation refers to individuals general disposition to learn and assess how individuals may enjoy or want to learn" measured through learning orientation questionnaire by Martinez, (2005). Learning orientation model employs three individual factor constructs in order to portray the four specific learning orientations along learning orientation continuum. The individual factors that control successful learning consists of "conative and affective learning focus, learning independence or autonomy, committed strategic planning and learning effort; while the learning orientation continuum consists of four types of learners namely, transforming learners, performing learners, conforming learners and resistant learners" (Martinez, 2001).

Martinez (2001) defined "conative and affective learning focus as belief of the individual that setting and accomplishing the personal learning goals will improve the personal growth, needs and learning performance; learning independently or autonomy was defined as individual's desires and ability to take responsibility, make choices, and control, self- assess, self-motivate, and manage or improve their own learning; and committed strategic planning and learning efforts were defined as the degree that learner strategically commits deliberate and persistent effort to accomplish learning; while in terms of learning orientation continuum, learners situationally fall along the continuum of learning orientations; change to a new learning orientation requires psychological change, greater effort and learner control, and stronger intensions, feelings, and beliefs about learning". "Transforming learners are anxious, resourceful that value learning capacity, dedicated, determined, and assertive effort, earnest, ardent, and positive expectations in order to successfully self-manage and achieve personal goals; performing learners strive to avoid risks and mistakes, are task-oriented, extrinsically driven, and risk- avoiders. They are less at ease with abstract theories, preferring to concentrate on specifics, processes, principles, grades, rewards, and normative accomplishment criteria; conforming learners prefer security, structure, and regularity. They are profoundly influenced by their understanding of the social components of learning as well as the external resources that inspire them. They accept knowledge more passively, store it, and duplicate it in order to comply and perform assigned tasks; and resistant learners avoid utilizing learning to meet goals that others have set for you and may show short-term or long-term resistance" (Martinez, 2001).

Learning Orientation Profiles

ORIENTATION	CONATIVE/AFFECTIVE ASPECTS	COMMITTED LEARNING AND STRATEGIC EFFORT	LEARNING AUTONOMY		
TRANSFORMING LEARNER (Transformance)	Focus strong passions and intentions on learning. Be an assertive, expert, highly self-motivated learner.	Set and accomplish personal short- and long-term challenging goals that may not align with goals set by others; maximize effort to reach personal goals.	Assume learning responsibility and self-manage goals, learning, progre and outcomes. Experience frustration if restricted or given litt learning autonomy.		
	Use learning to transform to high, personal standards.	Commit great effort to discover, elaborate, and build new knowledge and meaning. Succeed in loosely structured, mentoring environments that promote challenging goals, discovery, and self-managed learning.			
PERFORMING LEARNER (Performance)	Focus emotions/ intentions on learning selectively or situationally. Be a self-motivated learner when the content appeals.	Set and achieve short-term, task-oriented goals that align and meet average-to-high standards assigned by others; situationally minimize efforts and standards to reach assigned or negotiated standards.	Will situationally assume learning responsibility in areas of interest but willingly give up control in areas of less interest. Prefer continual coaching and interaction for achieving goal		
	Use learning to perform to above- average group standards.	Selectively commit measured effort to assimilate and use relevant knowledge and meaning. Succeed in semi-complex, semi-structured, coaching environments that stimulate personal value, and provide interaction, and external benefits.			
CONFORMING LEARNER (Conformance)	Focus intentions and emotions cautiously and routinely as directed. Be a modestly effective, extrinsically motivated learner.	Follow and try to accomplish simple task- oriented goals assigned by others. Try to please and conform; maximize efforts in supportive environments with safe standards.	Assume little responsibility, manage learning as little as possible, be compliant, want continual guidance, and expect reinforcement for achieving short-term goals.		
	Use learning to conform to easily achieved group standards.	Commit careful, measured effort to accept and reproduce knowledge to meet external requirements. Succeed in safe, structured environments that help learners achieve easy learning goals, in a step-by-step fashion and provide external benefits.			
RESISTANT LEARNER (Resistance)	Focus on not cooperating. Be an actively or passively resistant learner.	Consider lower standards, fewer academic goals, conflicting personal goals, or no goals; maximize or minimize efforts to resist assigned or expected goals either assertively or passively.	Assume responsibility for not meeting goals set by others, and set personal goals that avoid meeting formal learning requirements or		
	Avoid using learning to achieve academic goals assigned by others.	Chronically avoid learning (apathetic, unskilled, frustrated, discouraged, or aggressively disobedient). Avoid formal learning environments with assigned or expected goals that conflict with expectations, personal goals and values.	expectations.		

Figure 1.1: Learning orientation profiles

Source: Extracted from learning orientation questionnaire-manual (1996-2005)

Research studies by (Preziosi et al., 2004; Opfer, Pedder & Lavicza, 2011; and Ismulyaty & Lestari, 2017) indicated positive associations in learning orientation and organisational performance and individual's performance and influence of organisational conditions on teachers learning. On the other hand, Jha & Bhattacharyya (2013) reported no significant differences in respondents with high and low learning orientation. Studies by Eilam (2003); and Pedder & Opfer (2013)

reported significant differences in the learning orientation with respect to culture, gender and location. On the contrary, Birenbaum & Rosenau (2006) reported no effect of teaching experience on the learning orientation of teachers. Further, the review of literature examined reported dearth of studies with respect to exploration of learning orientation in the context of teachers.

In the present study, secondary stage schools teachers were selected keeping in mind the importance of this stage. In this stage the students develop the capacity for independent thinking. Teachers also focus on developing the habit of 'how to think' rather than 'what to think' (Souza et al., 2020). In this study secondary school teachers, refers to teachers (teaching classes 9-10) and having qualification of graduation with B.Ed. working in government and private schools affiliated and recognized by PSEB. In the current study the researcher tried to find out how far the organisational factor, that is, perceived organisational climate and individual factors, psychological capital and learning orientation are related to the effectiveness of secondary school teachers. Further on the basis of comprehensive review of literature most of the studies were conducted on teacher effectiveness with perceived organisational climate, psychological capital and learning orientation separately, but there were dearth of studies where all the variables were studied or taken together in relation to effectiveness of teachers. Hence the present research was undertaken towards investigating the "effectiveness of secondary school teachers in relation to perceived organisational climate, psychological capital and learning orientation".

1.5 Significance

"The destiny of India is being shaped in her classroom", (Kothari Commission Education Report, 1964-66). In a knowledge-driven economy, education affects the degree of a society's profitability, comfort, and safety and security. "On the quality and number of persons coming out of our schools and colleges will depends our success in the great enterprise of national reconstruction whose principal objective is to raise the standard of living of our people" (IEC 1964-66. Vol.1). Education, according to the Kothari Commission (1964-66), has the potential to be a strong tool for social, economic, and political change. Education is the only tool that could be utilized to ratify change without resorting to any violent revolution. Teachers are the architects who design their students' future. The immense efforts of teachers,' makes its' nation prosper.

Effective teachers have been central for the betterment of the educational system including the success of students. Many factors like family involvement, community involvement, good infrastructure, curricula, reduced class size contributes to the student achievement and progress of school but still the role of 'effective teachers' is the most prominent factor. A close perusal of related literature revealed inconsistencies in the results as reported by various researchers, further not much work has been done in the field of teacher effectiveness. Review of literature revealed inconsistencies in the findings of teacher effectiveness with reference to demographic variables viz, gender (Dar and Ponraj (2022); Nabi (2019) and Toor 2016), type of school (Bhardwaj, 2009), locale (Roy and Halder, 2018), stream (Kumar, 2019) and teaching experience (Ghali, 2002; Singh, 2009; and Mohalik, 2020). Additionally, most of the research work concerning teacher effectiveness regarding different variables has been carried out in the advanced countries such as United Nation, Germany, France and Australia (Marsh & Hattie, 2002). In the present study, the investigator has studied the effectiveness of teachers in relation to three factors namely, perceived organisational climate, psychological capital and learning orientation.

To achieve the desired performance organisational climate should be favorable both for the teachers and the students. The perceived organisational climate reflects the way an individual sees the organisation to which he or she belongs. For creating conducive organisational climate, the employer must understand their human force in a better way and efforts should be undertaken to identify what motivates their performance. Significant differences with respect to gender (Ch & Rashid, 2021; Babu & Venkatesh 2016), type of school (Meena, 2017, Gupta, 2009) locality (Ch & Rashid, 2021) teaching experience (Ch& Rashid, 2021) and organisational climate were found. In contrast, no differences in gender (Meena, 2017, Sodhi, 2010 & Jothi and Kanmani, 2019 Sodhi, 2010), stream (Sodhi 2010), length of service (Sodhi 2010), and type of school(Sodhi 2010; Kaur, 2018) with respect to organisational climate were found. Indeed, a close look at the analysis made about different studies, indicated no conclusive trend regarding perceived organisational climate on effectiveness of teachers with respect to demographic variables. This could be because different samples from different age groups, localities, streams, and other criteria were used in these investigations. Still further investigations are required to substantiate these findings. Further as compared to advanced countries less research work has been done in India in the field of teacher effectiveness and its relation to organisational climate specifically with respect to secondary school teachers.

Out of the numerous factors that affect teacher efficiency, the most influential factors are teaching aptitude, organisational climate, and various personality factors like self-efficacy, resilience, optimism and orientation towards learning. Individuals are important to economic production (Gavin & Mason, 2004), and "flat world" antagonism has empowered or persuaded everyone from all across the universe to cooperate and contribute (Friedman, 2007). Hence, organisations should embrace a different perspective of human resource management to ensure their long-term learning and expansion in such a highly competitive environment. Keeping in mind the above situation of working people, there are two areas where the researchers have focused in the last few decades. Positive organisational behavior, being the first one, and psychological capital, being the second one. Review of literature revealed that psychological capital was much studied in other fields, than education, so psychological capital of teachers, especially, secondary school, needs to be explored as these teachers deal with adolescents fleeting through a turbulent phase of life. Since psychological capital is developmental in nature, hence has relevance for all individuals irrespective of organisation. Higher levels of psychological capital among teachers will enable them to be strong communicators, adaptable and capable enough to deal with the troubles and challenges in schools.

Researches in the field of neuroscience in the last decades highlighted the influence of emotions on learning and memory. Since decades much emphasizes was laid on cognitive element but new researches showed that emotions also play a very significant role in learning. "In order to understand educational experiences, emotions and motivation need to be considered alongside cognition" (Hannula 2006, as cited in Kim& Pekrun, 2014). A general disposition, willingness and desire for learning among the teachers can serve as a motivating force for the students to build similar zeal, willingness and enthusiasm for learning. In fact the tendency for learning among teachers has influence on the educational outcomes of students. The present problem provoked research in the yet to be examined field of learning orientation, and its association with the teacher effectiveness. Further the comprehensive review of literature indicated that most of the studies conducted on teacher effectiveness and perceived organisational climate or psychological capital or learning orientation were taken separately. Likewise, it was quite clear from the related literature that several

studies were conducted in the area of teacher effectiveness viz. teacher effectiveness in relation to general intelligence and creativity, teacher effectiveness and emotional intelligence, teachers' belief on self efficacy and teacher effectiveness, teachers' thinking styles and teacher effectiveness and alike, but to the best of the knowledge of researcher effectiveness of secondary school teachers has not been adequately explored vis-à-vis perceived organisational climate, psychological capital and learning orientation taken together. So the present study was the first of its kind exploring all the influential factors vis-a-vis effectiveness of teachers.

The present study has contribution in the identification of various factors that promote or hinder the effectiveness of teachers. The study focused on the specific dominant dimensions of organisational climate, psychological capital and learning orientation that affect teachers' effectiveness. The present study has implications for administration, for promoting the effectiveness of teachers so as to ensure the holistic progress of students. Additionally, the study has potential to make important contribution, supplying recommendations for practice and giving guidelines to government so as to formulate such favourable organisational terms and conditions for teachers in schools that boost the level of psychological capital among teachers and encourage them to be lifelong transforming learners.

Hence, due to paucity of research with respect to effectiveness of teachers in relation to perceived organisational climate, psychological capital and learning orientation; the inconsistencies in research findings as well as the greater concern for providing quality education to the present and future generation for good academic achievements, holistic development and progress of nation at large inspired the investigator to carry out the present study.

1.6 Statement of the Problem

The problem was stated as:

"EFFECTIVENESS OF SECONDARY SCHOOL TEACHERS IN RELATION TO PERCEIVED ORGANISATIONAL CLIMATE, PSYCHOLOGICAL CAPITAL AND LEARNING ORIENTATION"

1.7 Operational Definitions

Effectiveness of secondary school teachers: Refers to "teacher effectiveness as measured through teacher effectiveness scale" by Kulsum (2011). "Teacher effectiveness refers to the competences in the teachers needed for their function and roles as well as planning and preparation for teaching, classroom management and knowledge of subject matter, teacher characteristics and their interpersonal relation."

Perceived organisational climate: Refers to "organisational climate as perceived by secondary school teachers and measured through organisational climate scale" by (Pethe et.al.,2010). "It is the set of perceived attributes of an organisation and its sub system as reflected in the way an organisation deals with its members, groups and issues and includes four factors viz., results, rewards and interpersonal relations, organisational processes, clarity of roles and sharing of information, and altruistic behavior."

Psychological Capital: It can be visualized "as an individual's positive psychological state of development and is characterized by: (a) having confidence (self-efficacy) to take on and put in the necessary effort to succeed at challenging tasks; (b) making a positive attribution (optimism) about succeeding now and in the future; (c) persevering toward goals and, when necessary, redirecting paths to goals (hope) in order to succeed; and (d) when beset by problems and adversity, sustaining and bouncing back and even beyond (resilience) to attain success." "It is the current state of individual's psychological capital through the four constructs namely self-efficacy, hope, optimism and resilience and measured through psychological capital questionnaire" by Luthans et. al., (2007).

Learning orientation: Refers to "individuals general disposition to learn and assess how individuals may enjoy or want to learn" measured through learning orientation questionnaire by Martinez, (2005).Learning orientation consists of three factors, viz. "conative and affective learning focus, learning independence or autonomy and committed strategic planning and learning efforts."

Secondary school teachers: Refers to the teachers (teaching classes, 9-10 and having qualification of graduation with B.Ed.) working in government and private schools of Punjab affiliated/recognized by Punjab School Education Board.

1.8 Objectives

The objectives of the study are as follows:

- 1) To study the levels of effectiveness of secondary school teachers and psychological capital.
- 2) To study the perception of teachers towards organisational climate of secondary schools.
- To find out difference in effectiveness of secondary school teachers, perceived organisational climate, psychological capital and learning orientation with respect to gender, locality, teaching experience and type of school.
- 4) To examine the relationship among effectiveness of secondary school teachers, perceived organisational climate, psychological capital and learning orientation.
- 5) To analyze the role of perceived organisational climate, psychological capital and learning orientation in the effectiveness of secondary school teachers.

1.9 Hypotheses

In the present study, the null hypotheses have been framed based on inconsistencies in the findings of the concerned variables with respect to demographic aspect as reported in literature review. Further, null hypothesis is a statistical hypothesis and covers 95% of NPC, hence framed null hypotheses (Garg & Kothari, 2019).

The hypotheses of the study are as follows:

- 1.(a) There exists no significant difference in effectiveness of secondary school teachers with respect to gender.
- (b) There exists no significant difference in effectiveness of secondary school teachers with respect to locality.
- (c) There exists no significant difference in effectiveness of secondary school teachers with respect to teaching experience.
- (d) There exists no significant difference in effectiveness of secondary school teachers with respect to type of school.
- 2.(a) There exists no significant difference in perceived organisational climate of secondary school teachers with respect to gender.
- (b) There exists no significant difference in perceived organisational climate of secondary school teachers with respect to locality.
- (c) There exists no significant difference in perceived organisational climate of

- secondary school teachers with respect to teaching experience.
- (d) There exists no significant difference in perceived organisational climate of secondary school teachers with respect to type of school.
- 3. (a) There exists no significant difference in psychological capital of secondary school teachers with respect to gender.
- (b) There exists no significant difference in psychological capital of secondary school teachers with respect to locality.
- (c) There exists no significant difference in psychological capital of secondary school teachers with respect to teaching experience.
- (d) There exists no significant difference in psychological capital of secondary school teachers with respect to type of school.
- 4. (a) There exists no significant difference in learning orientation of secondary school teachers with respect to gender.
- (b) There exists no significant difference in learning orientation of secondary school teachers with respect to locality.
- (c) There exists no significant difference in learning orientation of secondary school teachers with respect to teaching experience.
- (d) There exists no significant difference in learning orientation of secondary school teachers with respect to type of school.
- 5.(a) There exists no significant relationship of effectiveness of secondary school teachers with perceived organisational climate.
- (b) There exists no significant relationship of effectiveness of secondary school teachers with psychological capital.
- (c) There exists no significant relationship of effectiveness of secondary school teachers with learning orientation.
- 6. Perceived organisational climate, psychological capital and learning orientation do not play a significant role in effectiveness of secondary school teachers.

1.10 Delimitations

The study was delimited to

- 1. Teachers teaching in government and private secondary school affiliated/recognized by Punjab School Education Board.
- 2. Secondary school teachers teaching in Jalandhar, Ludhiana and Pathankot districts of Punjab.

CHAPTER-II

REVIEW OF LITERATURE

Research employs the wisdom and expertise that has been saved earlier as a function of regular human activities. For framing a new problem for the research study comprehensive stored knowledge is of utmost importance. Best (1981) viewed that "practically, all human knowledge can be found in the books and libraries. Unlike others animals, man transmitted this knowledge from generation to generation, man builds upon the accumulated and recorded knowledge of past." For building a connection between what had studied earlier and what is to study, associated literature becomes the most important part of the research.

Review of literature helps in finding the research gap as well as it provides the heap of earlier explored knowledge in that field. Therefore careful review of various resources of information like books, journals, theses, dissertations, research papers and other resources related to current research problem is an important task, to be followed while planning for any research work. The present chapter consisted of review of related literature on the dependent and independent variables of the study, namely, teacher effectiveness, organisational climate, psychological capital and learning orientation.

2.1 Studies Related to Effectiveness of Teachers

Dar and Ponraj (2022) studied teacher effectiveness in the Shopian area of Jammu and Kashmir and found that female instructors had much better teacher effectiveness than their male counterparts.

Sehjal (2021) investigated "teacher effectiveness vis-à-vis gender, location, and school type". Additionally, the research showed differences in teacher effectiveness in rural and urban school teachers, and also by institution type but no difference vis-à-vis gender.

Mohalik (2020) explored teacher effectiveness of history teachers at secondary level vis-à-vis gender, experience and qualification in Odisha. Results of the study found male teachers were more effective than their female counterparts. Length of

teaching experience had no significant influence on teacher effectiveness while teacher having higher qualification had better teacher effectiveness than with the low qualification.

Muhammad and Atta (2020) executed a secondary school level comparative study on teachers' thinking styles and teacher effectiveness Findings no difference among male/female and urban/rural teachers in respect of thinking styles and teacher effectiveness.

Kawa (2019) investigated "the attitudes of effective and ineffective secondary school teachers about teaching in Kashmir". Effective teachers were found to be more skilled in their professions, had a cheerful attitude, and were more cooperative with students and administrators.

Kumar (2019) examined the effectiveness of school teachers' vis-à-vis sex, stream, and school type. Teachers were found to have no significant differences in terms of stream, sex, or school type.

Nabi (2019) explored "secondary school teachers' effectiveness vis-à-vis gender". The findings highlighted differences in overall teacher effectiveness for male and female teachers. Female teachers depicted better overall teaching effectiveness as compared to their male counterparts.

Visweswari and Amuthavalli (2019) investigated teachers' effectiveness in terms of gender and location. Male teachers were more effective than their female counterparts, and teachers in urban schools were more effective than their rural schools counterparts.

Naik and Mani (2018) carried out research on teacher effectiveness of school teachers' vis-à-vis gender, type and locale. Findings indicated no difference in male and female teachers working in rural and urban area schools run by private and government managements.

Roy and Halder (2018) undertook a study on "teacher effectiveness in terms of gender, marital status, experience, nature of service, and locality of the schools". Results highlighted significant differences in male & female teachers as well as in urban and rural teachers with respect to teacher effectiveness.

Amadi and Allagoa (2017) conducted research in secondary schools in Obio and Port Harcourt on demographic characteristics as predictors of teacher effectiveness in classroom management. Teachers' classroom management

effectiveness was shown to be determined by their age, years of length of service, and academic credentials. The effectiveness of classroom management was unaltered by educational discipline or teacher gender.

Toor (2016) performed "a study on secondary school teachers' effectiveness, general intelligence, and creativity", and observed significant differences between government and private school teachers' effectiveness. Government school teachers were thought to be more efficient than those in private schools. There was no difference in the effectiveness of male and female teachers.

Kumari and Padhi (2014) researched teacher effectiveness in connection with gender and type of habitation. Finding of the study highlighted that male and female teachers had same effectiveness whereas rural and urban teachers differed significantly in their effectiveness. Teacher belonging to urban schools were more effective than the rural school teachers.

Tyagi (2013) analyzed the association amongst demographic qualities and teachers' effectiveness. The results showed that "teacher's marital status, socioeconomic position, length of service, subject areas, and qualification" influenced many aspects of their ability to teach effectively.

Dhillon and Kaur (2010) explored teacher effectiveness of teachers pertaining type of school and gender. Findings revealed insignificant differences with regard to "gender and type of school".

Sodhi (2010) carried research on teacher effectiveness pertaining gender, location and teaching experience and found no significant difference with respect to gender location and teaching experience.

Bhardwaj (2009) compared the effectiveness of teacher between private and govt. schools. Results highlighted that teacher of private schools have better teacher effectiveness and also were more effective in classroom management; inter- personal relations; knowledge of subject matter etc. and preparation and planning for teaching, dimensions as compared to the government teachers.

Malik (2009) explored "teacher effectiveness of secondary teachers' vis-à-vis gender and locality". Results of the study highlighted no effect of locality and gender on the teachers' effectiveness in teaching.

Singh (2009) conducted a study on "effectiveness of teachers pertaining to gender, specialization in the subject and length of service". The results revealed that the service length has no role in secondary school teachers' teacher effectiveness. The female teachers were more effective in areas of teacher effectiveness, namely as a guide; as an advisor, and as a motivator. Teachers teaching in the science stream were less effective teachers as compared to the arts stream teachers.

Hanspal and Sahu (2008) explored teacher effectiveness with respect to gender, achievement, qualification and experience and found significant differences in teacher effectiveness with respect to achievement, length of service and gender. The highly experienced and qualified male teachers were having more teacher effectiveness in comparison to their female teacher counterparts.

Kaur (2006) studied and analyzed teacher effectiveness of teachers pertaining to gender and job type and revealed that female teachers and male teachers differed significantly in their teaching effectiveness. The male teachers were less efficient in classroom management, personality as compared to the female teachers. The ratings by the school principals revealed that the government school teachers were less cordial in maintaining relationships as compared to private school teachers.

Bray-Clark and Bates (2003) directed a study on teachers' beliefs on self-efficacy and teacher effectiveness. This study disclosed that in teacher effectiveness, the teacher efficacy is an essential variable which has a consistent relationship with student outcome and teacher behaviour.

Ghali (2002) explored the factors influencing teacher effectiveness in regard to age, gender, experience, teaching experience, marital status, designation, qualification, institution status, and type of institute management. Findings revealed significant differences within the teachers having age up to 35 years and above. It was also found that the gender, experience, teaching experience, marital status, designation, qualification, institution status and the institute management type of the teachers do not significantly influence teacher effectiveness.

On the basis of review of literature, mixed findings of teacher effectiveness with reference to demographic variables were found. Mohammad and Atta (2020), Kumar (2019), Naik and Mani (2018) found no differences in teacher effectiveness with regard to sex, stream and type of schools. On the contrary, Roy and Halder (2018) found significant difference in male and female teachers. Further Dar and Ponraj (2022) &Nabi (2019), Kaur (2006) reported female teachers to be more

effective in terms of teaching than male colleagues. Mohalik (2020), Hanspal and Sahu (2008), Visweswari and Amuthavalli (2019) found male teachers to be more effective than female teachers. Hanspal and Sahu (2008), Sodhi (2010), Sehjal (2021) found no difference in teacher effectiveness with respect to gender. In addition, Dhillon and Kaur (2010), Toor (2016) revealed no difference in male and female teachers; and pointed government teachers to be more effective than their private school counterparts. Whereas Bhardwaj (2009) disclosed that the teachers of private schools had better teacher effectiveness in contrast to their govt school counterparts. While Dhillon and Kaur (2010), found no difference with respect to teaching experience. Roy and Halder (2018) established significant differences between rural teachers and their urban counterparts for teacher effectiveness. Kumari and Padhi (2014) found that urban school teacher were more effective than rural school counterparts. In contrast Mohalik (2020) found no effect of locality on teacher effectiveness. Length of service had no major effect on teacher effectiveness (Ghali, 2002; Singh, 2009; and Mohalik, 2020). While (Hanspal and Sahu 2008; Tyagi, 2013) found significant difference in teacher effectiveness for experience. While Bray-Clark and Bates (2003) found that in teacher effectiveness teacher efficacy is an essential variable which has a consistent relationship with student outcome and teacher behaviour. Kawa (2019) found effective secondary school teachers to be more skilled in their professions, had a cheerful attitude, and were more cooperative with students and administrators. Effectiveness of teachers being an individual factor is also dependent upon various organisational and administrative factors and one of significant factor is organisational climate and how the organisational climate, the nature and the work environment of an organisation is being perceived by the teachers. The following section highlights the studies covering the effectiveness of teachers and perceived organisational climate.

2.2 Studies Related to Effectiveness of Teachers and Perceived Organisational Climate

Deka and Jain (2022) conducted a study on faculty members' perceptions on various dimensions of organisational climate in Assam's central universities and found no significant difference in the dimensions of "challenge/involvement, freedom, idea/time, playfulness/humour, conflict, idea support, debate, communication, rewards, clarity, and team spirit" between Tezpur University and Assam University faculty members.

Ch and Rashid (2021) examined as "to how organisational climate affected school teachers' competence vis-a-vis gender, location, qualification, and experience". Finding suggested that organisational climate was positively and significantly correlated with teachers' competence. Further revealed significant differences regarding gender, locality and teaching experience on organisational climate.

Jothi and Kanmani (2019) explored the organisational climate of school teachers and found that moderate level of organisational climate was reported by 62.6% teachers. Gender of teachers did not perceive any differences in organisational climate. The level of organisational climate was perceived as good by the teachers in govt schools than their private schools counterparts.

Karve (2018) undertook "a comparative study on organisational climate, occupational stress and work motivation among physical education teachers working in different management schools" of Bidar district. Results of the study highlighted significant differences in organisation climate in varied management schools. Also government and aided school teachers had better perception of organisational climate than the un-aided school teachers.

Kaur (2018) explored the teacher effectiveness vis-à-vis the organisational climate. The results noted no link amongst teacher effectiveness and organisational climate, and no variation in teaching effectiveness with regard to gender. In terms of "teacher performance and organisational atmosphere", there were no significant differences between government and private teachers. For male and female teachers no difference in the organisational climate of schools was found. The organisational climates of public and private schools were reported as similar.

Chaithra et al. (2018) investigated the organisational climate and obstacles encountered by teachers in rural schools. The majority of respondents, 76.67 percent, said the organisational climate was "favourable", followed by "more favourable" (22.67 percent) and "less favourable" (0.66 percent).

Lezha (2017) explored teacher's perception on the organisational climate in urban and rural schools and found that teachers' opinion from rural and urban schools were on the same line for organisational climate.

Meena (2017) examined the school environment of primary teachers vis-a-vis gender, locale and school type. Findings showed no differences with regard to gender and locality whereas differences were found for type of school.

Babu and Venkatesh (2016) researched organisational climate in teachers pertaining to gender and management. Results revealed that significant differences exist in organisational climate for gender and management. Results also highlighted that female teachers perceived better organisational climate than male teachers and government aided schools had better organisational climate than the private schools.

Lenka, Chandra and Gupta (2015) undertaken a comparative study on organisational climate of privately managed school with government school and found that organisational climate of the government schools differed from the private schools.

Shalmani (2014) explored the influence of gender and type of school on organisational climate. The results revealed significant association between organisational climate and gender, type and level of school.

Babu et al., (2013) examined the effect of organisational climate on teacher effectiveness and reported that there had been significant differences in teacher effectiveness in regard to organisational climate.

Mishra and Acha (2011) focused on teachers' efficacy vis-a-vis location and organisational atmosphere. Findings indicated that teacher efficacy of teachers was affected by organisational climate. The results also highlighted no differences in rural and urban teachers with respect to teacher efficacy. In open and closed type of school significant difference in teaching effectiveness was found.

Kauts and Hans (2011) analyzed the effectiveness of teachers and the organisational climate in respect to emotional intelligence in secondary school teachers. Female instructors showed greater 'disengagement' than male teachers in the organisational climate, whereas male teachers exhibited more 'espirit.'

Sodhi (2010) explored teacher effectiveness vis-a-vis school organisational climate in Punjab and revealed that teachers who experienced "an autonomous and familiar kind of school organisational climate exhibited substantially greater levels of teacher effectiveness as compared to those who perceived "closed type of school climate".

Gupta (2009) performed a study on organisational climate in public and government schools. Result found differences in organisational climate of public schools and government schools. Controlled climate was exhibited by public schools whereas the government schools exhibited familiar type of organisational climate.

Gunbayi (2007) explored the perception of high school teachers on organisational climate factors with the aim to find the levels of organisational climate perceived by the teachers on the open to closed continuum. As a result of the analysis, all the teachers reported open climate in relation to the factors of "team commitment, organisational clarity and standards, intimacy and support, autonomy, member conflict, medium climate in relation to the factors of risk and in reward".

The above assemblage of review of literature indicated mixed findings related to organisational climate. Significant differences with respect to gender (Ch & Rashid, 2021; Babu & Venkatesh 2016), type of school (Meena, 2017, Gupta, 2009 locality Ch & Rashid, 2021) teaching experience (Ch& Rashid, 2021) and organisational climate were found. In contrast, no differences in gender (Meena, 2017, Sodhi, 2010 & Jothi and Kanmani, 2019 Sodhi, 2010), stream (Sodhi 2010), length of service (Sodhi 2010), and type of school(Sodhi 2010; Kaur, 2018) with respect to organisational climate were found. Jothi & Kanmani 2019 and Karve (2018) found teachers of government schools perceived organisational climate as better than their private school counterparts. Further, Lenka, Chandra & Gupta (2015) found that organisational climate of the government schools differed from the private schools. While, Babu&Venkatesh (2016) found that government aided schools had better organisational climate than the private schools. Further, Kaur (2018) found no association in teacher effectiveness and organisational climate. On the contrary (Babu, et al. 2013;,Ch & Rashid (2021) found organisational climate as positively and significantly related with teachers' competence and effectiveness. Lezha (2017) found similar perception of teachers from rural and urban schools for organisational climate. Chaithra et al., (2018) investigated the organisational climate in rural schools and pinpointed that the majority of respondents found the organisational climate as "favourable", followed by "more favourable" and "less favourable." On the contrary (Sodhi, 2010; Mishra & Acha, (2011) found no differences in rural and urban teachers with respect to teacher efficacy. Further (Sodhi 2010), found that teachers exhibited higher level of teacher effectiveness in autonomous and familiar type as compared to closed type of climate; significant differences were also noted by, Mishra & Acha (2011)in the teachers teaching in open and closed climate schools. Further, Babu et al., (2013) found significant differences in teacher effectiveness in regard to organisational climate. Apart from the organisational factors there are certain individual psychological factors, like psychological capital comprising of selfefficacy, hope, optimism and resilience that may influence the effectiveness of teachers. Following section of highlights the studies of effectiveness of teachers and psychological capital.

2.3 Studies Related to Effectiveness of Teachers and Psychological Capital

Gustari and Widodo (2022) investigated the influence of psychological capital on teachers' organisational commitment through interpersonal communication and observed that PsyCap has an influence on teachers' organisational commitment.

Clarence, Viju, Jena and George (2021) studied "predictors of positive psychological capital of teachers in rural Jharkhand". Findings of the study revealed that individual differences significantly contributed when explaining their psychological capital.

Varadwaj and Varadwaj (2021) explored teachers' psychological capital and teacher effectiveness. Findings showed psychological capital as an attribute for the effectiveness of teachers and also revealed self-efficacy as the most effective dimension of PsyCap followed by optimism, hope and then resilience in influencing the teacher effectiveness skills.

Mvana and Louw (2020) conducted a research on work engagement sociodemographic variables, psychological capital and turnover intention in teachers. The outcomes highlighted that education qualification, teaching experience and age of teachers contributed while explaining the psychological capital.

Physical education teachers' occupational assimilation and psychological capital were evaluated by Ahmet and Ozbek (2019), who reported no gender differences in the psychological capital of teachers.

Chen, Zeng, Chang and Cheung (2019) explored possible predictors (coping styles and teacher burnout) of PsyCap in teachers, and reported that teachers had higher degree/level of PsyCap.

Demirtas and Kucuk (2019) conducted a study to examine psychological capital levels of teachers. Findings highlighted that levels of psychological capital of teachers differed for resilience, hope for the gender variable, and hope and self-efficacy dimension for teaching experience.

Raj, Tiwari, and Rai (2019) investigated teacher turnover intentions in terms of school structure and psychological capital and concluded that the type of school had significant main effects for self-efficacy, while gender displayed main effects for resilience and optimism.

Tadesse (2019) compared the psychological capital of high school teachers in rural and urban area in Tegrai state and found urban teachers scored more than their rural counterparts on "self-efficacy, hope, resilience, and optimism" dimensions of PsyCap.

Kaur (2018) assessed the effects of PsyCap and self-concept on school teachers' teaching skills and found no differences in psychological capital among private and public-school teachers. In particular, female teachers have more psychological capital than male teachers.

Hasnain, Hasan, and Chorath (2017) assessed "organisational civic behaviour and job motivation as determinants of psychological capital in public and private school teachers". The study's outcomes indicated that government school instructors outperformed superior than private school teachers in the "self-efficacy", "optimism", and "resilience" dimensions but no difference found in "hope" dimension of PsyCap of government and Private school teachers.

Parthi and Gupta (2016) studied psychological capital, job satisfaction and organisational climate and found significant differences in males and females for PsyCap and indicated females being higher on optimism and males being higher on resilience.

Yalcin (2016) analyzed the relationship in "positive psychological capital and organisational commitment of teachers". The results showed positive relationship in the levels of positive psychological capital and organisational commitment for all sub dimensions namely "self-efficacy", "hope", "optimism" and "resilience" and total scores.

Huang (2015) researched the relationship involving PsyCap, work stress, and creative teaching in physical education teachers. The findings suggested that PsyCap such as "self-efficacy, hope, and optimism" were all positively linked to creative teaching.

Shoor (2015) explored the resources that predict engagement among teachers. Findings revealed that PsyCap predicted work engagement of teachers. Further, PsyCap did not mediate the relation between job resources and work engagement.

Wang (2014) explored psychological capital and teaching efficacy in public schools. Findings revealed that teachers in the elementary school performed well in the integrity of the psychological capital, the "self-efficacy" is the best among the four construct of the PsyCap and concluded that higher the psychological capital better was the teaching effectiveness.

Review of literature revealed psychological capital as an attribute for the effectiveness of teachers, and also revealed that self-efficacy was the most effective dimension of PsyCap followed by optimism, hope and then resilience in influencing the teacher effectiveness skills (Varadwaj & Varadwaj 2021). Similar findings were supported by Huang (2015) that "self-efficacy, hope and optimism" of PsyCap are positively related with creative teaching. Wang (2014) pointed that higher the psychological capital better was the teaching effectiveness. Chen, Zeng, Chang & Cheung (2019) found higher level of PsyCap in primary school teachers. Shoor (2015) revealed that psychological capital predicted work engagement of teachers. Gustari and Widodo (2022) observed that PsyCap has an influence on teachers' organisational commitment. Demirtas & Kucuk (2019) found that levels of PsyCap of teachers differed for the sub-dimension resilience (Parthi & Gupta 2016), hope for gender variable, and hope and self-efficacy dimension for teaching experience. Similarly Mvana and Louw (2020) revealed that "educational qualification, teaching experience and age of high school teachers" contributed when describing their psychological capital. While Hasnain, Hasan, and Chorath (2017) found that for selfefficacy, optimism and resilience dimensions public school teachers had better score than private counterparts and no differences were found with respect to hope dimension (Kaur, 2018). While Raj, Tiwari & Rai (2019) found that the type of school displayed its positive results for efficacy, while gender displayed for resilience and optimism. Whereas (Kaur, 2018) found female teachers working in schools had better psychological capital than male teachers. On the contrary, Parthi & Gupta (2016) found significant difference among males and females for PsyCap, females being higher on optimism and males being higher on resilience. While, Ahmet and Ozbek (2019), reported no gender differences in the psychological capital of teachers. Further, Yalcin (2016) revealed a positive association in the levels of positive PsyCap and organisational commitment under all sub dimensions "self-efficacy, hope, resilience and optimism" and total scores. Besides, perceived organisational climate and psychological capital, individuals' willingness or want to learn may also play an important role in effectiveness of teachers. Following section shows the reviews related to effectiveness of teachers and learning orientation.

2.4 Studies Related to Effectiveness of Teachers and Learning Orientation

Magut and Kinyua (2022) reviewed the literature on learning orientation and concluded learning orientation as a predictor of quality service delivery in an organisation.

Baker, Mukherjee, and Perin (2022) demonstrated that high learning orientation among individuals supports companies' capability to attain competitive advantage.

Darini and Shahamat (2021) analyzed the relationship between learning orientation and psychological safety atmosphere, as well as team learning, among physical education teachers in Golestan province, and reported a positive and significant relationship in learning orientation and psychological safety atmosphere.

Ismulyaty and Lestari (2017) explored the determinants of learning orientation and motivation on employee performance and revealed a positive relation in learning orientation with employee performance at Open University.

David, et al. (2016) conducted research on learning orientation, motivation, and self-efficacy as prompts for Romanian teachers to take part in novel teaching settings, results revealed that teaching staff who engaged in a jobs-program as an imaginative learning set- up differs greatly in one's teaching and learning orientation, becoming quite progressive, cognitivist, and therefore less transmissive.

Jha and Bhattacharyya (2013) carried research on "learning orientation and performance orientation scale development and its relationship with performance". Findings of the study highlighted that group differences were not significant for two groups of respondents with high and low learning and performance orientation.

Pedder and Opfer (2013) determined the professional learning orientation patterns of dissonance and alignment in teachers values and practices. Findings highlighted differences in the learning orientation vis-à-vis gender and location. Significant association was found in teacher learning profiles and gender; whereas no differences were found in learning profiles of teachers with regard to location.

Opfer, Pedder, and Lavicza (2011) studied the importance of teachers' learning orientation in professional development and change in England, and discovered that teacher learning orientation (which encompasses their learning practices and beliefs) has a bearing on their learning change. Apart from individual influences, learning of teachers was affected by organisational settings.

Birenbaum and Rosenau (2006) did a research of Israel's pre-service and inservice teachers' assessment inclinations, learning orientation, and learning practices and concluded significant differences in learning orientation of in-service and preservice teachers. Study also found that teaching experience had no effect on the learning orientation of teachers.

Martinez (2005) completed a case study on testing the LOQ's psychometric parameters on adults. Findings highlighted that learning orientation questionnaire is helpful in identifying the individual differences in learning (transforming, performing, conforming and resistant learner).

Preziosi et.al., (2004) studied the relation in learning orientation and organisational production and observed a positive connection in all dimensions of organisational production and learning orientation.

Eilam (2003) investigated "Jewish and Arab teacher trainees' orientations toward teaching-learning processes in relation to their cultural background" and found the significant difference in orientation towards teaching learning processes with respect to culture.

Martinez (1999) investigated the effect of learning orientation, on learning and discovered that learning orientation had a considerable impact on satisfaction, learning efficacy, accomplishment, and purposeful learning performance.

Literature review on learning orientation revealed dearth of studies with respect to teacher effectiveness and learning orientation of teachers. Review revealed positive and significant associations in learning orientation and psychological safety atmosphere amongst teachers. Darini and Shahamat (2021), Magut and Kinyua (2022) concluded learning orientation as a predictor of quality service delivery in an organisation. While Baker, Mukherjee, and Perin (2022) demonstrated that high learning orientation among individuals supports companies' capability to attain competitive advantage. Review of literature also revealed that teachers who engage in the jobs-program as an innovative learning setting have different teaching orientations (David et. al., 2016). Preziosi et al., (2004) pinpointed a positive relationship in all dimensions organisational performance and learning orientation. Similarly Ismulyaty and Lestari (2017) also found a positive relation in learning orientation with employee performance. While Jha and Bhattacharyya (2013) found no significant difference in respondents with learning orientations as high and low; and performance orientation. Pedder & Opfer (2013) found significant differences in the learning orientation with regard to gender and location. Significant association was found in teacher learning profiles and gender whereas no differences were found between learning profiles of teachers with respect to location. Opfer, Pedder, and Lavicza (2011) discovered that learning orientation of a teacher has an effect on his/her learning transformation. Apart from human factors, organisational factors influenced instructors' learning. Birenbaum & Rosenau (2006) found significant differences in learning orientation of in-service and pre-service teachers, while found no effect of teaching experience on the learning orientation of teachers. Further Eilam (2003) found the significant difference in orientation towards teaching learning processes with respect to culture. Martinez (1999) revealed that learning orientation has a considerable bearing on contentment, learning efficacy, accomplishment, or purposeful learning efficiency.

CHAPTER – III

METHODOLOGY

The previous chapter discusses about how to formulate a research problem based on literature review. The present chapter consists of steps followed by the researcher to find the solution of his problem. Method and procedure is very important step of research. It includes sampling procedure, description of tools and statistical analysis of data. Research methods entail "all those methods/techniques that are used for conduction of research" (Garg & Kothari, 2014). The significant educational questions can be discovered and constructed for any domain of education, but they can be answered in several ways, subject to whether the study is fundamental, applied, or action research. The method of research refers to the variability in the trials of attaining an answer. These methods are based on the scientific method's steps.

Research methods or techniques thus refer to "the methods researchers use in performing research operations". In other words, research methods refer to, "all those methods, which are used by researcher during the course of studying the research problem." According to the Macquarie Dictionary (3rdEd.1981) methodology is the science of methods, namely a branch of logic dealing with the logical principles underlying the organisations of the various social sciences, and the conduct of scientific inquiry, also education a branch of pedagogics concerned with the analysis and evaluation of subject matter and methods of teaching." Naik and Giri (2018) defined "research methodology as that branch which involves such general activities as identifying problems, review of literature, formulating hypothesis, procedure for testing hypothesis, measurement, data collection and analysis of data, interpreting result and drawing conclusions, thus research methodology consists of all general and specific activities of research". In the present chapter research method, research design, sampling techniques, tools, and data collection techniques have been discussed in detail.

3.1 Research Method

In the present study keeping in view the objectives and hypotheses the investigator employed descriptive survey method. "Descriptive research attempts to answer queries about the current status of a phenomenon under study; usually, it involves studying the preferences, attitudes, practices, concerns, or interests of some

group of people" (Koul, 2012). Landman (1988) defined "descriptive research as a type of research that is primarily concerned with describing the nature or conditions and degree in detail of the present situations." According to Best and Khan (2000) "descriptive study describes and interprets what is. It is concerned with the conditions or relationships that exist, opinions that are held, processes that are going on, effects that are evident, or trends that are developing. It is primarily concerned with the present, although it often considers past events as they relate to current conditions." The present study was conducted to explore "effectiveness of secondary school teachers in relation to their perceived organisational climate, psychological capital and learning orientation."

3.2 Research Design

The study's design assists the investigator in testing hypotheses by enabling him/her to draw reliable and objective findings concerning the relationship in the independent and dependent variables. The purpose of the investigation, the kinds of variables, and the setting in which the study will be conducted are taken into consideration while selecting any research design or plan. Any research design's goal is to offer complete information that is pertinent to the issue being researched at the lowest possible cost. The present study was conducted to study the effectiveness of secondary school teacher's vis-a-vis perceived organisational climate, psychological capital and learning orientation in the three cultural regions of Punjab namely, Doaba, Majha and Malwa. All the four tools employed, namely, "teacher effectiveness scale by Kulsum(2011), organisational climate scale by Pethe et al.,(2010), psychological capital questionnaire by Luthans et al.,(2007) and learning orientation questionnaire" by Martinez,(2005) were administered on the secondary school teachers teaching in government schools and private schools affiliated/ recognized to PSEB, Mohali.

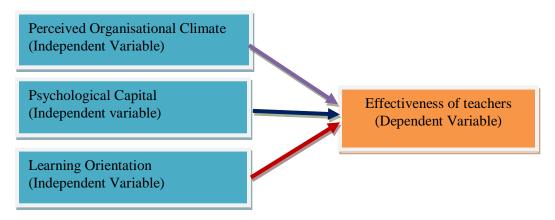


Fig. 3.1 Research Design.

3.3 Population

The population for the present study included all the teachers serving in secondary schools of Punjab affiliated/recognized to Punjab School Education Board (PSEB). Punjab is one of India's most developed states, enjoying prosperity in terms of physiographic features, drainage systems, economic circumstances, agriculture, and other resources. Aside from this wealth, the state has expressed major concerns about demographic issues, with the literacy rate being one of the most important issues. In spite of all the great efforts by the state government and non- government organisations the literacy rate of Punjab (75.84) is still lagging behind many other states of India (Census, 2011). Hence keeping in view the time factor, cost feasibility and inquisitiveness regarding low literacy rate, especially, females and other weaker sections of the society and teacher effectiveness having implications for literacy rate encouraged the investigator to undertake the study in the state of Punjab. The distribution of the districts of Punjab has been presented in below table 3.1.

Table 3.1 Region wise distribution of the districts of Punjab

Doaba	Majha	Malwa
Hoshiarpur	Amritsar	Firozpur
Kapurthala	Gurdaspur	Bathinda
Jalandhar	Pathankot	Ludhiana
SBS Nagar	Tarn-Taran	Moga
		Barnala
		Mansa
		Roopnagar
		Faridkot
		Fatehgarh Sahib
		Sangrur
		Sri Muktsar Sahib
		SAS Nagar
		Fazilka
		Patiala

3.4 Sample

"Sampling is the process by which a relatively small number of individuals or measures of individuals, objects or events is selected and analysed in order to find out something about the entire population from which it was selected" (Koul, 1997). Smaller proportion of population which researcher selects using some rules and regulations in a systematic way so that they represent a population are called as sampling. The following figure 3.2 shows the sampling process by Taherdoost (2016)

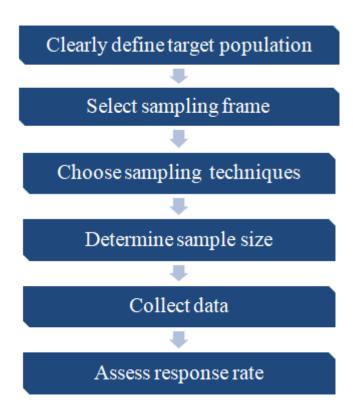


Fig. 3.2 Sampling Process (Source: Taherdoost, 2016)

In the present research, stratified multistage random sampling method has been used. "Multistage sampling is a process of moving from a broad to a narrow sample using a step by step process" (Ackoff, 1953 as cited in Taherdoost, 2016). In multistage sampling, a sample of primary units is selected and then a sample of secondary unit is selected within each primary unit. Multistage sampling can create representative sample than single sampling technique. "Stratified sampling is where the population is divided into strata (or subgroups) and a random sample is taken from each subgroup; while subgroup is a natural set of items; subgroups might be based on company size, gender or occupation (to name but a few); stratified sampling is often

used where there is a great deal of variation within a population. Its' purpose is to ensure that every stratum is adequately represented" (Ackoff, 1953 as cited in Taherdoost, 2016).

To get the representative sample stratified multistage random sampling was used, that is, at each stage, strata were created and final sample was selected within each of the stage and within each of the stratum. The selected primary sampling units (first stage) were stratified, and were divided up into secondary units (second stage) that were again stratified. And within those selected secondary units, third-level units (third stage) were selected and then within those selected third level units, fourth level units were selected. Stratification is used to assure representation and though stratification is done at each stage but implicitly, final sampling units (teachers) are getting stratified, because they're contained within these primary sampling units and secondary sampling units that are relatively homogeneous. In each stratification is done either explicitly, formal groupings, or implicitly through an ordered list and a selection from it and thus ending up in the final sample, by combining sampling techniques. Sampling was carried out in three stages in this research study:

Stage 1: The state of Punjab is culturally divided into three regions, namely Doaba (Hoshiarpur, Jalandhar, Kapurthala, SBS Nagar), Majha (Amritsar, Gurdaspur, Pathankot, Tarn Taran) and Malwa (Barnala, Bathinda, Fathgarh Sahib, Faridkot, Firozpur, Ludhiana, Mansa, Moga, SAS Nagar, Sri Muktsar Sahib, Patiala, Rupnagar, Sangrur and Fazilka) that indicates geographical stratification. The primary units at the first stage include 22 districts of Punjab. For the selection of districts from each region, districts comparable in literacy rate and with considerable gap in literacy rate of males and females were taken into consideration. As per literacy rate (Census, 2011) of all districts of Punjab, three districts, namely, Pathankot with literacy rate (total 84.6, male 89.21 and female 79.31) from Majha region; Ludhiana with literacy rate (total 82.2, male 86.00, and female 77.90) from Malwa region and Jalandhar with literacy rate (total 82.50, male 86.10 and female 78.50) from Doaba region were selected. In accordance with Census 2011, literacy rate of males in Punjab is 80.5% in contrast to females with literacy rate of 70.7%. It is evident that there exists a gender gap between literacy rates of males and females in Punjab, (http://www.esopb.gov.in/ population statistics of Punjab (1971-2011). Number of secondary school teachers in Pathankot were found to be 4102, in Jalandhar 12546, and in Ludhiana 24844 (as per Government of Punjab Official Census, 2016).

Stage 2: As in multistage sampling, secondary stage units are selected from each of the primary stage units. Each selected district at primary stage comprised of number of educational blocks viz. six, twelve and eleven in Pathankot, Ludhiana and Jalandhar districts respectively (https://schools.org.in/punjab). After listing the units, that is, the educational blocks, for selecting the educational block, from the selected districts of each region, moderate, low and high level of educational development in educational blocks of Punjab was taken into consideration, along with it availability of govt and private secondary schools both in rural and urban areas was also taken into consideration. For moderate level of educational development, Pathankot block from Pathankot, for low level of educational development, Ludhiana-1 from Ludhiana and for high level of educational development, Jalandhar East from Jalandhar, was selected. Behl and Singh (2017) studied regarding the regional inequalities in the levels of educational development at block level in Punjab and found Jalandhar East block as one of the block with high educational development, Pathankot block with medium educational development and Ludhiana-1 with low educational development out of the listed districts and educational blocks.

Jalandhar is one of the most developed districts of Punjab. It has high percentage of urban to rural ratio (47.45) and high literacy rate (77.91). The high literacy rate in this district of Punjab can be ascribed to various higher educational institutions in Jalandhar itself (as cited in Rani, 2011). Moreover, most of the characteristic features of all the four districts of Doaba region (Hoshiarpur, Kapurthala, SBS Nagar, and Jalandhar are more or less similar. Jalandhar district is more representative of the Doaba region and for selecting the educational block with high educational development from Doaba region (as cited in Rani,2011). Considering all of the tremendous endeavors undertaken by the state government and non-governmental agencies, Punjab (Malwa region) still has a lower literacy rate than many other Indian states. It is the largest region in Punjab that comprises of 14 districts and two-third of the total area of Punjab. The literacy ratio among women and other disadvantaged groups in society is also very alarming. With the exception of district Ludhiana, every district in Malwa has a predominance of rural inhabitants who have little interest in education and are more focused on agriculture as their primary occupation as cited in (Pushkarna & Singh 2017). While Majha region district Pathankot was found at the bottom level 20th rank among 22 districts in the education index as cited in (Goyal and Singh 2018). Thus, at secondary stage sampling unit was identified on the basis of educational blocks.

Stage 3: Further, within those selected secondary stage units i.e. the educational blocks, Pathankot block, Ludhiana-1 and Jalandhar East block, at the third stage, third level units i.e. secondary schools were selected. The list of government and private secondary schools affiliated/recognized to PSEB, Mohali was taken from District Education Officer of each educational block as directed by Director SCERT. Twenty-two (22) schools from Pathankot (10 rural, 12 urban); thirty (30) schools from Jalandhar (14 rural, 16 urban); and thirty-one (31) schools from Ludhiana (14 rural, 17 urban) were selected from each of the predefined educational blocks. These schools were situated in rural and urban areas and were both government and private schools recognized/affiliated to PSEB, Mohali. These eighty-three (83) secondary schools had comparable teacher population of rural school teachers from 150 to 250 and urban school teachers from 250 to 350. Further out of these only those schools were selected from each of the educational block which had teachers of all experiences (0-5, 5-10 or >10) years. Thus third stage sampling unit was stratified on the basis of locale and government and private schools affiliated/recognised to PSEB.

Table 3.2 Number of schools covered in sample

Sr.	Districts	Education Blocks	Number of Schools						
No.			Rural	Urban	Total				
1	Pathankot	Pathankot Block	10	12	22				
2	Ludhiana	Ludhiana -1 block	14	17	31				
3	Jalandhar	Jalandhar-East Block	14	16	30				
	Total		38	45	83				

(https://schools.org.in/punjab)

3.4.1 Sample Size

According to www.esop.gov.in, Government of Punjab, Abstract 2019, there are 61641 secondary school teachers working in 4524 secondary schools. For selecting representative sample, (goodscalculators.com) was used. The calculator

estimated an adequate sample size of 382 based on a 95% level of confidence and 5% margin of error, which is enough to depict the population of Punjab school teachers. On the basis of sample size calculator, a sample of 382 was sufficient, but in order to overcome the problem of unengaged responses, missing values and outliers oversampling was done and a sampling of 600 was collected. For collecting the data related to the study purpose, secondary school teachers were personally contacted by the investigator which was sufficiently greater than the calculated three hundred and eighty-two sample size. Few of the teachers didn't respond and few teachers returned incomplete forms so as recommended by Hair et al. (2010), hence after data cleaning process a sample of 500 was finalized for analysis and interpretation.

Stage 4: Written permission from, Director State Council for Educational Research and Training (SCERT) Chandigarh, Mohali to collect data from teachers teaching in secondary schools of Punjab affiliated/recognized to PSEB, Mohali was taken. In the fourth stage, the final sampling unit, that is, teachers were selected. After selecting the secondary schools, a representative sample of secondary school teachers from all the selected schools of three districts, were selected proportionately. Thus, within the fourth stage, a representative sample of 600 (165 male and 435 female) secondary school teachers were selected proportionately.

Table 3.3 Selection of teachers from educational blocks Pathankot, Ludhiana-1 and Jalandhar East

Educational Block	Total Number of teachers	Total number of Male Teachers	Male Teachers selected	Total number of Female teachers	Female Teachers selected	Total Teachers selected
Pathankot	442	146	59	296	118	177
Ludhiana-1	489	97	38	392	157	195
Jalandhar- East	571	170	68	401	160	228
Total	1502	413	165	1089	435	600

Table 3.4Educational Block wise distribution of teachers of the concerned districts, namely Pathankot, Ludhiana and Jalandhar

Location and	Patha	ankot- B	lock	Ludhia	ana-1 E	Block	Jalandh	Final		
type of schools	F	M	Total	F	M	Total	F	M	Total	Total
Govt. Schools in URBAN area	100	49	149	140	28	168	109	33	142	438
Private Schools in URBAN area	87	31	118	88	28	116	128	128 64 192		447
Govt. Schools in RURAL area	70	55	125	77	30	107	88	62	150	360
Private Schools in RURAL area	39	11	50	87	11	98	76	11	87	257
Total	296	146	442	392	97	489	401	170	571	1502
Proportionate Sample (40%)	118	59	177	157	38	195	160	68	228	600

Note: F=Female and M=Male.

Table 3.5 Final sample of teachers from each block of three districts

Pathankot Block							Ludhiana-1 Block							Jalandhar-East Block									
	Urban				Ru	ral		Urban Rural					Url	oan	n Rural								
G	ovt	P	vt	Go	ovt	P	vt	Go	ovt	P	vt	Go	ovt	P	vt	Go	ovt	Pvt		Govt Pv		vt	
M	F	M	F	M	F	M	F	M	F	M	F	M	F	M	F	M	F	M	F	M	F	M	F
19	40	13	36	28	18	7	16	11	55	11	36	12	31	5	34	13	44	26	50	25	36	4	30
	Grand Total =600																						

Table 3.2 displays the number of schools covered in sample, while table 3.3 shows the selection of teachers from the educational blocks, Pathankot, Ludhiana-1 and Jalandhar East from each district, Pathankot, Ludhiana and Jalandhar respectively. Since the total sample of teachers decided was 600 and total teachers found in three educational blocks were 1502 (www.esop.gov.in, and e-Punjab school app) so it was found that 600 is the 40% of 1502. For making the sample proportionate in all three educational blocks, 40% of total teachers (male and female)

was calculated as given in the table 3.3. Table 3.4 shows educational block wise distribution of teachers of the concerned districts, namely Pathankot, Ludhiana and Jalandhar and Table 3.5 shows final sample of teachers drawn from each block of three concerned districts namely Pathankot, Ludhiana and Jalandhar. The state of Punjab is divided into three cultural regions namely, Doaba, Majha, and Malwa and has 22 districts. To obtain a fairly representative sample, stratified multistage random sampling has been employed. For finding out the proportion of teachers in a particular educational block, the ratio of total number of teachers in the selected block by the total number of teachers in all three selected blocks multiplied by six hundred was calculated. Thus from Pathankot (177) teachers (59 males and 118 females), from Ludhiana-1(195) teachers (38 males and 157 females), and from Jalandhar (228) teachers (68 males and 160 females), were selected randomly as final sample for the study. Table 3.6 shows the detailed sample of all three regions of Punjab.

Table 3.6 Detailed plan of sample from all three regions of Punjab

			_	Govt.		TE 0-5 yrs.=5, 5-10 yrs.=5 and 10yrs.&above = 9	19					
		Pathankot Block	Urban	\mathcal{E}	F	TE 0-5 yrs.=8, 5-10 yrs.=5 and 10yrs.&above = 27	40					
	cot	Blc	Ur	Pvt.	M	TE 0-5 yrs.=5, 5-10 yrs.=3 and 10yrs.&above = 5	13					
	Pathankot	ot	·		F	TE 0-5 yrs.=10, 5-10 yrs.=4 and 10yrs.&above = 22	36					
	th	ınk		Govt.	M	TE 0-5 yrs.=10, 5-10 yrs.=4 and 10yrs.&above = 14	28					
	$\mathbf{P}_{\mathbf{\hat{z}}}$	th	Rural	\mathcal{G}	F	TE 0-5 yrs.=5, 5-10 yrs.=6 and 10yrs.&above = 7	18					
		Pa	R _u	Pvt.	M	TE 0-5 yrs.=3, 5-10 yrs.=2 and 10yrs.&above = 2	7					
					F	TE 0-5 yrs.=4, 5-10 yrs.=4 and 10yrs.&above = 8	16					
	ıa		_	Govt.	M	TE 0-5 yrs.=3, 5-10 yrs.=3 and 10yrs.&above = 5	11					
		ck	bar	Ğ	F	TE 0-5 yrs.=12, 5-10 yrs.=12 and 10yrs.&above = 31	55					
0		B	Urban	Pvt.	M	TE 0-5 yrs.=3, 5-10 yrs.=3 and 10yrs.&above = 5	11					
Punjab	ıjaı	a-1			F	TE 0-5 yrs.=7, 5-10 yrs.=4 and 10yrs.&above = 25	36					
Pur	Ludhiana	Ludhiana-1 Block	Rural	vt.	M	TE 0-5 yrs.=3, 5-10 yrs.=5 and 10yrs.&above = 4	12					
-				Pvt. Govt.	F	TE 0-5 yrs.=5, 5-10 yrs.=10 and 10yrs.&above = 16	31					
				r.	M	TE 0-5 yrs.=2, 5-10 yrs.=2 and 10yrs.&above = 1	5					
					F	TE 0-5 yrs.=5, 5-10 yrs.=7 and 10yrs.&above = 22	34					
		Jalandhar-East Block	Urban	Govt.	M	TE 0-5 yrs.=3, 5-10 yrs.=5 and 10yrs.&above = 5	13					
				\mathcal{E}	F	TE 0-5 yrs.=5, 5-10 yrs.=13 and 10yrs.&above = 26	44					
	ar			Pvt.	M	TE 0-5 yrs.=10, 5-10 yrs.=8 and 10yrs.&above = 8	26					
	Jalandhar	Ē			F	TE 0-5 yrs.=10, 5-10 yrs.=8 and 10yrs.&above = 32	50					
	ılar	ar						Govt.	M	TE 0-5 yrs.=7, 5-10 yrs.=8 and 10yrs.&above = 10	25	
	Ja)db	Rural	\mathcal{E}	F	TE 0-5 yrs.=5, 5-10 yrs.=5 and 10yrs.&above = 26	36					
		lar	R u	Pvt.	M	TE 0-5 yrs.=2, 5-10 yrs.=1 and 10yrs.&above = 1	4					
		Jį		Þ	F	TE 0-5 yrs.=11, 5-10 yrs.=9and 10yrs.&above = 10	30					
	Total 0-5 yrs. =143											
	5-10 yrs.= 136											
					10	yrs.& above =321, Total Teachers =600						
				I	M=N	lale , F=Female, TE=Teaching Experience						
		112-11410 ; 1 = 1 change; 12-1 change 2 aperione										

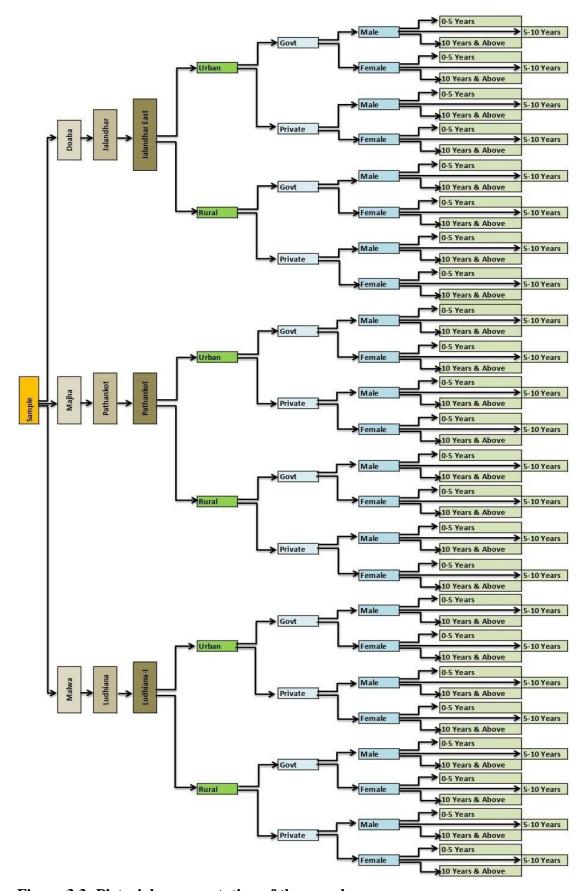


Figure 3.3: Pictorial representation of the sample

3.5 Tools Used

Four separate instruments were used for collecting data in the study. There are various research instruments and methods available for the collection of data and its analysis. Selecting the appropriate tools and methods for the research study needs some criteria that should be satisfied e.g. nature of objectives and hypotheses, competence of the respondents, sample type, availability and appropriateness of the tools for the particular study etc. From the review of literature the researcher decided to use following four tools for the collection of data.

- 1. Teacher Effectiveness Scale (2011) by Dr. Umme Kulsum
- 2. Organisational Climate Scale (2010) by Sanjyot Pethe, Sushama Chaudhari and Upinder Dhar.
- 3. Psychological Capital Questionnaire (2007) by Luthans, Avolio, Avey and Norman.
- 4. Learning Orientation Questionnaire (2005) by Martinez.

3.5.1 Description of Teacher Effectiveness Scale (2011) by Dr. Umme Kulsum

"Kulsum's Teacher Effectiveness Scale" (2011) was used to assess teacher effectiveness. In the scale the use of a ladder image that was acquainted to the teachers was also expected to facilitate visualizing the top and bottom anchoring points easier and more consequential. This self-anchoring striving scale was thought to be more scientific because it was based on first-person approaches. The scale was neither rigid, nor had specified dimensions, verbal classifications, organized phrases, and the like as mentioned by the designers of the scale. The data gathered using the scale was psychologically as well as directly comparable, which means that the scale level decided by one group or person could be said to be larger, lesser, or equal to the scale level opted by some other persons or groups because the participants' frames of reference were psychologically similar.

Five categories were utilized to evaluate the teacher's effectiveness of his/her qualities (personality, attitudes, etc.), process (teacher-pupil interaction, etc.), and production factors (outcomes of the teaching learning process) namely, "preparation

and planning for teaching", "classroom management", "knowledge of subject matter its delivery and presentation", "teacher characteristics" and "interpersonal relations". This scale consisted of 60 items. Dimensions of the teacher effectiveness scale as given by (Kulsum, 2011) are as follows:

- a) "Preparation and planning for teaching includes statements pertaining to the capability of the teacher in developing, designing and organizing for teaching in agreement with the course objectives by using different resources."
- b) "Classroom management statements pertaining to the capability of the mentor to effectively interact, encourage the pupils and assess the teaching learning activity and also to keep discipline in the classroom within the structure of democratic set-up."
- c) "Knowledge of subject-matter etc includes statements on the capability of the teacher in receiving, keeping, analyzing and making utility of the contents of the subject he/she is dealing with the classroom conditions and delivery of course contents and its demonstration including B.B. summary constitute necessary feature of the teaching-learning activity."
- d) "Teacher characteristics include statements pertaining to the personality make-up and its behavioural manifestations that have their own level of acceptability or unacceptability in the teaching profession, capability to arouse a perceptive mass and seeking active participation of pupils constitute necessary demand characteristics of effective teacher".
- e) "Interpersonal relations focus on capability of the teacher to acquire himself/herself to create cordial links with his/her colleagues, pupils, their parents and other persons in the society with whom he/she is to communicate as part and parcel of his/her profession form the basis to have statements pertaining to this area."

Table 3.7 Dimensions of the teacher effectiveness scale

Area/Dimensions	Serial number of items in the final scale	Total number of items
A. Preparation and Planning for Teaching	2,6,11,23,27,33,37,44,49,54,58.	11
B. Classroom management	3,7,12,16,20,24,28,38,45,50,51,55,56,59.	14
C. Knowledge of Subject-matter etc	1,8,14, 17,29,39,46.	7
D. Teacher Characteristics	4,9,13,18,21,25,30,31,34,35,36,40,41,47,48,52,57.	17
E. Interpersonal relations	5,10,15,19,22,26,32,42,43,53,60.	11
	Total	60

Source: Extracted from Kulsum's manual of teacher effectiveness scale

3.5.2 Reliability

Test-retest and split-half reliability techniques have been used to evaluate reliability on 180 secondary school teachers from Bangalore. With a 16-day time gap, the test-retest (r) found was 0.63. The split- half (r) =0.68.

Table 3.8 Reliability

Sr.No	Reliability	Co-efficient of correlation (r)	Reliability index
1	Split- half reliability	0.68	$X_{tt} = 0.82$
2	Test-retest reliability	0.63	$X_{tt} = 0.79$

Source: Extracted from Kulsum's manual of teacher effectiveness scale

3.5.3 Criterion-related validity

The scale has three types of criterion-related validities: first, a correlation amid the ratings of headmaster of teacher effectiveness and individual teacher effectiveness as evaluated by the teacher effectiveness scale; second, a correlation amid the scores of the criterion item, "In general how effective are you in your job" and the scores of "teacher effectiveness" as analyzed by the "teacher effectiveness scale"; and 3rd, the 't-value' was computed using the results of a teacher effectiveness scale administered to two groups of teachers: effective and ineffective as judged by the headmasters. For scoring the step number assigned to every item for "the step number you are on now" was used to calculate the effectiveness of each responding teacher. The participant's maximum score lies between 0 to 600.

Table 3.9 Correlation of teacher effectiveness rating scale and teacher effectiveness scale

Sr. No.	Teacher Effectiveness Rating Scale	Teacher Effectiveness Scale (self)	'r'
1	Preparation and Planning For teaching	Preparation and Planning For teaching	0.64
2	Classroom Management	Classroom Management	0.72
3	Knowledge of Subject-Matter	Knowledge of Subject- Matter	0.57
4	Teacher Characteristics	Teacher Characteristics	0.78
5	Interpersonal Relations	Interpersonal Relations	0.66
	Total Score		0.85

Source: Extracted from Kulsum's manual of teacher effectiveness scale

3.5.4 Reliability

Cronbach's alpha for the teacher effectiveness scale was calculated on the 300 respondents and was found out to be as 0.965 as shown in Table 3.10. This resultant value illustrates an internal consistency in teacher effectiveness scale items with a high degree as per the interpretations made by Gliem and Gilem (2003).

 Table: 3.10 Reliability of teacher effectiveness scale

Dimensions	Ň	Cronbach's Alpha
PPT	11	0.836
CM	<mark>14</mark>	0.880
KSM	<mark>7</mark>	0.736
TC	<u>17</u>	0.886
<mark>IR</mark>	<mark>11</mark>	0.861
ET TOT	<mark>60</mark>	0.965

Note: "PPT-preparation and planning for teaching, CM= classroom management, KSM= knowledge of subject matter etc., TC= teacher characteristics, IR=interpersonal relations and ET=effectiveness of teachers".

The reliability co-efficient of all the constructs have acceptable values more than the cutoff value 0.6 to 0.7 as recommended by Hair et al. (2010).

3.5.5 Construct Validity

The composite reliability (CR) of the construct can be used to analyse construct validity (As cited in Tadesse, 2019). Construct validity of the teacher effectiveness scale was calculated using composite reliability CR and convergent validity by AVE. The

values of AVE & CR were found to be 0.81& 0.98 respectively and found as per cut off values (AVE > 0.40 (Farooq, 2016); CR > 0.70 (Fornell & Larcker, 1981). CR of the teacher effectiveness scale was found to be 0.98 which depicted that the measurement scale was sound and its construct validity was acceptable. Since AVE value exceeded 0.5, it was an indication that the convergent validity was good enough (as cited in Tadesse (2019).

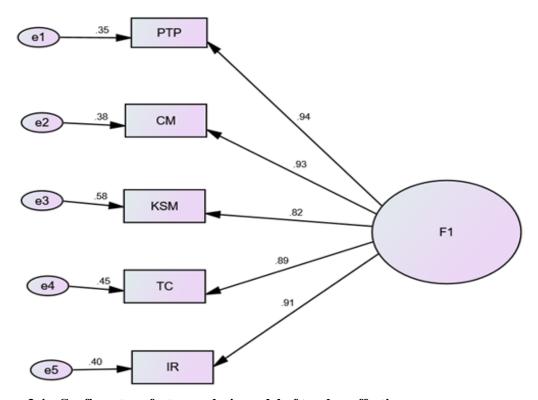


Figure 3.4: Confirmatory factor analysis model of teacher effectiveness

Note: "PPT=preparation and planning for teaching, CM= classroom management, KSM= knowledge of subject matter etc., TC= teacher characteristics, IR= interpersonal relations and ET= effectiveness of teachers, F1= Effectiveness of secondary school teachers".

3.5.6 Scoring, Norms and Interpretation

For the purpose of scoring, total the responses on the step number you are on now for all 60 items, roles A, B, C, D and E wise and then the total for all the roles. This total will form the present status of the effectiveness of the teacher and shall be the raw score. Z- score norms have been given in table. Find out the corresponding z-score for the raw score. For finding out the level of status of teacher effectiveness, norms have been given in the table 3.11.

Table 3.11:Norms for interpretation of z-scores for level of teacher effectiveness

Sr.No.	Range of raw score	Range of z-score	Grade	Level of teacher effectiveness
1	435 and Above	+2.01 and Above	A	Most Effective Teacher
2	401-434	+1.26 to +2.00	В	Highly Effective Teacher
3	367-400	+0.51 to +1.25	C	Above Average Effective Teacher
4	321-366	-0.50 to +0.50	D	Moderately Effective Teacher
5	287-320	-0.51 to -1.25	E Below Average Effective Teac	
6	286-253	-1.26 to -2.00	F	Highly Ineffective Teacher
7	252 and below	-2.01 and below	G	Most Ineffective Teacher

Source: Manual of teacher effectiveness scale by Dr. Umme Kulsum

The level of teacher effectiveness ranges from "most effective teachers", "highly effective teachers", "above average effective teacher", "moderately effective teacher", "below average effective teacher", "highly ineffective teacher" to "most ineffective teacher".

3.6 Description of Organisational climate scale (2010) by Sanjyot Pethe, Sushama Chaudhari and Upinder Dhar

In order to study perceived organisational climate of secondary school teachers, organisational climate scale (OCS) developed by Pethe, Sanjyot & Chaudhari, Sushama & Dhar, Upinder (2010) was employed. "Organisational climate refers to set of perceived attributes of an organisation and its sub system as reflected in the way an organisation deals with its members, groups and issues and includes four factors" namely "results, rewards and interpersonal relations", "organisational processes", "clarity of roles and sharing of information" and "altruistic behavior" (Pethe et al., 2010). It's a self- administering scale that doesn't require the help of a professional tester and may be used for both group and individual testing. The scale can be used for both research and surveys. It can also be used to examine people individually. The organisational climate scale is a 22- statement self-administered seven-point semantic differential scale. These statements are grouped into a bipolar scale with +ve and -ve poles or ends. Each statement has two descriptors that are totally opposite. The scale is categorized into four factors established using factor analysis as shown below:

Factor 1: This factor included the items related to "result, rewards and interpersonal relations". "It included the performance appraisal, whether merit is

rewarded, the people are evaluated by the results they achieve and the creative climate is allowed to sustain or not".

Factor 2: In this factor, "organisational processes" was taken into considerations. Individual as well as team development is encouraged, whether people working in the organisation are consulted before taking any decision and resources are made available.

Factor 3: It included the items that are related with the "clarity of roles and sharing information". Whether the roles of the individuals are defined in the organisation, new ideas shared by the individuals are accepted and the problems of the individuals shared in the organisations.

Factor 4: Altruistic behaviour included the behaviour of the individuals.

Table 3.12Dimensions of the organisational climate scale

S. No.	Area/Dimensions	S. No. of items in the final scale	Total number of items
A	Results, rewards and interpersonal relations	2, 3, 4, 5, 10, 11, 12, 14 and 15.	9
В	Organizational processes	13, 16, 17, 18, 19, 20, 21 and 22.	8
С	Clarity of roles and sharing of information.	6, 7, 8 and 9.	4
D	Altruistic behaviour	1	1
		Total	22

Source: Extracted from Manual of organisational climate scale by Pethe et. al., (2010)

3.6.1 Reliability

The scale's reliability was established by calculating (r) on 205 executives and supervisors. The split half 'r' = 0.87. Also, the Cronbach's alpha of the overall scale was found to be 0.89, which showed that the scale was reliable.

3.6.2 Validity

The scale had good content validity, in addition to face validity, because all items were relevant to the variable under study. The scale's components are clearly connected to the idea of organisational climate, according to the judges' and experts' opinions. The reliability index, which was determined using the reliability coefficient (Garret, 1981), suggested strong validity because it was 0.93. The inter-item correlation was measured together with the item-total correlation to validate the scale's internal consistency ('r' equals 0.1946, p.05) (Pethe et al., 2010).

3.6.3 Construct Validity

The composite reliability (CR) of the construct can be used to analyse construct validity (As cited in Tadesse, 2019). Construct validity of the organisational climate scale was calculated using composite reliability CR and convergent validity by AVE. The values of AVE & CR were found to be 0.57 & 0.89 respectively and were found as per cut off values (AVE > 0.40 (Farooq, 2016); CR > 0.70 (Fornell & Larcker, 1981). CR of the organisational climate scale was found to be 0.89 which depicted the measurement scale was sound and its construct validity was acceptable. When AVE value exceeds 0.5 this indicates that the convergent validity is good enough (as cited in Tadesse (2019).

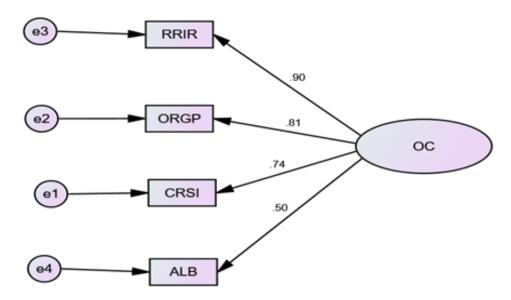


Fig. 3.5: Confirmatory factor analysis model of perceived organisational climate

Note; "RRIR=results rewards and interpersonal relations, ORGP=organisational processes, CRSI=clarity of roles and sharing of information, ALB=altruistic behaviour and OC=organisational climate".

3.6.4 Scoring, norms and interpretation

Table 3.13 shows norms for interpretation of raw scores. "These norms can be regarded as a reference point for interpreting the organisational climate scores and users of this scale are advised to develop their own norms" (Pethe et al., 2010).

Table 3.13Norms for interpretation of raw scores of organisational climate

Factors 2 3 4 Total Clarity of Organizational Altruistic Results, Rewards and Processes Rules and Behaviour Interpersonal Sharing of Information Relations 37.7 5 Mean 18.5 104 43.01 S. D. 9.37 7.7 4.4 20 1.18 Normal Range 33-53 30-45 14-23 4-6 84-124 (Favourable) High Score 54 & above 46 & above 24 & above 7 & above 125 & above 83 & below 32 & below 29 & below 13 & below 3 & below Low Score Items Nos. 2, 3, 4, 5, 13, 16, 17, 6, 7, 8, 9 1 All 10, 11, 12, 14, 18, 19, 20, 21, 22 15.

Source: Extracted from manual of organisational climate scale by Pethe et al., (2010)

Note: "RRIR=results rewards and interpersonal relations, ORGP=organisational processes, CRSI=clarity of roles and sharing of information, ALB=altruistic behaviour, OC=Organisational climate".

As suggested by (Pethe et al., 2010) norms of the scale were prepared by the investigator keeping in mind the sample size and Mean \pm 0.675SD was used to find the low, high and medium group. Kaur (2011) also found favourable and unfavourable organisational climate by employing Mean \pm 0.675SD on the same scale by (Pethe et.al, 2010).

To find the perception of organisational climate by secondary school teachers, three groups were created. The teachers scoring \geq M+.675SD on the variable of organisational climate were taken as the group with highly favourable organisational climate; the teachers scoring \leq M-0.675SD on the variable of organisational climate were taken as the group with unfavourable organisational climate and the teachers scoring between M-0.675SD and M+0.675SD on the variable of organisational climate were taken as the group with favourable organisational climate.

Table 3.14 Mean and standard deviation of perceived organisational climate and its dimensions

M and SD	ос	RRIR	ORGP	CRSI	ALB
Mean	122.46	52.51	46.45	23.50	5.97
Std. Deviation	10.564	4.952	4.473	2.411	0.889
Mean +.675SD	130	56	49	25	7
Mean675SD	115	49	43	22	5

Note: "RRIR=results rewards and interpersonal relations, ORGP=organisational processes, CRSI=clarity of roles and sharing of information, ALB=altruistic behaviour, and OC= organisational climate".

Table 3.14 displays the M and SD for "perceived organisational climate (total), results rewards and interpersonal relations, organisational processes, clarity of roles and sharing of information and altruistic behaviour" respectively. The M and SD for "perceived organisational climate (total), results rewards and interpersonal relations, organisational processes, clarity of roles and sharing of information and altruistic behaviour" respectively were found to be (122.46 and 10.564), (52.51 and 4.952), (46.45and 4.473), (23.50 and 2.411) and (5.97 and 0.889) respectively. The teachers whose scores were equal to or greater than 129.58, i.e., M+0.675SD (122.46+.675X10.56= 129.58) perceived the organisational climate as highly favourable and whose scores were equal to or less than M-0.675SD i.e. 115.332 perceived the organisational climate as less favourable; and whose scores lies between (129.58=130 and 115.33=115) perceived the organisational climate as favourable.

Similarly for "results rewards and interpersonal relations, organisational processes, clarity of roles and sharing of information and altruistic behaviour" the teachers perceived organisational climate as "highly favourable"; "less favourable" and "favourable" if they scored (= or > 56; = or <49; between 56-49); (= or > 49; = or <43; between 49-43); (= or > 25; = or <22; between 25-22); and (= or > 7; = or <5; between 7-5) respectively.

3.7 Description of Psychological Capital Questionnaire (2007) by Luthans, Avolio, Avey and Norman

In the 2007, Luthans Avolio, Avey, and Norman created psychological capital questionnaire. The PCQ-24, a PsyCap measure, has gone through substantial psychometric testing and has been validated by samples from the service, manufacturing, education, technical, military, and cross-cultural sectors. The tool consists of 24 items that assess a person's "psychological capital" in terms of "self-efficacy", "hope", "resilience" and "optimism".

"Psychological Capital refers to the current state of individual's psychological capital through the four constructs, namely, self-efficacy, hope, resilience and optimism and measured through psychological capital questionnaire" by (Luthans.et al., 2007).

"Self-efficacy is as an individual's conviction (or confidence) about his or her abilities to mobilize the motivation, cognitive resources, and courses of action needed to successfully execute a specific task within a given context" (Stajkovic & Luthans, 1998).

"Hope is defined as a positive motivational state where two basic elementssuccessful feeling of agency (or goal-oriented determination) and pathways (or proactively planning to achieve those goals) interact."

"Optimism is an attribution style that, explains positive events in terms of personal, permanent and pervasive causes, and negative events as external, temporary and situation-specific" Seligman (1998).

"Resilience is defined as the developable capacity to rebound or bounce back from adversity, conflict, and failure or even positive events, progress, and increased responsibility" (Luthans, 2002). There are six items in each of these four subcomponents. The final score reflects a person's positive PsyCap level. In the psychological capital questionnaire, "self-efficacy" scale was adopted from Parker (1998), "hope" scale was adopted from Snyder et al. (1996). "Optimism" scale was taken from Scheier and Carver (1985) and "resilience" scale was taken from Wagnild and Young (1993). The PsyCap questionnaire prompts the individual to express how they consider of themselves right now in order to enhance the "state-like" feature.

In this psychological capital questionnaire, items 1-6 measure "self-efficacy defined as people's confidence in their ability to achieve a specific goal in a specific situation;" items 7-12 consists of items of "hope defined as persevering towards goals and when necessary redirecting paths to goals;" items 13-18 consists of "resilience defined as when beset by problems and adversity, sustaining and bouncing back and even beyond to attain success;" and items 19-24 measure "optimism, defined as making a positive attribution about succeeding now and in the future."

Table 3.15 Distribution of items of the PCQ-24

Sr. No.	Dimensions	Item Numbers	Total Item
1	SELF	1,2,3,4,5 & 6	6
2	НОРЕ	7,8,9,10,11 & 12	6
3	RESI	13R,14,15,16,17,& 18	6
4	OPTI	OPTI 19,20R,21,22,23R & 24	

Note: R= reverse coded items, "SELF=self-efficacy, HOPE=hope, RESI=resilience OPTI=optimism."

3.7.1 Reliability and Validity

Supported up by empirical evidence different validated PsyCap tools are accessible. Luthans et al., devised the major tool for assessing PsyCap in 2007. Cronbach's α values for the "self-efficacy, hope, resilience, and optimism" dimensions of PCQ-24 devised by (Luthans et al., 2007) varied from (0.75 to 0.85) for "self-efficacy", (0.72 to 0.80) for "hope", (0.66 to 0.72) for "resilience", and (0.69 to 0.79) for "optimism". PsyCap's value in the workplace has been demonstrated in various researchers. PsyCap, has been discovered as a strong predictor of performance (Luthans et al., 2010) as well as satisfaction (Luthans et al., 2007).

3.7.2 Administration and scoring of PCQ-24

The 24-items PCQ instrument (Luthans et al., 2007) with four dimensions of "self- efficacy, hope, resilience and optimism" is a six-point Likert scale with options as "strongly agree=6, agree=5, somewhat agree=4, somewhat disagree=3, disagree=2

and strongly disagree=1." The psychological capital scale has 21 positive and 3 negative items. Following table 3.16 presents the scoring pattern and classification of test items into negative and positive items. Respondents are instructed to tick the statement to indicate their "agreement or disagreement" with each of the statement that most closely represents their opinion about that statement. Scoring pattern followed in the PCQ-24 is as given in the Table 3.16 below.

Table 3.16 Scoring pattern of psychological capital questionnaire

Types of Number		Item Number	Scores		
item	of items				
Positive	21	1,2,3,4,5,6,7,8,9,10,11,12,14,15,	SA=6, A =5, SWA=4, SWD=3,		
Positive	21	16,17,18,19, 21,22, &24	D=2 and SD=1.		
Negative	2	13, 20 & 23	SA=1, A =2, SWA=3, SWD=4,		
Negative	3	13, 20 & 23	D=5 and SD=6.		

Note: "SA=strongly agree, A=Agree, SWA=somewhat agree, SWD=somewhat disagree, SD=strongly disagree, and D=disagree".

3.7.3 Validation of PCQ-24 in the Indian Context

Luthans et al., (2007) developed the PCQ-24 in a western milieu. The instrument, according to Van de Vijver& Leung (2001), can be characterized as mono-centered, that is, a tool that originated from unique, western cultural base. Apart from the cultural adaptation of PCQ to Indian socio-cultural settings, numerous forms of scale equivalence are essential (Berry &Dasen, 1974; Goldschmidt, 1966). The overall model fit criteria, composite reliability (CR), and Cronbach's alpha (α) will be investigated in the Indian context. Further the review also shows that PsyCap is a novice variable and very less studies has been conducted in India using this variable and so there is need to validate this scale in Indian context. Validation process was carried out by using "Exploratory Factor Analysis", "Confirmatory Factor Analysis" and reliability i.e., coefficient of Cronbach's α was calculated for measuring the internal consistency, construct validity was calculated, followed by creation of norms in the Indian context.

3.7.4 Administration of scale

Secondary school teachers were the subjects of pilot study to collect their responses to a questionnaire about psychological capital. A pilot test is a smaller subset of a larger research project which is an important step in ensuring the success of any research project (Polit, Beck, & Hungler, 2001; Teijlingen& Hundley, 2002). Testing the adequacy of research instruments (Teijlingen and Hundley) is just one of several goals of a pilot study (2002). Higher authorities were formally consulted, and sets of questionnaires were distributed to the teachers. Online data was collected from 110 teachers of Punjab. Cooper and Schinder (2011) recommend a sample size of 25 to 100 subjects when choosing on a sample size for a pilot study. Cronbach's α used to evaluate the internal consistency of the data. The Cronbach's α value for the overall psychological capital questionnaire was found to be 0.66 (acceptable value is above 0.6, Moss et al., 1998). Cronbach's α must have a minimum value of 0.70 (Nunnally, 1978). However, readings close to 0.60 are acceptable (Hair, et al., 2006).

3.7.5 Exploratory factor analysis of PCQ-24

EFA was applied using "principal component analysis with Varimax rotation and Kaiser Normalization method" to extract factors and four factors extracted namely, "self-efficacy", "hope", "resilience" and "optimism" on 295 secondary school teachers of Punjab. For factor analysis three negatively worded items PC13,PC20 and PC23 were deleted for their corrected item-to-total correlations (CITC) value found was 0.139, 0.291 and 0.228 respectively as shown in Table 3.17which was too low (less than 0.30) (Cristobal, et al., 2007) as cited in Tadesse (2019). Chen & Lim, (2012); Etin, Basim, (2012); Rego Bahr et.al., (2010), found that excluding the reversed items raises the factor load of the other items and improves model fit (as cited in Cid et. al., 2020).

Table 3.17 Item-total statistics of PCQ-24

Items	SM(ITD)	SV(ITD)	CITC	SMC	a (ITD)
PC1	117.35	154.583	0.508	0.331	0.876
PC2	117.20	150.371	0.598	0.444	0.873
PC3	117.33	152.302	0.477 0.389		0.876
PC4	117.18	153.821	0.455	0.459	0.877
PC5	117.38	153.114	0.403	0.260	0.878
PC6	117.11	155.950	0.356	0.305	0.879
PC7	117.33	152.440	0.469	0.423	0.876
PC8	117.09	153.814	0.416	0.376	0.877
PC9	117.22	150.133	0.551	0.465	0.874
PC10	117.34	148.714	0.554	0.421	0.874
PC11	117.21	151.484	0.525	0.476	0.875
PC12	117.36	150.184	0.488	0.401	0.875
PC13R	117.43	157.239	0.139	0.252	0.888
PC14	117.46	147.943	0.515	0.403	0.875
PC15	117.52	147.618	0.579	0.485	0.873
PC16	117.58	148.081	0.458	0.418	0.877
PC17	117.55	145.847	0.554	0.470	0.873
PC18	117.41	148.924	0.549	0.448	0.874
PC19	117.48	146.720	0.574	0.462	0.873
PC20R	117.46	153.889	0.291	0.316	0.881
PC21	117.27	147.067	0.619	0.530	0.872
PC22	117.40	147.853	0.538	0.442	0.874
PC23R	117.48	154.652	0.228	0.292	0.884
PC24	117.29	153.507	0.387	0.278	0.878

Note: "SM (ITD) = scale mean if item deleted, SV (ITD) = scale variance if item deleted, CITC=corrected item total correlation, SMC= Squared multiple correlation, α (ITD) = Cronbach α if item deleted".

Table 3.18 KMO and Bartlett test of Spherecity

<u> </u>					
KMO	0.901				
Bartlett's Test	Chi-Square	2139.844			
	Df	210			
	Sig.	0.000			

KMO and Bartlett's Test of Sphericity was conducted prior to CFA for checking the adequacy of data and the values obtained were found to be suitable for conducting CFA. The minimum value of KMO for a good factor structure must be at least 0.60 or above (Tabachnick and Fidell, 1996). In Table 3.18, after removing the

items (PC13, PC20 & PC23) the KMO value found was 0.901, which was well above the threshold level. Bartlett's test of Sphericity showed significant correlations among variables with $\chi 2=2139.844$, df= 210 and p value = 0.00 which was found to be significant. "Exploratory factor analysis" (EFA) was used to confirm the PCQ's factorial structure. The analysis was carried out using principal component analysis and Varimax rotation, which allowed four factors to be extracted utilizing parallel processing as suggested by (Horn, 1965). These variables accounted for 53.19% of the total variance. While the eigenvalues found for four factors was 7.025, 1.631, 1.366, and 1.148 respectively. The first component explained 17.81% of the variance, while the remaining three factors explained 15.01%, 14.19%, and 6.166% respectively.

Table 3.19 Total variance explained of PCQ-21items

	Init	ial Eigenva	alues	Ex	traction S	SSL	R	Rotation S S	S L
Items	Total	% of Variance	Cumula tive %	Total	% of Varian ce	Cumulat ive %	Total	% of Variance	Cumula tive %
1	7.025	33.454	33.454	7.025	33.454	33.454	3.741	17.817	17.817
2	1.631	7.768	41.222	1.631	7.768	41.222	3.153	15.015	32.831
3	1.366	6.507	47.729	1.366	6.507	47.729	2.981	14.197	47.028
4	1.148	5.465	53.194	1.148	5.465	53.194	1.295	6.166	53.194
5	0.987	4.701	57.895						
6	0.904	4.305	62.2						
7	0.836	3.983	66.183						
8	0.794	3.779	69.962						
9	0.748	3.563	73.526						
10	0.671	3.193	76.719						
11	0.601	2.862	79.58						
12	0.568	2.704	82.284						
13	0.538	2.562	84.846						
14	0.480	2.287	87.133						
15	0.457	2.176	89.309						
16	0.450	2.143	91.452						
17	0.404	1.926	93.378						
18	0.383	1.825	95.203						
19	0.362	1.725	96.928						
20	0.330	1.571	98.499						
21	0.315	1.501	100						

Note: "SSL=Sums of Squared Loadings."

Several countries including the United States (Luthans et al., 2007), South Africa (Du Plessis & Barkhuizen, 2012, Gorgens-Ekermans & Herbert, Dominguez,

Moriano, & Molero, 2014), China (Qingshan, Le, & Xuansheng, 2014) and Portugal (Antunes, Caetano, & Pina-Cunha, 2017), conducted validation of Psychological capital. The majority of research support the instrument's original structure, with a four-factor distribution, correlations between components ranging from 0.36 to 0.77, and Cronbach's alphas ranging from 0.80 to 0.90 (as cited in Cid et. al., 2020).

Table 3.20 Results of EFA for PCQ-21 items

Items	SELF	НОРЕ	RESI	OPTI
PC4	0.764			
PC3	0.643			
PC2	0.629			
PC1	0.493			
PC5	0.425			
PC6	0.401			
PC8		0.702		
PC9		0.687		
PC10		0.670		
PC7		0.569		
PC12		0.537		
PC11		0.532		
PC16			0.762	
PC17			0.721	
PC15			0.718	
PC18			0.668	
PC14			0.498	
PC21				0.611
PC22				0.523
PC24				0.499
PC19				0.477
Eigen Value	7.025	1.631	1.366	1.148
%of variance	17.18	15.01	14.19	6.166

Rotation converged in 25 iterations.

Note: "SELF=self-efficacy, HOPE=hope, RESI=resilience OPTI=optimism."

The above Table 3.20 showed the results of EFA of PCQ-21 items and the factor loading of all the factors. Other validations of PCQ on other populations (e.g., Portuguese; Monico, Pais, dos Santos, & Santos, 2014; Egypt; Badran & Youssef Morgan, 2013; South Africa; Gorgens Ekermans & Herbert, 2013) yielded different results (as cited in Lupsa et., al. 2018).

Further, the results of PsyCap are not often consistent throughout the other contexts and countries, more exploration on the influence of cultural factors on the construct's evaluation is desired, and incorporating the more distinctive features of each culture(as cited in Cid et. al.,2020). Additionally, Rego et al. (2010) addressed the possibility that PsyCap may react differently depending on cultural factors due to the fluctuation of factorial solutions (as cited in Cid et.al. 2020).

3.7.6 Results of confirmatory factor analysis

In validation research, there are no basic rules for the sample size that must be used. It is generally advised to have a sample size of at least 50-100 people, some methods, on the other hand necessitate a larger number of participants (Morrison & Susan 2012). According to the rule of thumb, each scale item should have at least 10 participants, i.e., the "ideal ratio of respondents to items is 10:1", as stated in (Boateng et al., 2018). The respondents in this study were secondary school teachers from Punjab. Although the sample size desirable, is influenced by the condition of normality of data and the method of estimation being used by researcher, but Schreiber et al. (2006) said that the commonly accepted number is 10 respondents for every item assessed (cited in Hoe, 2008). The general guideline has been that each scale item should have at least ten participants, i.e., 10:1 ratio of respondents to items is desirable (Nunnally, 1978). For each item on the scale, it is recommended that at least ten participants should be there (Clark and Watson 1995; DeVellis 2003; Hair Junior et al. 2009, as cited in Morgado, Meireles, Neves, et al. 2018). The PsyCap questionnaire (PCQ) by (Luthans et al., 2007) was validated in the Indian context using 295 secondary school teachers from Punjab.CFA was considered appropriate since psychological capital construct has established theoretical rationale and supports a four dimension a priori factor structure as evident in the published literature (e.g., Luthans et al., (2007); Luthans et al., (2010); Peterson et al., (2011).

"Confirmatory factor analysis is a distinct case of structural equation, is also known as linear structural relationship model" (Joreskog & Sorbom, 2004). CFA is a statistical method which is employed to verify the factor structure of a set of observed variables. CFA is used in a well-established scale to confirm whether the scale confirms to our population or not. CFA was run on PCQ-24 and the results showed

that model fit was not satisfactory. After checking the values of factor loading it was observed that factor loading on the reverse coded item (13, 20 and 23) was less than the acceptable range. Extensive review of literature showed that exclusion of reversed items increased the factor loading of other items and also improved the model fit (Cetin &Basim, 2012; Chen & Lim, 2012; Rego et al., 2010). In Brazilian sample, also the three reverse coded items (13, 20 and 23) were excluded, and that lead to a very good model fit (Fidells, 2016; Raulino, 2015). According to Raulino (2015), these are the scale's negative items, which might have been taken as pessimism, in contrast to the other elements predicted by the instrument. In "Lithuanian version of the instrument" (Lith-PCQ-21), three negatively worded items were removed due to poor fit of the model. The psychometric indices of the Lith-PCQ-21 indicators revealed the factorial structure's reliability as well as the instrument's internal consistency, demonstrating the instrument's suitability as a tool for assessing psychological capital (Dirzyte, Perminas and Biliuniene 2021). Hence keeping in view, the review of literature, three negative items (13, 20 and 23) were removed and CFA was run again, which lead to the improvement in fit indices as shown in table 3.21. As reiterated by (Hair et al., 2017a; Hair, Black, Babin, & Anderson, 2010), not higher than 20% of the total items in a model, regardless CB-SEM or PLS-SEM, can be deleted as thumb rule (as cited in Morgado, Meireles, Neves, et al., 2018).

Maroco (2014) advised that any change to the original version of the psychometric instrument should be validated using the AIC and MECVI indices using the maximum likelihood technique. Thus, in the present context for PCQ validation, in comparison to24- item model (MECVI=2.663 and AIC =768.55), the 21-item model (without the reverse items) showed lower (MECVI=1.938 and AIC=558.698), indicating that it has higher external validity and stability in an independent sample.

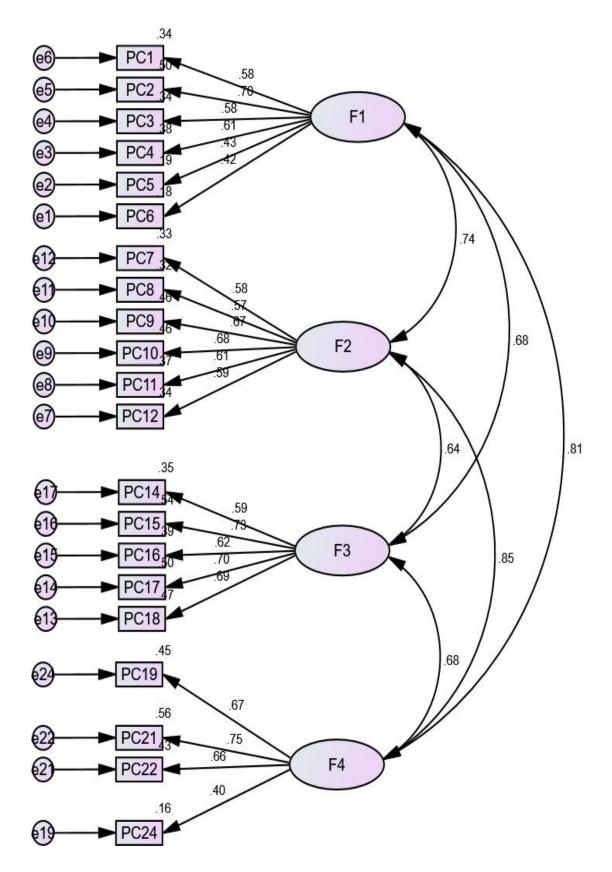
Table 3.21 showed the measures of fitness indices of items of psychological capital questionnaire (PCQ-21). The RMSEA value is 0.066, which is lower than the cut off value of 0.08. Value less than 0.05 is considered as good fit, value up to 0.08 is measured as a fair fit, and a value between 0.08 and 0.10 is considered as moderate fit (All et.al 2013; Hu & Bentler 1999). The values found for the TLI and CFI were 0.863 and 0.880 respectively. The cut off value of all the measures of goodness of fit is 0.9. The "GFI and CFI" indices standard values should be in-between 0 and 1 though, in literature there are varying viewpoints on these values. Hair et al. (2010)

suggested that, the value of CFI > 0.85 is acceptable and the value of CFI > 0.90 is considered a better fit. If CFI >0.90 then it's a good fit (Schumacker& Lomax, 2016). Additionally, various studies by Gay et al. (2010); Mahne & Huxhold (2014); Lima-Rodríguez et al. (2015) reported CFI less than 0.90. While Lloyd et al. (2017) reported perceived listening quality's three sub-scales' CFA models (CFI=0.850, TLI=0.830). From the values of Model Fit it has been observed that the model fit indices have been improved after deleting the reverse coded items. The Table 3.21 shows the measures of fitness indices for PCQ- 21.

Table 3.21 Measure of fitness indices for PCQ- 21

Measure Fit	Fit Indices	Measure Standard
CMIN/DF	2.299	The value of ratio of CMIN/df less than 3 (reasonably good indicator of model fit, Hoe 2008).
RMSEA	0.066	The values from .05 to .10 recommend acceptable fit (Browne & Cudeck, 1992; MacCallum et al., 1996). Same range reported by (Fryer et al., 2014; Kashdan et al., 2014; Sellbom et al., 2014; Tran et al., 2014; Kim & Shute, 2015; Fabio & Gori, 2016; Lloyd et al., 2017).
(CFI)	0.880	Hair et al. (2010) suggested that, value of CFI > 0.85 is acceptable and the value of CFI > 0.90 is considered a better fit (p. 647). Lima-Rodríguez et al. (2015) reported the value of CFI less than 0.90. Lloyd et al. (2017) reported perceived listening quality's three sub-scales' CFA models (CFI = .85, TLI = .83)
(NFI)	0.809	The value is acceptable if above 0.8 (Doll et al., (1994); Baumgartner & Homburg, 1995)
(GFI)	0.881	The value is acceptable if above 0.8 (Doll et al., (1994); Baumgartner & Homburg, 1995). Reported by (Hair et al., 2006; Cheng, 2011; Kim et al., 2016; Wong & Carlbäck, 2018).
(TLI)	0.863	TLI ranging from 0.85 and over 0.9 is a good fit (Bentler &Bonett, 1980; Sharma et al., 2005; Hair et al., 2006; Kline, 2015)

Note: A model is deemed fit whenever 3-4 parameters in it, meet minimum criteria (Hair et al., 2010). If the bulk of the fit indices are over the threshold values, it can be concluded that the conceptual model is confirmed by data (Schumacker & Lomax, 2016).



(F1= Self -efficacy, F2 =Hope, F3= Resilience and F4=Optimism)

Figure 3.4: Confirmatory Factor Analysis Model of psychological capital

3.7.7 Reliability of PCQ-21

The Composite reliability (CR) of psychological capital questionnaire for "self- efficacy, hope, resilience and optimism" and overall PsyCap were found to be (0.73, 0.78, 0.80, 0.72 and 0.95) respectively (value above 0.7 is acceptable cut off (Hair et al 1995). According to Fornell and Larcker (1981) and Malhotra, & Dash (2010), "the average variance extracted may be a more conservative estimate of validity of the measurement model and on the basis of CR (composite reliability) alone, the researcher may conclude that the convergent validity of the construct is adequate, even though more than 50% of the variance is due to error" (as cited in Lam,2012).

As the CR of "self- efficacy, hope, resilience and optimism" and overall PsyCap were found to (0.73, 0.78, 0.80, 0.72 and 0.95) respectively, all values were found to be well above the recommended level, hence the internal reliability of measurement items was acceptable. Each dimension has satisfactory convergent validity as the CR should be greater than (0.7) to indicate reliable factors (Hair et al 1995). From the table 3.22, it can be interpreted that for PCQ-21, Cronbach's α ranges from (0.723 to 0.796) for the four different components of psychological capital, namely, "self-efficacy, hope, resilience and optimism" respectively, while for the overall scale α was found to be 0.897. The values of reliability improved in 21-item scale. Further the Cronbach a value for all four components "self-efficacy, hope, resilience and optimism" were found to (0.723, 0.785, 0.796) and (0.715). Cronbach's α is a good indicator of the latent variable's internal consistency, and acceptable values are usually above 0.70 (Nunnally, 1978). Cronbach's alpha must have a minimum value of 0.70 (Nunnally, 1978). However, readings close to 0.60 are acceptable (Hair, et al., 2006). Hence scale reliability suggested that the PsyCap questionnaire seemed to be internally consistent.

Table 3.22 Reliability of the PCQ-21

S. No	Dimensions	C.R.	Cronbach's α	Number of items
1	Self-Efficacy	0.73	0.723	6
2	Норе	0.78	0.785	6
3	Resilience	0.80	0.796	5
4	Optimism	0.72	0.715	4
	Psychological Capital	0.95	0.897	21

3.7.8 Final draft of Psychological Capital Questionnaire (PCQ-21)

The final draft of the "Psychological Capital Questionnaire" (PCQ-21) has 21 items distributed in the four dimensions, namely," self-efficacy (1-6), hope (7-12), resilience (14-18) and optimism" (19, 21, 22 and 24).

Table 3.23 Number of items of PCQ-21

Dimensions	No. of Items	Total	Range of Score
Self-Efficacy	1-6	6	6-36
Норе	7-12	6	6-36
Resilience	14-18	5	5-30
Optimism	19,21,22 and 24	4	4-24
Psychological capital	Total 21 items	21	21-126

3.7.9 Development of Norms

The participants of the study were chosen from the state of Punjab keeping in view the conditions of representativeness and adequacy of sample. The final scale of psychological capital consisted of 21-items. The range of scores of individual participants on present scale is 21 to 126.

Table 3.24 Mean and standard deviation of PCQ-21 items

Dimensions	M	SD
Self-Efficacy	31.17	3.26
Норе	31.16	3.94
Resilience	29.76	4.56
Optimism	30.34	4.08
Psychological capital	122.45	12.79

To find the levels of "psychological capital" of secondary school teachers, mean of the raw scores of the psychological capital questionnaire (overall) and its dimensions was used. Similar levels of psychological capital using mean were also calculated by (Hutagalung & Saad 2019; Khera, 2017; & Tadesse, 2019).

Table 3.25 Norms for interpreting the levels of (PCQ-21)

Levels	PC	SELF	НОРЕ	RESI	OPTI
Low	1-2.49	1-2.49	1-2.49	1-2.49	1-2.49
Medium	2.50 -4.49	2.50 -4.49	2.50 -4.49	2.50-4.49	2.50-4.49
High	4.5 - 6.0	4.5 - 6.0	4.5 - 6.0	4.5 - 6.0	4.5 - 6.0

Note: "PC= psychological capital, SELF=self-efficacy, HOPE=hope, RESI=resilience OPTI=optimism."

The above Table 3.25, depicts the norms for the interpreting the levels of psychological capital questionnaire viz. low, medium and high.

3.8 Description of Learning Orientation Questionnaire (2005) by Martinez

"Learning orientation questionnaire" was developed by Martinez (1996-2005) in order to measure learning orientation of an individual. The questionnaire was designed to know the three dimensions of learning orientation, namely, "conative and affective learning focus, learning independence or autonomy and committed strategic planning and learning efforts." In the present study, learning orientation questionnaire by Martinez (2005) has been adapted in Indian context on the secondary school teachers.

The "learning orientation questionnaire" is a multifaceted measure of learning orientation that may be used to assess a variety of learning goals, styles, abilities, roles, and scenarios. "Learning orientation is defined as individual's general disposition to learn and assess how individuals may enjoy or want to learn (Martinez 2001). Learning orientations describe the individual's proclivity to take control, expend strategic effort, manage resources, and take risks to learn. Learning orientation is the degree that learners, following beliefs, desires, emotions and intensions to learn, generally commit effort and self-manages the learning process to learn. They describe

how learners intend to set and attain goals, have feeling about learning progress, and use reflections to improve future learning" (Martinez, 2001). "Learning orientation has been described in terms of (a) across individual construct factors, namely, conative and affective learning focus; learning independence or autonomy; and committed strategic planning and learning effort as well as (b) along learning orientation continuum comprising of four types of learners, namely, transforming learners, performing learners, conforming learners and resistant learners" (Martinez, 2001).

According to Martinez (2001), "conative and affective learning focus construct factors includes the belief of the individual that setting and accomplishing the personal learning goals will improve the personal growth, needs and learning performance. Casual beliefs and affective and conative factors help successful learners expand knowledge, self- assess values and principles and set challenging learning goals; while learning independence or autonomy refers to individual's desires and ability to take responsibility, make choices, and control, self- assess, self-motivate, and manage or improve their own learning; and committed strategic planning and learning effort refers to the degree that learner strategically commits deliberate and persistent efforts to accomplish learning; successful learners place great importance on the act of commitment to applying focused, strategic, hardworking principles and skills to learn". "Further, the learners situationally fall along the continuum of learning orientations. Change to a new learning orientation requires psychological change, greater effort and learner control, and stronger intensions, feelings, and beliefs about learning" (Martinez, 2001).

There are four sorts of learners in terms of learning orientation, (Martinez, 2001), namely, "transforming learners, performing learners, conforming learners, and resistant learners." "Transforming learners are highly goal-oriented, holistic thinkers who value learning ability, committed, persistent and assertive effort, abstract theories, creative strategies and positive expectations to self-manage and accomplish personal goals successfully." "Performing learners are task oriented, more often extrinsically motivated, and prefers avoiding risks and mistakes; they are less

comfortable with the abstract theories more often focus on details, processes, principles, grades, rewards and normative achievement standards." "Conforming learners value security, structure and routine; they are deeply influenced by an awareness of the social aspects of the learning and external resources that motivate them; they more passively accept knowledge, store it and reproduce it to conform and complete assigned tasks." "While the resistant learners may deal with either short term (temporary) or long term (permanent) resistance, and avoid using learning to achieve goals assigned by others."

Table 3.26 Distribution of items of LOQ-25 items

Dimensions	Item No.	Total Items
Conative and affective learning focus	1,2,4,6,9,10,11,12,13,15,16, 17,19,21 and 24	15
Learning independence or autonomy	3,5,8,20,22 and 23	6
Committed strategic planning and learning effort	7,14,18 and 25	4
Grand total	1 to 25	25

Source: Extracted from the manual of LOQ

3.8.1 Reliability of LOQ-25 Items

The base of the "learning orientation questionnaire is the learning orientation research and a theoretical three-factor representation, called the learning orientation construct." Martinez (1996-2005) conducted a series of experiments and discovered learning orientation questionnaire as a valid and reliable tool. Managers, educators, and other professionals can utilize the learning orientation questionnaire to plan, design, and improve novelty, ability, globalization, leadership, and capability improvement, performance enhancement programmes, and resource usage. The reliability, 'r' of the learning orientation questionnaire is 0.823, which is acceptable. Cronbach's α for "conative and affective learning orientation" were determined to be 0.891, 0.788 for "learning independence or autonomy", and 0.791 for "committed strategic planning and learning effort".

3.8.2 Administration and Scoring

The LOQ (Martinez, 1996-2005) uses a "seven-point Likert scale stretching from 1 (very uncharacteristic of me) to 7 (very characteristic of me)". Respondents in the questionnaire provide each question a score expressing their level of agreement; the higher the agreement, the more probable the responder is to have the theorized subscale. The "LOQ measures where the learner may fall (a) across the individual construct factor" that is, "conative and affective learning focus", "learning independence or autonomy"; and "committed strategic planning and learning effort" and (b) "along the learning orientation continuum" (as four sorts of learners, viz. "transforming learners, performing learners, conforming learners, and resistant learners") (Martinez, 1996-2005).Respondents are asked to express their agreement by checking the box next to each statement with the number that best indicates their opinion on that item. Respondents obtain four scores after completing the LOQ: one for each of the three construct elements and one for learning orientation.

3.8.3 Validation of LOQ-25 items in Indian context

The learning orientation questionnaire was developed by Martinez (1996-2005) through a series of studies conducted in the western cultures on students, adults and corporate workers. Review of literature suggested that there was dearth of studies in Indian context on the learning orientation of school teachers. This motivated the researcher to validate the learning orientation questionnaire. To validate the questionnaire, EFA & CFA was conducted, for checking the internal consistency of questionnaire, Cronbach α and CR was computed. Also, from the review of literature it has been seen that learning orientation is a novice variable and very less studies has been conducted in India using this variable and so there is need to validate this scale in Indian context.

3.8.4 Administration of questionnaire

For administering the learning orientation questionnaire developed by Martinez (2005) in Indian context slight changes were made in the items and the questionnaire was sent to experts for content validity and the suggestions given by them were taken into consideration. After that pilot study was conducted on

secondary school teachers to collect their responses for learning orientation questionnaire. A pilot test is a scaled replica of a larger study, an important step to ensure the success of any study (Polit, Beck, & Hungler, 2001; Teijlingen & Hundley, 2002). Testing the efficiency of research instruments is one of multiple reasons for doing a pilot study (Teijlingen and Hundley) (2002). Formal permission was taken from higher authorities and questionnaire was administered on the teachers. Online data was collected from 110teachers of Punjab. Cooper and Schinder (2011) recommended a sample size of 25 to 100 people when settling on a sample size for a pilot study. To check the internal consistency, Cronbach's α was computed after the data was collected, the value obtained for a was 0.852. In validation research, there are no basic rules for the sample size that must be used. It is generally advised to have a sample size of at least 50-100 people, some other methods, on the other hand necessitate a larger number of participants (Morrison & Susan 2012). According to the rule of thumb, each scale item should have at least 10 participants, i.e., "the ideal ratio of respondents to items is 10:1", as stated in (Boateng et al., 2018). The respondents in this study were secondary school teachers from Punjab. The researcher selected 304 secondary school teachers teaching in government and private schools in rural and urban areas of Punjab.

3.8.5 Exploratory factor analysis of LOQ-25 Items

EFA was applied using principal component analysis with Varimax rotation and Kaiser Normalization method to extract three factors i.e. "conative and affective learning focus", "learning independence or autonomy" and "committed strategic planning and learning efforts" on 304 secondary school teachers of Punjab. Only factors with eigenvalues greater than 1 were extracted and retained. For factor analysis two items LO8 and LO20 were deleted as their corrected item-to-total correlations values (CITC) found was 0.169 and 0.205 respectively as shown in Table 3.27 which was too low (less than 0.30) (Cristobal, et al., 2007) as cited in Tadesse (2019).

Table 3.27 Item-total statistics of LOQ-25 Items

Items	SM(ITD)	SV(ITD)	CITC	SMC	α (ITD)
LO1	134.957	440.893	0.636	0.504	0.922
Lo2	134.487	441.835	0.609	0.465	0.922
Lo3	135.158	416.523	0.720	0.592	0.919
LO4	134.576	444.984	0.619	0.532	0.922
LO5	135.243	412.561	0.720	0.605	0.919
LO6	134.786	439.759	0.644	0.563	0.922
LO7	135.266	417.853	0.706	0.677	0.920
LO8	134.849	459.772	0.169	0.200	0.928
LO9	135.069	436.698	0.617	0.466	0.922
LO10	134.947	435.119	0.686	0.550	0.921
LO11	134.766	439.632	0.681	0.631	0.921
LO12	134.898	435.194	0.720	0.647	0.921
LO13	134.954	424.750	0.689	0.550	0.920
LO14	135.434	417.989	0.678	0.704	0.920
LO15	134.997	424.188	0.698	0.623	0.920
LO16	135.092	430.757	0.651	0.502	0.921
LO17	135.395	435.104	0.475	0.300	0.924
LO18	135.872	422.251	0.544	0.538	0.923
LO19	134.944	440.403	0.567	0.474	0.923
LO20	136.635	484.589	-0.205	0.123	0.940
LO21	134.799	443.897	0.609	0.512	0.922
LO22	135.332	422.170	0.637	0.509	0.921
LO23	135.572	417.084	0.642	0.547	0.921
LO24	134.993	436.475	0.689	0.559	0.921
LO25	134.661	439.149	0.520	0.364	0.923

Note: "SM (ITD) = scale mean if item deleted, SV (ITD) = scale variance if item deleted, CITC=corrected item total correlation, SMC=Squared multiple correlation, α (ITD) =Cronbach α if item deleted".

Table 3.28 KMO and Bartlett's test of Spherecity

KMO		0.952
Bartlett's Test	Approx. Chi-Square	4018.143
Dartiett's Test	Df	253
	Sig.	0.000

After removing those items (LO8 and LO20) the study obtained the KMO value of 0.952 (minimum acceptable value is 0.60 or above Tabachnick & Fidell, 1996). Statistically significant Bartlett's Test of Sphericity (approx. $\chi 2=4018.143$, df = 253, p =0.000) supports the assumption that the data provided a normal distribution

as supported by (Karaca et. al., 2022) as shown in Table-328. All of the items were above 0.3 in terms of communality (Tabachnick & Fidell, 2007 as cited in Chan et.al. 2017). According to Coakes, Steed, Coakes, & Steed (2003), the acceptable level for the anti-image correlation for all items is over 0.5. In this study, anti-image correlation for all items greater than 0.5 and all items had a communality that was above 0.3. "Exploratory factor analysis" of the learning orientation questionnaire indicated three factor explaining 58.22% of total variance. The eigenvalues showed that the first factor "conative and affective learning focus" explained 27.06% of the variance, the second factor "learning independence or autonomy" explained 17.62% of the variance, the third factor "committed strategic planning and learning efforts" explained 13.53% of the variance as evident from the Table 3.29

Table 3.29 Exploratory factor analysis of LOQ-23 items

Items	Factor Loadings					
200112	CONAF	LEARN	CSPLE			
LO4	0.712					
LO12	0.704					
LO19	0.688					
LO6	0.685					
LO11	0.672					
Lo21	0.660					
LO15	0.650					
LO10	0.636					
LO24	0.622					
LO1	0.622					
LO13	0.572					
LO2	0.501					
LO17	0.444					
LO16	0.441					
LO9	0.401					
LO22		0.751				
LO23		0.684				
LO3		0.538				
LO5		0.434				
LO18			0.801			
LO14			0.781			
LO7			0.718			
LO25			0.423			
Eigen Values	10.919	1.451	1.020			
% of variance	27.066	17.621	13.526			

a. Rotation converged in 8 iterations.

Note: "CONAF=conative& affective learning focus, LEARN=learning independence, CSPLE=committed strategic planning and learning efforts."

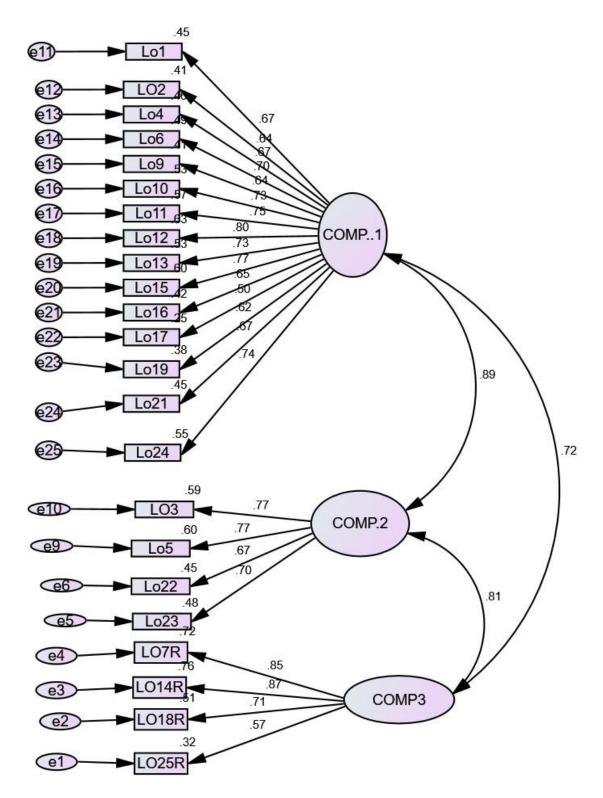
Further the above Table 3.29 also shows the factor loadings of all the factors namely "conative and affective learning focus", "learning independence or autonomy" and "committed strategic planning and learning efforts". According to a rule of thumb, using an alpha level of .01 (two-tailed), a rotated factor loading for a sample size of at least 300 would need to be at least 0.32 to be considered statistically meaningful (Tabachnick & Fidell, 2007).

3.8.6 Results of Confirmatory Factor Analysis

The learning orientation questionnaire was adapted and CFA was conducted on 304 secondary school teachers in Indian context using IBM-SPSS Amos 24-version to three construct of LOQ as given by Martinez (1996-2005). The basic thumb rule has been that each scale item would have had at least 10 participants, i.e., the ideal ratio of participants to items is 10:1 (Nunnally, 1978). CFA was considered appropriate since learning orientation construct has established theoretical rationale and supports a three dimension a priori factor structure as evident in the published literature (Martinez, 1996-2005). Joreskog & Sorbom (2004) stated "confirmatory factor analysis is a distinct case of structural equation, is also known as linear structural relationship model." Values of the model fit indices were found to be CMIN= 518.752, df=227 p=0.000, RMSEA=0.065, Chi-squared/df or CMIN/DF=2.285, GFI= 0.870, AGFI=.842, CFI=.924 as shown in the table. So RMSEA is a good fit indicator in this model (Jpreskog and Sorbom, 1993: Kline 2005). Various model fit indices and their threshold values are as given below in Table 3.30.

 $Table \ 3.30 Measure \ of \ fitness \ indices \ for \ LOQ-23 \ items$

Measure Fit	Fit	Measure Standard
	Indices	
Incremental	0.925	The value over 0.90 is a good fit (Bollen, 1989; Hair et al.,
Index (IFI)		2006).
CMIN/DF	2.285	Tho and Trang (2008), based on the experience of
		many researchers, CMIN/df < 5 is acceptable.
Root Mean	0.065	In 1992, Browne& Cudeck; and in 1996, MacCallum et al.,
Square Error		recommend satisfactory fit values from .05 to .10. Same range
Approximation		was reported by (Tran et al., 2014; Fryer et al., 2014; Kashdan
(RMSEA)		et al., 2014; Sellbom et al., 2014; Kim & Shute, 2015; Fabio &
		Gori, 2016; Lloyd et al., 2017).
Comparative	0.924	The values above 0.90 gives indication of a good fit (Hair et
Index (CFI)		al., 2006; Hair et al., 2010; Kline, 2015; Schumacker& Lomax,
		2016).
Normed Fit	0.874	The value is acceptable if above 0.8 (Doll et.al.,1994;
Index(NFI)		& Baumgartner & Homburg, 1995)
Goodness of Fit	0.870	The value is acceptable if above 0.8 (Doll et al., 1994;
(GFI)		Baumgartner& Homburg, 1995). Reported by (Hair et al.,
		2006; Cheng, 2011; Kim et al., 2016; Wong & Carlbäck, 2018).
Adjusted	0.842	Despite the fact that the GFI and AGFI values did not reach
Goodness of Fit		0.9 (threshold value), they satisfied the criteria established by
Index (AGFI)		Baumgartner and Homburg (1995);Doll, Xia, & Torkzadeh
		(1994):the value is acceptable if it is greater than 0.8.
Tucker-Lewis	0.916	TLI ranging from 0.85 and over 0.9 is a good fit (Bentler
Index (TLI)		&Bonett, 1980; Sharma et al., 2005; Hair et al., 2006; Kline,
		2015)



(Comp1- means Conative and affective learning focus, Comp-2, means Learning Independence and Comp-3, means committed strategic efforts)

Fig. 3.5: Confirmatory factor analysis model of learning orientation

3.8.7 Reliability and construct validity of (LOQ-23)

From the below Table 3.31, it is clear that the values of Cronbach α for all the dimensions of learning orientation questionnaire, namely, "conative and affective learning focus", "learning independence or autonomy" and for "committed strategic planning and learning effort" and overall learning orientation were adequate (cut off value above 0.70 (Hair et.al.2010). The values for CR were found to be 0.93, 0.82, 0.84 and 0.95 respectively for "conative and affective learning focus", "learning independence or autonomy", "committed strategic planning and learning effort" and overall learning orientation questionnaire. The values for average variance extracted were found to be 0.47, 0.53, 0.58 and 0.50 respectively for "conative and affective learning focus; learning independence or autonomy and committed strategic planning and learning effort" and overall learning orientation questionnaire. The values for average variance extracted (AVE) for each dimension were found to be satisfactory (acceptable cut off for AVE is 0.50 or more: Hair et.al.2010). The AVE should be greater than 0.40 (Forner & Larcker, 1981; Farooq, 2016). The reliability coefficients of Cronbach α was found to be 0.924, 0.817, 0.832 and 0.943 for "conative and affective learning focus; learning independence or autonomy and committed strategic planning and learning effort" and overall learning orientation questionnaire respectively. The reliability co-efficient of all the constructs have acceptable values of 0.6 to 0.7 as recommended by Heir et al. (2010). So, the analysis of the scale reliability offers that the learning orientation questionnaire is internally consistent.

Table 3.31 Reliability of LOQ-23 items

Dimensions	CR	AVE	Cronbach α	Number of items
Conative and affective learning focus	0.93	0.47	0.924	15
Learning independence or autonomy	0.82	0.53	0.817	4
Committed strategic planning and learning Effort	0.84	0.58	0.832	4
Overall learning orientation	0.95	0.50	0.943	23

For LOQ and its dimensions, Cronbach's Alpha depicted good internal reliability (George & Mallery, 2003); AVE > 0.40 (Farooq, 2016); CR > 0.70 (Fornell & Larcker, 1981)

3.8.8 Final Draft of LOQ-23 Items

The final draft of the learning orientation questionnaire consisted of 23 items distributed in the three dimensions namely, "conative and affective learning focus; learning independence or autonomy, and committed strategic planning and learning effort".

Table 3.32Number of items in LOQ-23

S.NO	Dimensions	No. of Items	Range of Score
1	Conative and affective learning focus	15	15-105
2	Learning independence or autonomy	4	4-28
3	Committed strategic planning and learning effort	4	4-28
4	Grand total	23	23-161

3.8.9 Development of Norms

The respondents of this study were chosen from the state of Punjab keeping in mind the conditions of representativeness and adequacy for the projected population. The final scale of learning orientation questionnaire consists of 23-items. The range of scores of individual participants on present scale is 23 to 161.All the items of "committed strategic planning and learning efforts" were reverse coded. Using descriptive statistics, z-scores norms on 304 responses have been prepared. Z-score norms for 304 replies were calculated employing descriptive analysis. In Table 3.34 z-score has been presented and in Table 3.35 norms for interpreting the learning orientation scores.

Table 3.33Mean and standard deviation of LOQ

Construct	Mean	SD
Conative and affective learning focus	87.39	12.65
Learning independence or autonomy	21.62	5.76
Committed strategic planning and learning effort	21.71	5.56
Learning Orientation	130.72	21.81

Table 3.34 Z-Score for learning orientation questionnaire (LOQ-23)

Z-Score					Z-S	core		Z-S	core	Z-Score		
Le	earning (on	Conativ	e and Af		earning		rning ndence	Committed strategic planning and learning efforts		
Raw	Z-	Raw	Z-	Raw	Z-	Raw	Z-	R-	Z-	R-	Z-	
Score	Score	Score	Score	Score	Score	Score	Score	Score	Score	Score	Score	
161	1.39	121	-0.45	105	1.39	74	-1.06	28	1.11	28	1.13	
160	1.34	120	-0.49	104	1.31	73	-1.14	27	0.93	27	0.95	
159	1.3	119	-0.54	103	1.23	72	-1.22	26	0.76	26	0.77	
158	1.25	118	-0.58	102	1.15	71	-1.3	25	0.59	25	0.59	
157	1.2	117	-0.63	101	1.08	70	-1.37	24	0.41	24	0.41	
156	1.16	113	-0.81	100	1	69	-1.45	23	0.24	23	0.23	
155	1.11	112	-0.86	99	0.92	68	-1.53	22	0.07	22	0.05	
154	1.07	110	-0.95	98	0.84	67	-1.61	21	-0.11	21	-0.13	
153	1.02	109	-1	97	0.76	66	-1.69	20	-0.28	20	-0.31	
152	0.98	108	-1.04	96	0.68	65	-1.77	19	-0.46	19	-0.49	
151	0.93	107	-1.09	95	0.6	64	-1.85	18	-0.63	18	-0.67	
150	0.88	105	-1.18	94	0.52	63	-1.93	17	-0.8	17	-0.85	
149	0.84	104	-1.23	93	0.44	62	-2.01	16	-0.98	16	-1.03	
148	0.79	103	-1.27	92	0.36	61	-2.09	15	-1.15	15	-1.21	
147	0.75	102	-1.32	91	0.29	60	-2.17	14	-1.32	14	-1.39	
146	0.7	101	-1.36	90	0.21	59	-2.24	13	-1.5	13	-1.57	
145	0.65	100	-1.41	89	0.13	58	-2.32	12	-1.67	12	-1.75	
144	0.61	99	-1.45	88	0.05	57	-2.4	11	-1.84	11	-1.92	
143	0.56	98	-1.5	87	-0.03	56	-2.48	10	-2.02	10	-2.1	
142	0.52	97	-1.55	86	-0.11	55	-2.56	9	-2.19	9	-2.28	
141	0.47	96	-1.59	85	-0.19	54	-2.64	8	-2.36	5	-3	
140	0.43	94	-1.68	84	-0.27			6	-2.71	4	-3.18	
139	0.38	93	-1.73	82	-0.43							
138	0.33	92	-1.78	81	-0.51							
137	0.29	91	-1.82	79	-0.66							
136	0.24	90	-1.87	78	-0.74							
135	0.2	89	-1.91	77	-0.82							
134	0.15	88	-1.96	76	-0.9							
133	0.1	87	-2	75	-0.98							
132	0.06	86	-2.05									
131	0.01	85	-2.1									
130	-0.03	83	-2.19									
129	-0.08	82	-2.23									
128	-0.13	79	-2.37									
127	-0.17											
125	-0.26											
124	-0.31											
123	-0.35											
122	-0.4											

Table 3.35 Z-score norms for interpreting learning orientation and its dimensions

Range of Learning Orientation	LO(TOT)	CONAF	LEARN	CSPLE
Range of z-score	· ·	Range of z- score	Range of z-	Range of z- score
	Score		Score	
Very	+2.04&above	+1.99 &above	+1.84 &above	+1.92 & above
Characteristic				
Characteristic	+1.26 to+ 2.03	+1.24 to +1.98	+0.42 to 1.87	+1.15 to 1.91
Somewhat	+0.53 to +1.25	+0.51 to +1.23	+0.28 to +0.41	+0.32 to +1.14
Characteristic				
Neutral	-0.52 to +0.52	-0.50 to +0.50	-0.27 to +0.27	-0.31 to +0.31
Somewhat	-1.25 to -0.53	-1.21 to -0.49	-0.97 to -0.28	-1.21 to -0.30
uncharacteristic				
Uncharacteristic	-2.03 to -1.26	-1.98 to -1.20	-1.85 to -0.98	-1.91 to -1.20
Very	-2.04 and	-1.99 & below	-1.84 &below	-1.92 &below
Uncharacteristic	Below			

Note: "CONAF=conative & affective learning focus, LEARN=learning independence, CSPLE=committed strategic planning and learning efforts and LO=Learning orientation".

Table 3.36 Norms for interpreting learning orientations

Learning Orientation	Raw Score Range	Z score	Range
Hi Transforming	138-161	0.33 to 1.39	6.0-7.0
Transforming	127-137	-0.17 to 0.29	5.56-5.9
Hi Performing	115-126	-0.63 to -0.26	5.0-5.5
Performing	105-114	-1.18 to -0.81	4.56-4.9
Hi Conforming	91- 104	0.29 to -1.31	4.0-4.5
Conforming	82 -90.0	-0.43 to 0.21	3.56-3.9
Resistant	0-81	-0.51& below	0-3.5

3.9 Procedure of Data Collection

For the present study, the investigator himself personally collected the data. The Director (SCERT) Chandigarh, Mohali granted authorization to collect data from teachers teaching in secondary schools in Punjab that are affiliated/recognised by the PSEB, Mohali. The investigator went to the DEO (District Education Office) in each of the concerned districts, Pathankot, Ludhiana, and Jalandhar, on the orders of the Director (SCERT), and gathered the list of schools. After that, approval was obtained from the heads of the relevant institutions, and a time frame was established in advance for tool administration. The intent of the study was explained to the teachers, and any worries they had about filling out personal information and responding in the questionnaire and scales were dispelled. The respondents were motivated to give answers carefully and truthfully. Their cooperation was sought by assuring them, that their results would be kept strictly confidential. The requirement of the study was to take secondary school teachers from government schools and private schools. It took 6-7 months for data collection. Then on these selected teachers all the four tools, namely, teacher effectiveness scale, organisational climate scale; psychological capital questionnaire and learning orientation questionnaire were administered. The total data was collected from all the schools, that is, government and private from each selected district, belonging to each cultural region of Punjab namely, (Doaba, Majha and Malwa). The districts selected for data collection were Jalandhar, Ludhiana and Pathankot. The data for this study was obtained by the investigator himself. Hence the data of the concerned variables in the study was collected.

Statistical Techniques

Most research investigations generate a huge amount of raw data, which must be reduced to a manageable size so that it can be read simply and used for future analysis. In reality, descriptive statistics and inferential statistics are the two main types of statistics. Software tools such as "IBM SPSS-24 and IBM AMOS-24" were utilised to analyse the acquired data. The following statistical techniques were used to analyse the data:

(a) Descriptive statistics measures like M, SD and z-score were used to understand the nature of data. While percentage analysis was done on the scores of respondents to find out the "levels of effectiveness of teachers" i.e., "most effective",

- "highly effective", "above average effective", "moderately effective", "below average effective", "highly ineffective" and "most ineffective" and for psychological capital as low, medium and high and for perception of organisational climate as normal (favourable), high and low.
- (b) Inferential statistics, drawing conclusions about populations based upon observations of sample is the purpose of inferential analysis. Also, t-test was applied for studying the significance of differences between the means in "effectiveness of secondary school teachers, perceived organisational climate, psychological capital and learning orientation" with respect to "gender, locality and type of school" while oneway ANOVA was employed to study difference among the means in effectiveness of teachers with respect to teaching experience.
- (c) To analyse the relationship of effectiveness of teacher of secondary schools, perceived organisational climate, psychological capital and learning orientation, Karl Pearson's coefficient of correlation was calculated.
- (d) For studying role of perceived organisational climate, psychological capital and learning orientation on effectiveness of teacher of secondary schools multiple regression analysis was employed.

Graphical representation of data

(a) Graphical representation of data facilitates the understanding of a set of data. A well-drawn diagram makes it usually easier to read and interpret the data. So, graphical representation of data was done, wherever possible and required.

CHAPTER – IV

ANALYSIS AND INTERPRETATION

Previous chapter dealt with the methodology of research which included the sampling, process of data collection, selection and description of tools including the formation of norms while the current chapter, on the other hand, focuses on data analysis and interpretation.

According to Polit and Beck (2004), "data analysis is the systematic organisation and synthesis of research data and the testing of research hypothesis using that data." Data is meaningless if it is not analysed and interpreted. This chapter mainly focuses on the statistical analysis of data, description and interpretation of results in view of the objectives of the study. According to Koul (1997), "data analysis entails studying the organized material in order to discover inherent facts. As such, a researcher has to be alert, flexible and open-mind when analyzing data." Kumar (2002) emphasizes that "data analysis is the most skilled task of all the stages of the research. It is a task calling for the researcher's own judgment and skill." With the help of interpretation only, it is therefore possible for the investigator to explore the differences and relations which underlie in the findings. Both inferential and descriptive statistics were employed in the quantitative analysis. The following section shows how the data was evaluated and interpreted in the current study in the light of the study's hypotheses.

4.1 DATA CLEANING

In quantitative research despite using careful procedures in sampling, methodology, design, selection of instrument etc. the chances of errors is still a possibility. Before applying any parametric test data must be screened properly for the missing values and outliers (responses falling outside the range). According to Van den Broeck et al. (2005), "data cleaning is a process of quality assurance that facilitates a researcher with screening/monitoring, diagnosing and eliminating abnormalities of a data set". Due to its diverse benefits, data cleaning has attained substantial attention from researchers (Hadi, 1992). In order to obtain fair results of the investigation the data must be cleaned and errors be removed. In the present study, prior to analysis and result generation, data was rigorously analysed for missing

values using "IBM SPSS Version-24". In this study, 600 respondents from various government and private schools were given questionnaires. A total of 580 questionnaires were filled and returned by the respondents. Questionnaires were scanned again to examine the types of responses, and 40 questionnaires were discarded due to incomplete information provided by respondents, which could lead to major measurement errors in the results. Finally, the investigator had 540 questionnaires left and the data was entered into MS Excel 2007. Furthermore, the investigator used data cleaning procedure using SPSS-24 to find unengaged responses, outliers or missing values in data. As a result, the data revealed 40 cases of outliers or missing values in research variables. The final data of 500 respondents (83.33%) was examined for normality. In survey studies "a response rate of 30% is acceptable" (Sekaran and Bougie, 2010), (as cited in Aminu and Sharif, 2014). Hence the study response rate was found to be adequate for further analysis.

4.2 DESCRIPTIVE ANALYSIS

Over the last few decades, a number of normality tests have been accepted (D'Agostino, 1982; MacGillivray, 1982). The Shapiro-Wilk test has always been proved to be a more powerful test of non-normality (Shapiro, Wilk, and Chen, 1968). However, Monte Carlo experiments have shown that the separate tests (z-score skewness and z-score Kurtosis) have better power than the Shapiro-Wilk test for some type of distributions (Shapiro et.al., 1968). With small to medium-sized samples (e.g., n=300), conventional normality tests such as the Shapiro-Wilk test and the Kolmogorov-Smirnov test can also be used, but they can be inconsistent with large samples (Kim, 2013). Another method to determine normality is to employ the Sk and Ku of the distribution, which can be generally accurate in both small and large samples (Kim, 2013). Simon (2009) also argued that "there are no official rules about cut-off criteria to decide just how large skewness or kurtosis values must be to indicate non-normality". "The values for asymmetry and kurtosis between -2 and +2 are considered acceptable in order to prove normal univariate distribution (George and Mallery, 2010), (as cited in Mathyela, Karimi & Kinyua, 2018). If the skewness is between -2 and +2 and the kurtosis is between -7 and +7, the data is regarded as normal (Bryne, 2010). Additionally, following an argument of Kline (2011) that the "absolute value of Skewness greater than 3 and Kurtosis value greater than ten may indicate a problem and values above 20 may indicate a more serious problem". Conversely, Tabachnick and Fidell (2013) stated that "when the sample is more than 200, deviation from normality of skewness and kurtosis often do not lead to substantive difference in the analysis". Hence, it was suggested that the absolute value of Skewness and Kurtosis should not be greater than 3 and 10, (as cited in Aminu and Shariff, 2014). Clason and Dormody (1994) and Wu (2007) found it hard to see how normality in the Likert scale held (as cited in Leung 2011). Parametric tests, including linear regression analysis, are robust to violations of normality with large sample sizes (Vittinghoff, Shiboski, Glidden, & McCulloch, 2005, p. 33), (as cited in Burakgazi & Coskun, 2020).

4.2.1 Descriptive analysis of effectiveness of secondary school teachers

The obtained data has been quantified and analysed for the purpose of computing descriptive statistics for the variable effectiveness of secondary school teachers, and the findings are shown in table 4.2.1.

Table 4.2.1 Descriptive statistics of effectiveness of teachers

Dimonsions	N	M	Median	CD	CI-	SE	Z	V	CE(IZ)	Z
Dimensions	N	IVI	Median	SD	Sk	(Sk)	(Sk)	Ku	SE(Ku)	(Ku)
PPT	500	85.41	84	7.83	0.508	0.109	4.65	-0.324	0.218	-1.49
CM	500	108.79	107	10.26	0.481	0.109	4.41	-0.276	0.218	-1.27
KSM	500	54.71	54	5	-0.007	0.109	-0.07	-0.475	0.218	-2.18
TC	500	132.84	130	12.16	0.645	0.109	5.91	-0.226	0.218	-1.04
IR	500	86.31	85	8.54	0.479	0.109	4.38	-0.514	0.218	-2.36
TE TOT	500	468.05	458	40.77	0.622	0.109	5.7	-0.32	0.218	-1.47

Note: "N=number of respondents, M=mean, SD= standard deviation, Sk=skewness, Ku=kurtosis, SE(Sk)=standard error of skewness, Z(Sk)=Z(Skewness), SE(Ku)= standard error of kurtosis, Z(Ku)= Z(kurtosis), PPT=preparation and planning for teaching, CM= classroom management, KSM= knowledge of subject matter etc., TC= teacher characteristics, IR=interpersonal relations and ET=effectiveness of teachers".

The above table 4.2.1 shows the mean(M), median, SD, skewness(Sk), standard error of skewness SE(Sk), Z(skewness), kurtosis(Ku), standard error of kurtosis SE(Ku) and Z(kurtosis) for "preparation and planning for teaching", "classroom management", "knowledge of subject matter etc.", "teacher characteristics", "interpersonal relations" and "effectiveness of teachers"(total). Mean, median, SD, Sk, SE(Sk), Z(Sk), (Ku), SE(Ku) and Z(Ku) for "preparation"

and planning for teaching", "classroom management, "knowledge of subject matter etc", "teacher characteristics" and "interpersonal relations" and "effectiveness of teachers(total)" were found to be,85.41, 84.0, 7.83, 0.508, 0.109, 4.65, -.324, 0.218 and -1.49;108.79, 107.0, 10.26, 0.481, 0.109, 4.41, -0.276, 0.218, and -1.27; 54.71, 54.0, 5.00,-0.007, 0.109, -0.07, -0.475, 0.218 and -2.18; 132.84, 130.0, 12.16, 0.645, 0.109, 5.91, -0.226, 0.218, and -1.04; 86.31, 85.0, 8.54, 0.479, 0.109, 4.38, -0.514, 0.218 and -2.36;468.05, 458.0, 40.77, 0.622, 0.109, 5.70,-0.320, 0.218 and -1.47 respectively. The data was regarded as normal if the skewness and kurtosis z-scores were less than 1.96 (for 5% of type I error rate) (Field, 2009; Kim, 2013). In addition, it was advised to raise the z-score from 1.96 to 3.29 for greater sample sizes (Kim, 2013), as noted in Orcan (2020).

Though in most of the cases the Z (Sk) and Z (Ku) were less than 3.29 with some exception, the data is normal in nature for most of the dimensions and the total score. Since the sample size is large so the value of standard error is coming very low (Field, 2009) (as cited in Bhalla, 2019).

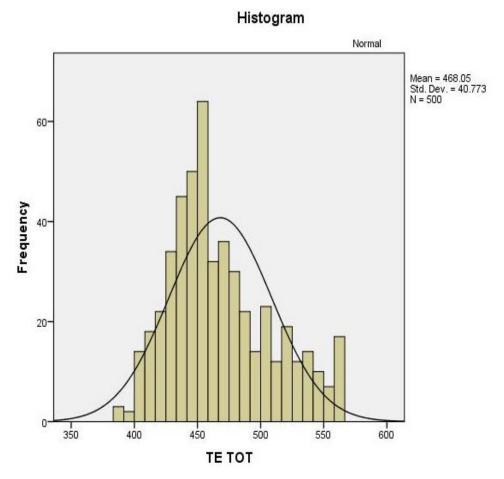


Figure 4.2.1.1: Histogram showing normal distribution of effectiveness of teachers

The above figure 4.2.1.1 depicts the histogram which shows a symmetric moderate tailed distribution. To confirm approximate normality of the data, normal probability plot (Q-Q plot) was also drawn.

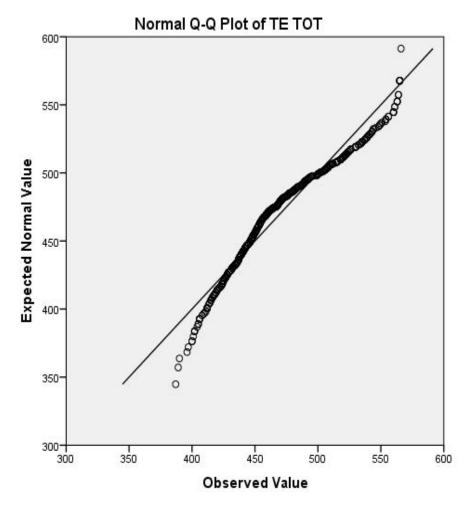


Figure 4.2.1.2: Normal probability plot (Q-Q Plot) of effectiveness of teachers

The normal probability plot was found to be approximately linear this indicates that the data was distributed normally hence confirms approximate normality.

4.2.2 Descriptive analysis of perceived organisational climate scale

The obtained data has been quantified and analyzed for the purpose of computing descriptive statistics for the variable perceived organisational climate, and the findings are shown in table 4.2.2

Table 4.2.2 Descriptive statistics of perceived organisational climate

Dimensions	N	M	Median	SD	Sk	SE(Sk)	Z(Sk)	Ku	SE(Ku)	Z(Ku)
RRIR	500	52.51	53	4.95	-0.628	0.109	-5.75	1.305	0.218	5.99
ORGP	500	46.45	47	4.47	-0.528	0.109	-4.83	1.543	0.218	7.08
CRSI	500	23.5	24	2.41	-0.421	0.109	-3.85	1.021	0.218	4.68
ALB	500	5.97	6	0.89	-0.456	0.109	-4.18	-0.638	0.218	-2.93
POC	500	122.46	123	10.56	-0.526	0.109	-4.81	2.046	0.218	9.39

Note: "N=number of respondents, M=mean, SD= standard deviation, Sk=skewness, Ku=kurtosis, SE(Sk) = standard error of skewness, Z(Sk)=Z(Skewness), SE(Ku)= standard error of kurtosis, Z(Ku)=Z(kurtosis), RRIR=results rewards and interpersonal relations, ORGP=organisational processes, CRSI= clarity of roles and sharing of information, ALB=altruistic behaviour &POC=perceived organisational climate".

The above table 4.2.2 shows the mean(M), median, SD, skewness(Sk), standard error of skewness SE(Sk), Z(skewness), kurtosis(Ku), standard error of kurtosis SE(Ku) and Z(kurtosis) for "results rewards and interpersonal relation", "organisational processes", "clarity of roles and sharing of information", "altruistic behavior", dimensions of perceived organisational climate and "perceived organisational climate (total)". Mean, median, SD, Sk, SE(Sk), Z(Sk), (Ku), SE(Ku) and Z(Ku) for "results rewards and interpersonal relation", "organisational processes", "clarity of roles and sharing of information", "altruistic behavior", dimensions of perceived organisational climate and "perceived organisational climate (total)" were found to be 52.51, 53.0, 4.95, -0.628, 0.109, -5.75, 1.305,0.218 and 5.99; 46.45, 47.0, 4.47, -0.528, 0.109, -4.83, 1.543, 0.218 and 7.08; 23.50, 24.0, 2.41,-0.421, 0.109, -3.85, 1.021, 0.218 and 4.68; 5.97, 6.0, 0.89, -0.456, 0.109, -4.18, -0.638, 0.218 and -2.93 and 122.46, 123.0, 10.56, -0.526, 0.109, -4.81, 2.046, 0.218 and 9.39 respectively.

Though in most of the cases the Z(Sk) and Z(Ku) are less than 3.29 with some exception, the data is normal in nature for most of the dimensions and the total score. Since the sample size is large so the value of standard error is coming very low (Field, 2009) (as cited in Bhalla, 2019).

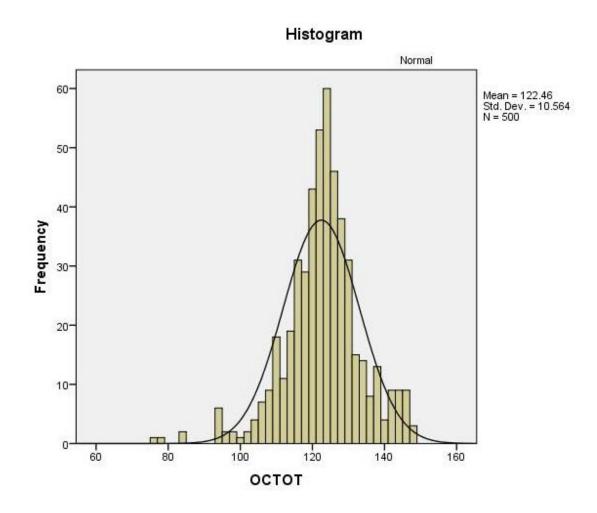


Figure 4.2.2.1: Histogram showing normal distribution of perceived organisational climate

The above figure 4.2.2.1 depicts the histogram which shows a symmetric moderate tailed distribution. To confirm approximate normality of the data normal probability plot (Q-Q plot) was also drawn.

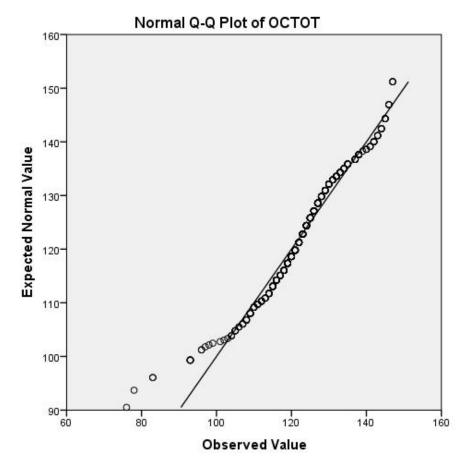


Figure 4.2.2.2: Normal probability plot (Q-Q Plot) of perceived organisational climate

The normal probability plot was found to be approximately linear this indicates that the data was distributed normally hence confirms approximate normality.

4.2.3 Descriptive analysis of psychological capital

The obtained data has been quantified and analysed for the purpose of computing descriptive statistics for the variable psychological capital and the findings are shown in table 4.2.3.

Table 4.2.3 Descriptive statistics of psychological capital

Dimensions	N	M	Median	SD	Sk	SE(Sk)	Z(Sk)	Ku	SE(Ku)	Z(Ku)
SELF	500	26.95	27	1.77	0.278	0.109	2.54	-0.334	0.218	-1.53
HOPE	500	27.5	28	1.49	-0.059	0.109	-0.54	-0.462	0.218	-2.12
RESI	500	23.37	23	1.32	-0.467	0.109	-4.28	0.092	0.218	0.42
OPTI	500	18.04	18	1.12	0.171	0.109	1.56	-0.676	0.218	-3.1
PC	500	95.87	96	3.4	-0.12	0.109	-1.1	-0.011	0.218	-0.05

Note: "N=number of respondents, M=mean, SD=standard deviation, Sk=skewness, Ku=kurtosis, SE(Sk)=standard error of skewness, Z(Sk)=Z(Skewness), SE(Ku)=standard error of kurtosis, Z(Ku)=Z(kurtosis), SELF=self-efficacy, HOPE=hope, RESI=resilience, OPTI=optimism and PC=psychological capital".

Above table 4.2.3 shows the mean(M), median, SD, skewness(Sk), standard error of skewness SE(Sk), Z(skewness), kurtosis(Ku), standard error of kurtosis SE(Ku) and Z(kurtosis) "self-efficacy", "hope", "resilience", "optimism" and "psychological capital (total)". Mean, median, SD, Sk, SE(Sk), Z(Sk), (Ku), SE(Ku) and Z(Ku) for "self-efficacy", "hope", "resilience", "optimism" and "psychological capital (total)" were found to be 26.95, 27.0, 1.77, 0.278, 0.109, 2.54, -0.334, 0.218 and -1.53; 27.50, 28.0, 1.49, -0.059, 0.109, -0.54, -0.462,0.218 and -2.12; 23.37, 23.0, 1.32, -0.467, 0.109, -4.28, 0.092, 0.218 and 0.42; 18.04, 18.0, 1.12, 0.171, 0.109, 1.56, -0.676, 0.218 and -3.10; 95.87, 96.0, 3.40, -0.120, 0.109, -1.10, -0.011, 0.218 and -0.05 respectively. Though in most of the cases the Z (Sk) and Z(Ku) are less than 3.29 with some exception, the data is normal in nature for most of the dimensions and the total score. Since the sample size is large so the value of standard error is coming very low, Field (2009) (as cited in Bhalla, 2019).

Histogram

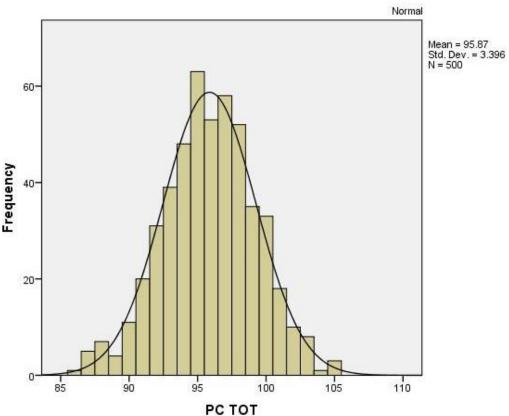


Figure 4.2.3.1: Histogram showing normal distribution of psychological capital

The above figure 4.2.3.1 depicts the histogram which shows a symmetric moderate tailed distribution. To confirm approximate normality of the data normal probability plot (Q-Q plot) was also drawn.

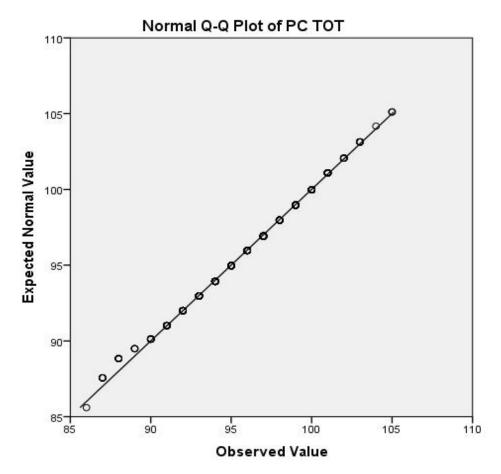


Figure 4.2.3.2: Normal probability plot (Q-Q Plot) of psychological capital

The normal probability plot was found to be approximately linear this indicates that the data was distributed normally hence confirms approximate normality.

4.2.4 Descriptive analysis of learning orientation

The obtained data has been quantified and analysed for the purpose of computing descriptive statistics for the variable learning orientation and the findings are shown in table 4.2.4.

Table 4.2.4 Descriptive statistics of learning orientation

Dimensions	N	M	Median	SD	Sk	SE(Sk)	Z (Sk)	Ku	SE(Ku)	Z(Ku)
CONAF	500	84.20	85	9.85	-0.580	0.109	-5.31	0.424	0.218	1.94
LEARN	500	22.14	23	4.63	-1.385	0.109	-12.68	1.736	0.218	7.96
CSPLE	500	24.73	25	2.71	-1.048	0.109	-9.59	0.743	0.218	3.41
LO(TOT)	500	131.07	133	15.47	-1.031	0.109	-9.44	0.847	0.218	3.89

Note: "N=number of respondents, M=mean, SD=standard deviation, Sk=skewness, Ku=kurtosis, SE(Sk)=standard error of skewness, Z(Sk)=Z(Skewness), SE(Ku)=standard error of kurtosis, Z(Ku)=Z(kurtosis), CONAF=conative and affective learning focus, LEARN=learning independence, CSPLE=committed strategic planning and learning efforts, LO=learning orientation".

The above table 4.2.4 shows the mean(M), median, SD, skewness(Sk), standard error of skewness SE(Sk), Z(skewness), kurtosis(Ku), standard error of kurtosis SE(Ku) and Z(kurtosis) for "conative and affective learning focus", "learning independence or autonomy", "committed strategic planning and learning effort" and "learning orientation (total)". Mean, median, SD, Sk, SE(Sk), Z(Sk), (Ku), SE(Ku) and Z(Ku) for "conative and affective learning focus", "learning independence or autonomy", "committed strategic planning and learning effort" and "learning orientation (total)" were found to be 84.20, 85.0, 9.85, -0.580, 0.109, -5.31, 0.42, 0.218 and 1.94; 22.14, 23.0, 4.63, -1.385, 0.109, -12.68, 1.736, 0.218 and 7.96; 24.73, 25.00, 2.71, -1.048, 0.109, -9.59, 0.743, 0.218 and 3.41; 131.07, 133.00, 15.47, -1.031, 0.109, -9.44, 0.847, 0.218 and 3.89 respectively.

Though in most of the cases the Z(Sk) and Z(Ku) are less than 3.29 with some exception, the data is normal in nature for most of the dimensions and the total score. Since the sample size is large so the value of standard error is coming very low (Field, 2009) (as cited in Bhalla, 2019).

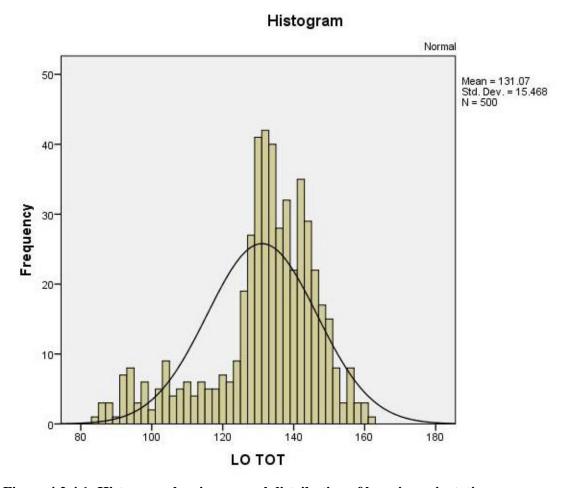


Figure 4.2.4.1: Histogram showing normal distribution of learning orientation

The above figure 4.2.4.1 depicts the histogram which shows a symmetric moderate tailed distribution. To confirm approximate normality of the data normal probability plot (Q-Q plot) was also drawn.

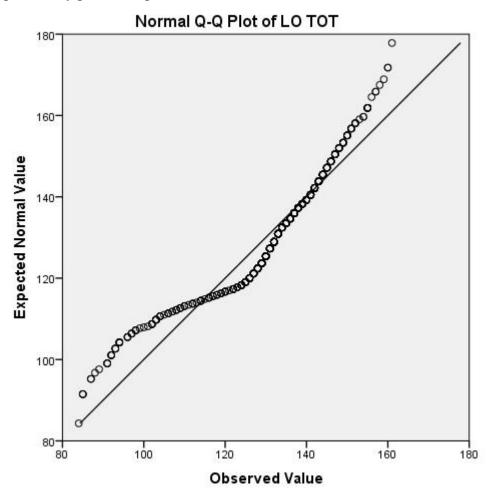


Figure 4.2.4.2: Normal probability plot (Q-Q Plot) of learning orientation

The normal probability plot was found to be approximately linear this indicates that the data was distributed normally hence confirms approximate normality.

Further on the basis of mean score of overall learning orientation it can be indicated that teachers had transforming learning orientation along the learning orientation continuum.

4.3 Levels of effectiveness of secondary school teachers and psychological capital

4.3.1 Percentage wise levels of effectiveness of secondary school teachers

The first objective was, "to study the levels of effectiveness of secondary school teachers and psychological capital". The analysis of above objective comprises

of levels of effectiveness of secondary school teachers in terms of their total strength at each level as well as in terms of percentage, along with the graphical representation of the same. Table 4.3.1 presents the percentage-wise analysis of various levels of effectiveness of teachers.

Table 4.3.1 Percentage-wise levels of effectiveness of teachers

Levels of effectiveness of teachers	N	%(percentage)
Most effective teachers	24	4.8
Highly effective teachers	49	9.8
Above average effective teachers	66	13.2
Moderately effective teacher	188	37.6
Below average effective teacher	135	27
Highly ineffective teacher	38	7.6
Most ineffective teacher	0	0
Teachers (total)	500	100%

Table 4.3.1 shows the levels of effectiveness of secondary school teachers. It is evident from the table 4.3.1, that 4.8% (n=24) of teachers were at "most effective level". On the other hand, about 9.8% (n=49) of teachers were found to be at "highly effective level". Further, 13.2% (n=66) of teachers were found to be at "above average effective level"; while 37.6% (n=188) teachers were found to be at "moderately effective teachers' level". Further, 27% (n=135) of teachers were found to be at "below average effective teachers' level"; and 7.6% (n=38) of teachers were found to be at "highly ineffective teachers level". The above table also revealed that none of teachers were found to be at most ineffective teacher. Therefore, it may be observed that majority of teachers were at "moderately effective teachers' level", followed by "below average", "above average", "highly effective", "highly ineffective", "most effective" and "most ineffective teacher level". Similar levels of

effectiveness of teachers were also revealed in the study of (Cour, 2021). The figure 4.3.1 indicates the different levels of effectiveness of teachers.

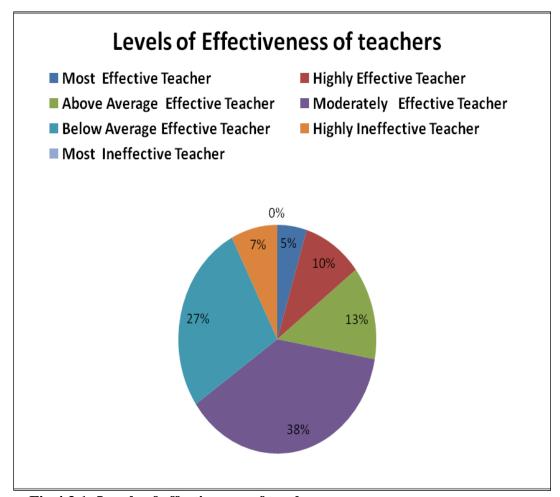


Fig.4.3.1: Levels of effectiveness of teachers

4.3.2 Levels of various dimensions of effectiveness of secondary school teachers

This section relates to levels of "preparation and planning for teaching, classroom management, knowledge of subject-matter etc., teacher characteristics and interpersonal relations" dimensions. An analysis of levels of various dimensions of effectiveness of secondary school teachers has been shown in table 4.3.2.

Table 4.3.2 Percentage-wise levels of various dimensions of effectiveness of teachers

Levels of effectiveness of	Dimensions of effectiveness of teachers										
teacher	PP'	PPT		СМ		KSM		TC		IR	
·	N	%	N	%	N	%	N	%	N	%	
Most Effective Teachers	17	3.4	21	4.2	7	1.4	25	5	16	3.2	
Highly Effective Teachers	49	9.8	44	8.8	64	12.8	43	8.6	51	10.2	
Above Average Effective Teachers	66	13.2	82	16.4	92	18.4	75	15	78	15.6	
Moderately Effective Teachers	190	38	186	37.2	151	30.2	190	38	197	39.4	
Below Average Effective Teachers	141	28.2	127	25.4	132	26.4	129	25.8	121	24.2	
Highly Ineffective Teachers	34	6.8	37	7.4	46	9.2	38	7.6	36	7.2	
Most Ineffective Teachers	3	0.6	3	0.6	8	1.6	0	0	1	0.2	
Total	500	100 %	500	100 %	500	100 %	500	100 %	500	100 %	

Note: "PPT=preparation and planning for teaching, CM=classroom management, KSM=knowledge of subject matter etc., TC=teacher characteristics, and IR=interpersonal relations."

The above table 4.3.2 shows the levels of "planning and preparation for teaching" dimension and revealed that 3.4% (n=17) of teachers were at "most effective level". On the other hand, about 9.8% (n=49) of teachers were found to be at "highly effective level". Further, 13.2% (n=66) of teachers were found to be at "above average level"; while 38% (n=190) teachers were found to be at "moderately effective teachers' level". Further, 28.2 % (n=141) of teachers were found to be at "below average effective teachers' level"; and 6.8% (n=34) of teachers were found to be at "highly ineffective teachers' level". The above table also revealed that only 0.6% (n=03) of teachers were found to be at "most ineffective teacher". Therefore, it may be concluded that majority of teachers were at "moderately effective teachers' level", followed by "below average", "above average", "highly effective", "highly ineffective", "most effective" and "most ineffective" teacher level for "preparation and planning for teaching" dimension. The following figure 4.3.2.1 shows the levels of "preparation and planning for teaching" dimension.

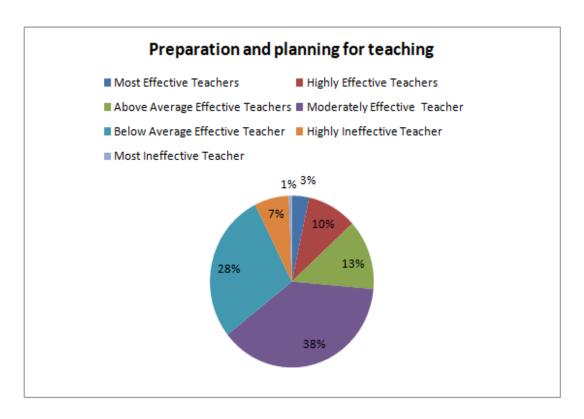


Figure 4.3.2.1: Levels of preparation and planning for teaching dimension

The above table 4.3.2 shows the levels of "classroom management" dimension and revealed, that 4.2% (n=21) of teachers were at "most effective level". On the other hand, about 8.8% (n=44) of teachers were found to be at "highly effective level". Further, 16.4% (n=82) of teachers were found to be at "above average level"; while 37.2% (n=186) teachers were found to be at "moderately effective teachers' level". Further, 25.4% (n=127) of teachers were found to be at "below average effective teachers' level" and 7.4% (n=37) of teachers were found to be at "highly ineffective teachers' level". The above table also revealed that only 0.6% (n=03) of teachers were found to be at "most ineffective teacher". Therefore, it may be construed that majority of teachers were at "moderately effective teachers' level", followed by "below average", "above average", "highly effective", "highly ineffective", "most effective" and "most ineffective teacher level" for "classroom management" dimension of effectiveness of teachers. The following figure 4.3.2.2 shows the levels of "classroom management" dimension.

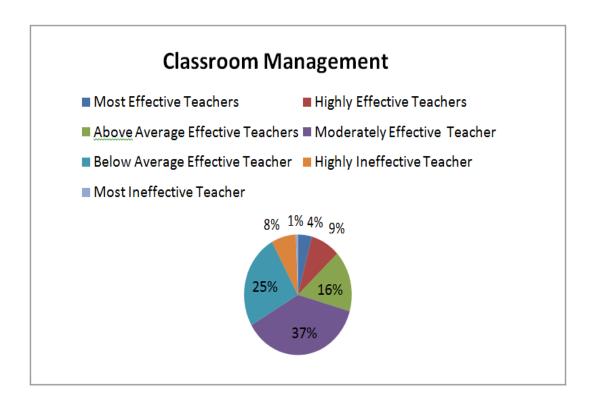


Fig. 4.3.2.2: Levels of classroom management dimension

The above table 4.3.2 shows the levels of "knowledge of subject matters etc" dimension and revealed that 1.4% (n=7) of teachers were at "most effective level". On the other hand, about 12.8% (n=64) of teachers were found to be at "highly effective level". Further, 18.4% (n=92) of teachers were found to be at "above average level"; while 30.2% (n=151) teachers were found to be at "moderately effective teachers' level". Further, 26.4% (n=132) of teachers were found to be at "below average effective teachers' level" and 9.2% (n=46) of teachers were found to be at "highly ineffective teachers' level". The above table also revealed that only 1.6% (n=08) of teachers were found to be at "most ineffective teacher". Therefore, it may be deduced that majority of teachers were at "moderately effective teachers' level", followed by "below average", "above average", "highly effective", "highly ineffective", "most effective" and "most ineffective teacher level" for "knowledge of subject matter etc." dimension. The following figure 4.3.2.3 shows the levels of "knowledge of subject matters etc." dimension.

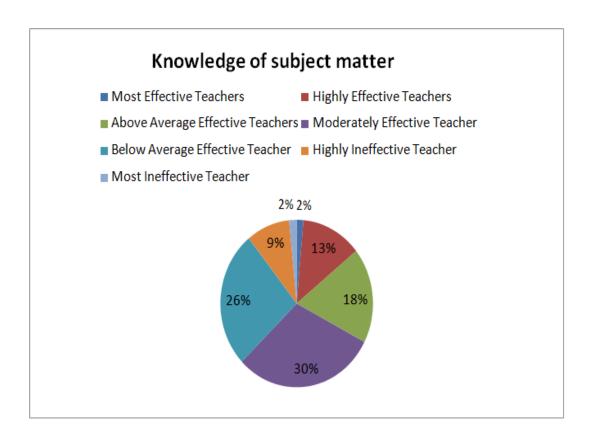


Figure 4.3.2.3: Levels of knowledge of subject matters etc. dimension

Further the above table 4.3.2 shows the levels of "teacher characteristics" dimension and revealed that 5% (n=25) of teachers were at "most effective level". On the other hand, about 8.6% (n=43) of teachers were found to be at "highly effective level". Further, 15% (n=75) of teachers were found to be at "above average level"; while 38% (n=190) teachers were found to be at "moderately effective teachers' level". Further, 25.8% (n=129) of teachers were found to be at "below average effective teachers' level" and 7.6% (n=38) of teachers were found to be at "highly ineffective teachers' level". The above table also revealed that none of teachers were found to be at "most ineffective teacher". Therefore, it may be inferred that majority of teachers were at "moderately effective teachers' level", followed by "below average", "above average", "highly effective", "highly ineffective", "most effective" and "most ineffective teacher level" for "teacher characteristics" dimension of effectiveness of teachers. The following figure 4.3.2.4 shows the levels of "teacher characteristics" dimension.

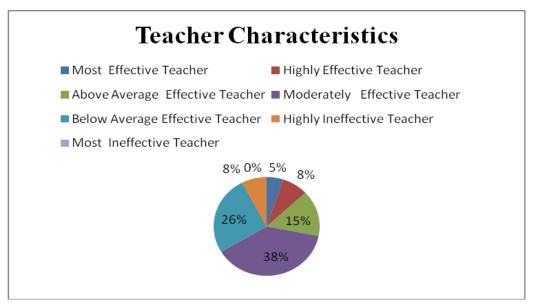


Figure 4.3.2.4: Levels of teacher characteristics dimension

Additionally the above table 4.3.2 shows the levels of "interpersonal relations" dimension and revealed that 3.2% (n=16) of teachers were at "most effective level". On the other hand, about 10.2% (n=51) of teachers were found to be at "highly effective level". Further, 15.6% (n=78) of teachers were found to be at "above average level"; while 39.4% (n=197) teachers were found to be at "moderately effective teachers' level". Further, 24.2% (n=121) of teachers were found to be at "below average effective teachers' level" and 7.2% (n=36) of teachers were found to be at "highly ineffective teachers' level". The above table also revealed that only 0.2% (n=01) of teachers were found to be at "most ineffective teacher". Therefore, it may be concluded that majority of teachers were at "moderately effective teachers' level", followed by "below average", "above average", "highly effective", "highly ineffective", "most effective" and "most ineffective teacher level" for "interpersonal relations" dimension of effectiveness of teachers. The following figure 4.3.2.5 shows the levels of "interpersonal relations" dimensions.

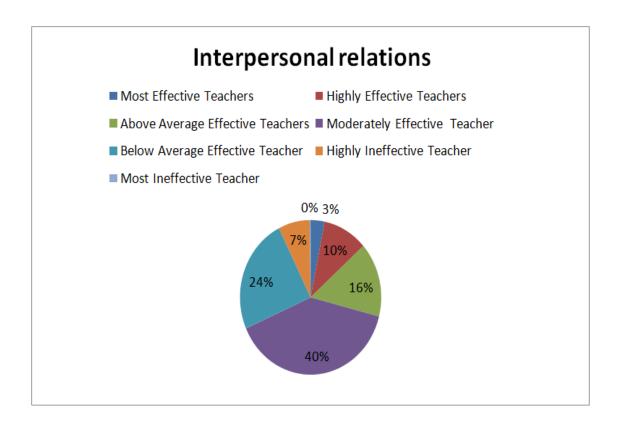


Figure 4.3.2.5: Levels of inter-personal relations dimension

Discussion of Results

The percentage analysis suggests that majority of teachers were at "moderately effective teachers' level", followed by "below average", "above average", "highly effective", "highly ineffective", "most effective" and "most ineffective teacher level" for "preparation and planning for teaching, classroom management, knowledge of subject-matter etc, teacher characteristics and interpersonal relations" dimensions.

Kagathala (2002) studied "teacher effectiveness of secondary school teachers in Gujarat and found their level of teacher effectiveness to be at average level". Cour, (2021) also studied the "levels of effectiveness secondary school teachers of Punjab" and found that majority of teachers were at "moderate level".

4.3.3 Levels of psychological capital of secondary school teachers

The present section deals with the analysis related to "levels of psychological capital" of secondary school teachers comprising of total number and percentage of teachers, at each "level of psychological capital" along with the graphical representation of the same. Table 4.3.3 presents the percentage-wise analysis of various "levels of psychological capital" of secondary school teachers.

Table4.3.3 Percentage wise levels of psychological capital

Psychological Capita	al J	N	% percentage		
	Medium	118	23.6		
	High	382	76.4		
	Total	500	100		

Table 4.3.3 shows the percentage-wise analysis of various "levels of psychological capital of secondary school teachers". It is obvious from the above table that 76.4% (n=382) of teachers had "high level" and 23.6% (n=118) of teachers were found to be at "medium level of psychological capital". Therefore, it may be deduced that majority of teachers were at "high level" followed by "medium level of psychological capital". The following figure 4.3.3shows the levels of psychological capital.

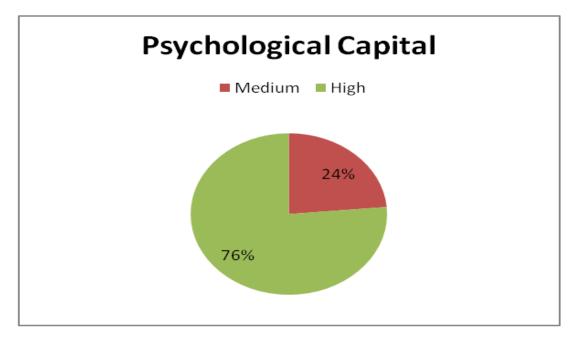


Figure 4.3.3: Levels of psychological capital of teachers

4.3.4 Levels of various dimensions of psychological capital of teachers

This section relates to levels of various dimensions, namely "self-efficacy, hope, resilience, and optimism". An analysis of levels of various dimensions of psychological capital of teachers has been given in table 4.3.4

Table 4.3.4 Percentage-wise levels of various dimensions of psychological capital of secondary school teachers

Levels of Psyc	chological Capital	N	% percentage
SELF	Medium	200	40.0
	High	300	60.0
	Medium	139	27.8
HOPE	High	361	72.2
	Medium	103	20.6
RESI	High	397	79.4
	Medium	174	34.8
OPTI	High	326	65.2

Note: "SELF=self-efficacy, HOPE=hope, RESI=resilience OPTI=optimism."

The above table 4.3.4 shows the "levels of various dimensions, namely self-efficacy, hope, resilience and optimism." The above table revealed that majority of teachers i.e.,60% (n=300) teachers were at "high level", and 40%(n=200) are at "medium level" of "self-efficacy" dimension. Therefore, it may be concluded that majority of teachers exhibited "high level" of "self-efficacy", followed by "medium level". The following figure 4.3.3.1 shows the "levels of self-efficacy" dimension.

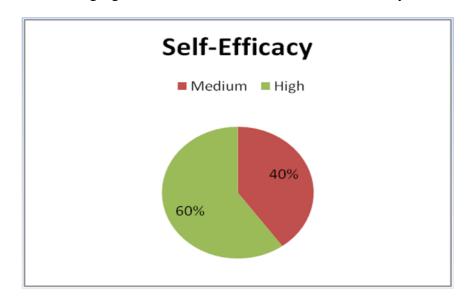


Fig. 4.3.4.1: Levels of self-efficacy dimension

The above table 4.3.4 revealed that 72.2% (n=361) teachers were at "high level", 27.8% (n=139) teachers were at "medium level" of "hope" dimension. Therefore, it may be deduced that majority of teachers exhibited "high level" for "hope", followed by "medium level". The figure 4.3.3.2 shows the "levels of hope" dimension.

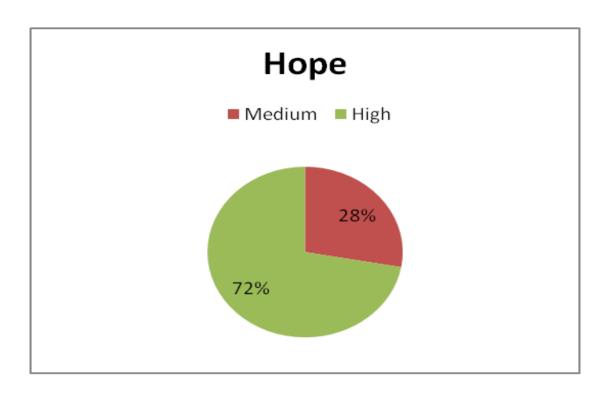


Fig. 4.3.4.2: Levels of hope dimension

The above table 4.3.4 showed that 79.4% (n=397) teachers were at "high level", 20.6% (n=103) of teachers are at "medium level" of "resilience" dimension. Therefore, it may be inferred that majority of teachers exhibited "high level" of "resilience", followed by "medium level". The figure 4.3.4.3 shows the levels of "resilience" dimension.

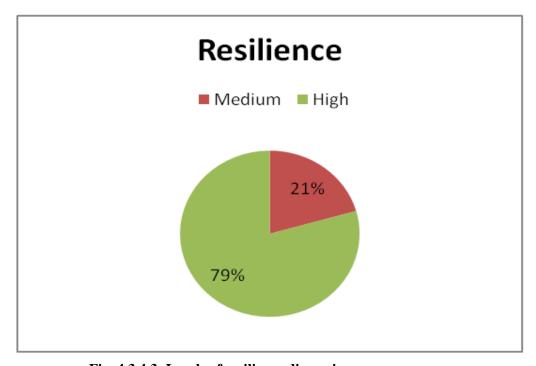


Fig. 4.3.4.3: Levels of resilience dimension

The above table 4.3.4 displayed that 65.2% (n=326) teachers were at "high level", 34.8% (n=174) teachers at "medium level" of "optimism" dimension. Therefore, it may be construed that majority of teachers exhibited "high level" of "optimism", followed by "medium level". The figure 4.3.4.4 shows the levels of "optimism," dimension.

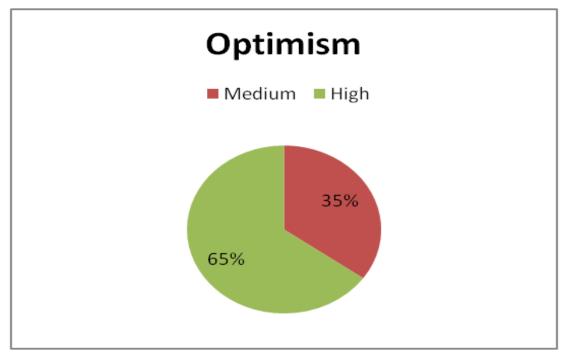


Fig 4.3.4.4:Levels of optimism dimension

Discussion of Results

The percentage analysis suggests that "majority of teachers were at high level", followed by "medium level" for various dimensions namely, "self- efficacy, hope, resilience, optimism" and "psychological capital (total)". Yong, Hutagalung and Saad, (2019) found the "moderate level" for "hope" and "resilience" dimensions of "psychological capital" and "high level" for "self-efficacy" and "optimism" dimensions of "psychological capital" in university lecturers by the descriptive analysis.

As cited in Ustun & Bostanci, 2021, the findings of Anık and Tosten (2019), Arslantas and Sahin (2017) complement our findings, indicating a "high level of psychological capital" among teachers in their study. "High level for psychological capital" was also reported in Chinese university lecturers by Yong, Hutagalung and Saad, (2019).

4.4 Perception of teachers towards organisational climate of secondary schools

The second objective of the study was, "To study the perception of teachers towards organisational climate of secondary schools."

4.4.1 Perception of teachers towards organisational climate (overall) of secondary schools

The present section deals with the analysis related to perception of teachers towards organisational climate of secondary schools. The analysis comprises of perception of total number and total percentage of secondary school teachers towards organisational climate along with the graphical representation of the same. Table 4.4.1 presents the percentage- wise analysis of perception of teachers towards organisational climate of secondary schools.

Table 4.4.1 Percentage wise perception of teachers towards organisational climate (overall) of secondary schools

Perception of teachers towards organisational climate	N	% age
Less favourable	102	20.4
Medium (Favourable)/Normal	302	60.4
Highly favourable	96	19.2
Total	500	100

Table 4.4.1 shows percentage-wise analysis of perception of teachers towards perceived organisational climate (total) of secondary schools. It is evident from the above table, that 20.4% (n=102) of teachers had less favourable perception towards organisational climate. On the other hand, about 60.4% (n=302) of teachers had medium (favourable)/normal perception of organisational climate. Further, 19.2% (n=96) of teachers had highly favourable perception of organisational climate. Thus it can be deduced that majority of teachers perceived the organisational climate as medium (favourable), followed by less favourable and highly favourable. Chaithra et., al. (2018) investigated the organisational climate and obstacles encountered by teachers in rural schools and revealed that majority of respondents, 76.67 percent, viewed that the organisational climate was "favourable", followed by "more favourable" (22.67 percent) and "less favourable" (0.66 percent). The following figure 4.4.1 shows the perception of teachers towards organisational climate.

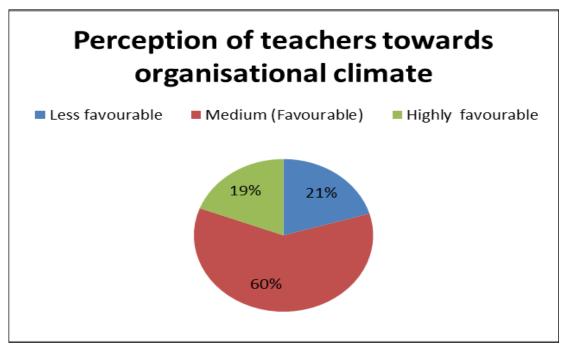


Figure 4.4.1: Perception of teachers towards organisational climate

4.4.2 Perception of teachers towards various dimensions of organisational climate of secondary schools

This section relates to perception of teachers towards various dimensions, namely, "results rewards and interpersonal relation, organisational processes, clarity of roles and sharing of information, altruistic behavior." An analysis of levels of various dimensions of organisational climate has been given in table 4.4.2

Table 4.4.2 Percentage wise perception of teachers towards various dimensions of organisational climate

Perception of Teachers	RRIR		ORGP		CRSI		ALB	
	N	%age	N	%age	N	%age	N	%age
Less favourable	104	20.8	108	21.6	150	30	145	29
Medium (Favourable)	284	56.8	250	50	205	41	195	39
Highly favourable	112	22.4	142	28.4	145	29	160	32
Total	500	100	500	100	500	100	500	100

Note; "RRIR=results rewards and interpersonal relations, ORGP=organisational processes, CRSI=clarity of roles and sharing of information and ALB=altruistic behaviour."

The above table 4.4.2 shows the levels of perception of secondary school teachers for "results rewards and interpersonal relation, organisational processes, clarity of roles and sharing of information, altruistic behavior" dimensions. The above table revealed that 20.8% (n=104) of teachers perceived "results rewards and interpersonal relation" dimension as less favourable, while 56.8 % (n=284) perceived as medium (favourable); and 22.4% (n=112) teachers perceived as highly favourable. Therefore, it may be determined that "majority of teachers had medium (favourable) perception, followed by highly favourable" and less favourable", for "results rewards and interpersonal relation." The following figure 4.4.2.1shows the perception of teachers towards "results rewards and interpersonal relation" dimension.

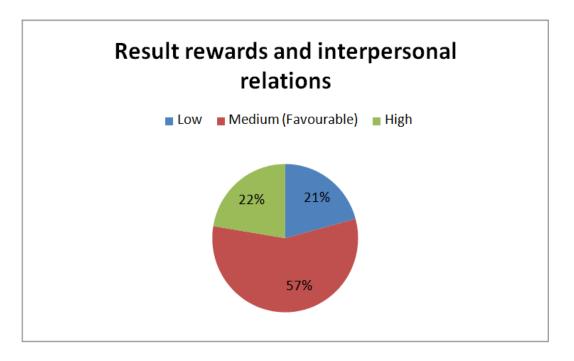


Fig. 4.4.2.1:Perception for results rewards and interpersonal relations dimension

The above table 4.4.2 revealed that 21.6% (n=108) of teachers perceived "organisational processes" dimension as "less favourable", while 50% (n=250) perceived as "medium" (favourable); and 28.4% (n=142) teachers perceived as highly favourable. Therefore, it may be decided that "majority of teachers had medium (favourable) perception", followed by "highly favourable" and "less favourable" for "organisational processes" dimension. The following figure 4.4.2.2 shows the perception of teachers towards "organisational processes" dimension.

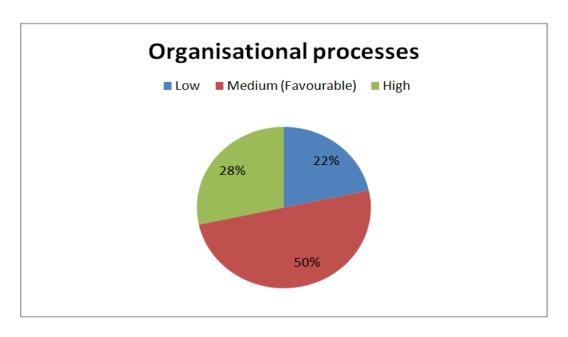


Fig. 4.4.2.2: Perception for organisational processes dimension

The above table 4.4.2 revealed that 30% (n=150) of teachers perceived "clarity of roles and sharing of information" dimension as less favourable, while 41% (n=205) perceived as medium (favourable); and 29% (n=145) teachers perceived as highly favourable. Therefore, it may be observed that "majority of teachers had medium (favourable) perception, followed by less favourable and highly favourable", for "clarity of roles and sharing of information" dimension. The following figure 4.4.2.3 shows the perception of teachers towards perceived "clarity of roles and sharing of information" dimension.

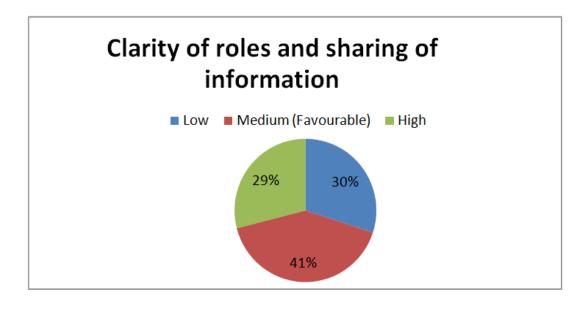


Fig. 4.4.2.3: Perception for clarity of roles and sharing of information dimension

The above table 4.4.2 revealed that 29% (n=145) of teachers perceived "altruistic behaviour", dimension as less favourable, while 39% (n=195) perceived as medium (favourable); and 32% (n=160) teachers perceived as highly favourable. Therefore, it may be concluded that majority of teachers had medium (favourable) perception, followed by highly favourable and less favourable, for "altruistic behaviour" dimension. The following figure 4.4.2.4shows the perception of teachers towards "altruistic behaviour", dimension.

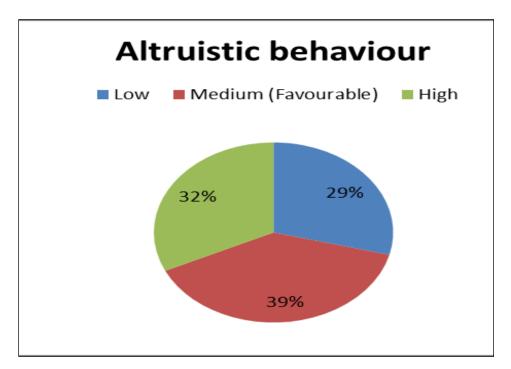


Fig. 4.4.2.4: Perception for altruistic behaviour dimension

Discussion of results: The percentage wise analysis suggests that "majority of teachers" had medium(favourable) perception for "results rewards and interpersonal relations, organisational processes, clarity of roles and sharing of information, altruistic behaviour" and perceived organisational climate (total) followed by "highly favourable" and "less favourable"; except for "clarity of roles and sharing of information" dimension and perceived organisational climate (total) which was followed "less favourable" and "highly favourable" perception.

4.5 COMPARATIVE ANALYSIS

The third objective was "to find the difference in effectiveness of secondary school teachers, perceived organisational climate, psychological capital and learning orientation with respect to gender, locality, teaching experience and type of school."

To examine the differences in mean scores of "effectiveness of secondary school teachers, perceived organisational climate, psychological capital and learning orientation" the variables were analysed and the results have been shown on basis of the gender, locality, teaching experience and type of school.

Comparison of effectiveness of secondary school teachers with respect to gender, locality, teaching experience and type of school

Hypothesis1 (a): "There exists no significant difference in effectiveness of secondary school teachers with respect to gender".

This hypothesis was examined by using independent sample t-test and the results have been shown in Table (4.5.1), on the basis of gender.

4.5.1 Results relating to differences in effectiveness of secondary school teachers with respect to gender

Table 4.5.1 Mean scores of effectiveness of teachers with respect to gender

Effectiveness of						
Teachers	G	N	M	SD	t-value	
Ţ.						
РРТ	Male	149	83.31	6.37	3.959**	
	Female	351	86.30	8.22	3.757	
СМ	Male	149	106.37	8.22	3.470**	
	Female	351	109.81	10.86	3.170	
	Male	149	53.24	4.45		
KSM	Female	351	55.33	5.09	4.358**	
TC	Male	149	128.54	9.83	5.279**	
	Female	351	134.66	12.60	3.217	
IR .	Male	149	83.60	6.81	4.719**	
	Female	351	87.46	8.94	1.717	
ET	Male	149	455.07	32.13	4.738**	
	Female	351	473.56	42.79	7.730	

Note: "N=number of respondents, G=gender, M=mean, SD= standard deviation, PPT=preparation and planning for teaching, CM=classroom management, KSM=knowledge of subject matter etc., TC=teacher characteristic, IR=interpersonal relations and ET=effectiveness of teachers, ** significant at (0.01)".

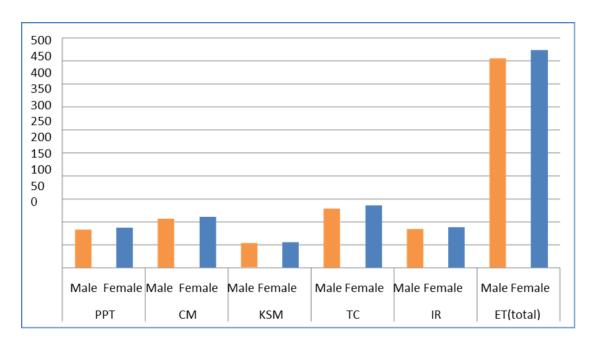


Figure 4.5.1: Mean scores of effectiveness of teachers with respect to gender

Note: "PPT=preparation and planning for teaching, CM=classroom management, KSM=knowledge of subject matter, TC=teacher characteristics, IR=interpersonal relations and ET=effectiveness of teachers".

Table 4.5.1displays the mean scores and SD of different dimensions of effectiveness of secondary school teachers, namely "preparation and planning for teaching, classroom management, knowledge of subject-matter etc., teacher characteristics, interpersonal relations and effectiveness of teachers (total)" of male and female secondary school teachers. The mean scores of "preparation and planning for teaching, classroom management, knowledge of subject-matter etc., teacher characteristics, interpersonal relations dimensions and effectiveness of teachers (total)" was found to be 83.31, 106.37, 53.24, 128.54, 83.60 and 455.07 for male teachers; and 86.30, 109.81, 55.33, 134.66,87.46 and 473.56 for female teachers respectively. Also figure 4.5.1.shows the mean scores of "effectiveness of teachers" with respect to gender.

The SD of "preparation and planning for teaching, classroom management, knowledge of subject-matter etc., teacher characteristics, interpersonal relations dimensions and effectiveness of teachers (total)" was found to be 6.37, 8.22, 4.45, 9.83, 6.81 and 32.13 for male teachers; and 8.22, 10.86, 5.09, 12.60, 8.94 and 42.79 for female teachers respectively.

Further, the t-values calculated of "preparation and planning for teaching, classroom management, knowledge of subject-matter etc., teacher characteristics, interpersonal relations dimensions and effectiveness of teachers (total)" was found to be 3.959, 3.470, 4.358, 5.279, 4.719 and 4.738 respectively. The t-values found were statistically significant at 0.01 level.

Discussion of Results

The significant t-values shows that there exist significant differences in "preparation and planning for teaching, classroom management, knowledge of subject-matter etc., teacher characteristics, and interpersonal relations dimensions and effectiveness of teachers (total)" for male and female teachers. The observation of mean scores of "preparation and planning for teaching, classroom management, knowledge of subject- matter etc., teacher characteristics, interpersonal relations dimensions and effectiveness of teachers (total)" of male and female teachers showed that mean scores of female teachers was greater than that of the male teachers.

As a result, it may be deduced, that female teachers were more effective in "preparation and planning for teaching, that is preparing, planning and organizing for teaching as per course objectives; in classroom management, that is, successfully communicate, motivate students and maintain the discipline in classroom; in knowledge of subject-matter etc., that is, in acquiring, retaining, interpreting and making use of content and its presentations; in teacher characteristics, that is, personality make-up and its behavioural manifestations; and interpersonal relations, that is, maintain cordial relations with colleagues, pupils, their parents etc." and overall effectiveness of teachers in comparison to their male counterparts.

Thus, from results, it could be deduced that hypothesis 1(a) which states that "There exists no significant difference in effectiveness of secondary school teachers with respect to gender," is thus not accepted.

The present study's outcomes are supported by other investigations of (Kaur 2006; Kumari and Padhi 2014; Toor 2016; Naik and Mani 2018 and Sehjal2021) that significant differences exist in teacher effectiveness with regard to gender. Dar and Ponraj (2022) found that female instructors had much better teacher effectiveness than their male counterparts. On the contrary, (Malik 2009; Singh, 2009; Roy and Halder 2018; Visweswari and Amuthavalli 2019 and Kumar 2019) established that gender had no significant impact on teacher effectiveness.

Hypothesis 1 (b): "There exists no significant difference in effectiveness of secondary school teachers with respect to locality."

This hypothesis was examined by using independent sample t-test and the results have been shown in Table 4.5.2, on the basis of locality.

4.5.2 Results relating to differences in effectiveness of secondary school teachers with respect to locality

Table 4.5.2 Mean scores of effectiveness of teachers with respect to locality

Effectiveness of Teachers	Location	N	M	SD	t-value
DDT	Urban	292	85.29	7.69	0.377
PPT	Rural	208	85.56	8.04	0.377
CM	Urban	292	108.75	10.11	0.093
CM	Rural	208	108.84	10.49	0.093
	Urban	292	54.67	5.04	
KSM	Rural	208	54.76	4.94	0.187
тс	Urban	292	133.13	11.83	0.643
IC.	Rural	208	132.42	12.62	0.043
ID	Urban	292	86.02	8.58	0.800
IR	Rural	208	86.72	8.50	0.899
TOTE	Urban	292	467.87	40.42	0.115
ET	Rural	208	468.30	41.36	0.115

Note: "N=number of respondents, M=mean, SD= standard deviation, PPT=preparation and planning for teaching, CM=classroom management, KSM=knowledge of subject matter etc., TC= teacher characteristic, IR=interpersonal relations and ET=effectiveness of teachers".

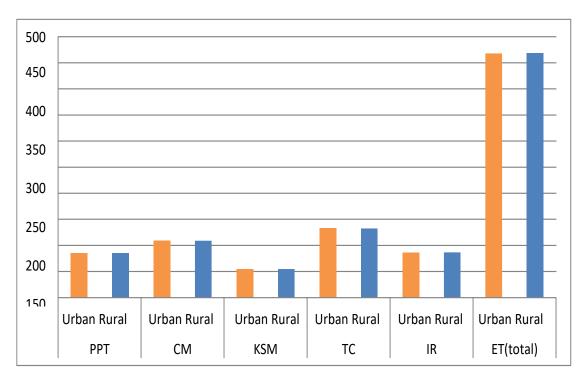


Fig. 4.5.2: Mean scores of effectiveness of secondary school teachers with respect to locality

Note; "PPT=preparation and planning for teaching, CM=classroom management, KSM=knowledge of subject matter etc., TC=teacher characteristics, IR=interpersonal relations and ET=effectiveness of teachers."

Table 4.5.2 shows the mean scores and SD of dimensions of "effectiveness of secondary school teachers, i.e., preparation and planning for teaching, classroom management, knowledge of subject-matter etc., teacher characteristics, interpersonal relations and effectiveness of teachers (total)" of teachers teaching in urban and rural secondary schools. The mean scores of "preparation and planning for teaching, classroom management, knowledge of subject-matter etc., teacher characteristics, interpersonal relations dimensions and effectiveness of teachers (total)" for teachers teaching in urban schools were found to be 85.29, 108.75, 54.67, 133.13, 86.02, 467.87 respectively; and for teachers teaching in rural schools were found to be 85.56, 108.84, 54.76, 132.42, 86.72 and 468.30 respectively. Also figure 4.5.2 .shows the mean scores of "effectiveness of teachers" with respect to locality.

The SD of "preparation and planning for teaching, classroom management, knowledge of subject-matter, teacher characteristics, interpersonal relations dimensions and effectiveness of teachers (total)" for teachers teaching in urban schools was found to be 7.69, 10.11, 5.04, 11.83, 8.58 and 40.42 respectively; and for teachers teaching in rural schools was found to be 8.04, 10.49, 4.94, 12.62, 8.50 and 41.36 respectively.

Further, the t-values calculated for "preparation and planning for teaching, classroom management, knowledge of subject-matter, teacher characteristics, interpersonal relations" dimensions for teachers teaching in urban and rural secondary schools were found to be 0.377, 0.093, 0.187, 0.643, 0.899 and 0.115 respectively. All the t- values were found to be statistically insignificant.

Discussion of Results

The insignificant t values demonstrated no significant differences in "preparation and planning for teaching, classroom management, knowledge of subject-matter etc., teacher characteristics, interpersonal relations dimensions and effectiveness of teachers (total)" of teachers teaching in urban and rural secondary schools.

As a result, it may be deduced that teachers teaching in urban and rural secondary schools were similar and equally effective in "preparation and planning for teaching, classroom management, knowledge of subject-matter etc., teacher characteristics, interpersonal relations dimensions and overall effectiveness of teachers". Thus, from results, it can be accomplished that hypothesis 1(b) which states

that "There exists no significant difference in effectiveness of secondary school teachers with respect to locality" is thus accepted.

The findings of this study are in congruence with that of (Malik 2009; Naik and Mani 2018) that locality had no significant influence on teacher effectiveness. However, (Kumari and Padhi 2014; Roy and Halder 2018) found significant differences in teacher effectiveness with regard to locality.

Hypothesis 1 (c): "There exists no significant difference in effectiveness of secondary school teachers with respect to teaching experience."

4.5.3 Results relating to differences in effectiveness of secondary school teachers with respect to teaching experience

In order to test this hypothesis, and to find out if the effectiveness of teachers differs with respect to teaching experience, the respondents were divided into three groups/categories, namely, 0-5 years, 5-10 years, and 10 years & above and One-way ANOVA was employed. Before applying ANOVA, homogeneity of variances must be checked through Levene's test. The below table 4.5.3.1displays the results of Levene's test for various dimensions of effectiveness of teachers, namely "preparation and planning for teaching, classroom management, knowledge of subject matter etc., teacher characteristics and interpersonal relations and effectiveness of teachers(total)" of teachers. Since p values were found to be greater than 0.05 which implies that there is homogeneity of variances, that is equal variances assumed, hence one way ANOVA can be applied.

Table 4.5.3.1 Test of homogeneity of variances for effectiveness of teacher

Effectiveness of Teachers	Levene's statistic	df1	df2	Sig.
PPT	0.682	2	497	0.506
CM	0.458	2	497	0.633
KSM	0.741	2	497	0.477
TC	1.441	2	497	0.238
IR	0.337	2	497	0.714
ET	0.203	2	497	0.817

Note: "PPT=preparation and planning for teaching, CM=classroom management, KSM=knowledge of subject matter etc., TC=teacher characteristics, IR=interpersonal relations and ET=effectiveness of teachers."

Table 4.5.3.2 Summary of one-way ANOVA for effectiveness of teachers with respect to teaching experience

		SS	Df	MS	F	Sig.
	Between Groups	107.771	2	53.886	0.878	0.416
PPT	Within Groups	30492.811	497	61.354		
	Total	30600.582	499			
	Between Groups	62.338	2	31.169	0.295	0.744
CM	Within Groups	52467.764	497	105.569		
	Total	52530.102	499			
	Between Groups	28.333	2	14.166	0.566	0.568
KSM	Within Groups	12428.617	497	25.007		
	Total	12456.950	499			
	Between Groups	130.906	2	65.453	0.442	0.643
TC	Within Groups	73638.732	497	148.166		
	Total	73769.638	499			
	Between Groups	10.966	2	5.483	0.075	0.928
IR	Within Groups	36410.736	497	73.261		
	Total	36421.702	499			
	Between Groups	966.034	2	483.017	0.290	0.749
ET	Within Groups	828574.916	497	1667.153		
	Total	829540.950	499			

Note: "PPT=preparation and planning for teaching, CM=classroom management, KSM=knowledge of subject matter etc., TC=teacher characteristics, IR=interpersonal relations and ET=effectiveness of teachers."

The above table 4.5.3.2 shows the differences in various dimensions of effectiveness of teachers, namely, "preparation and planning for teaching, classroom management, knowledge of subject-matter etc., teacher characteristics, interpersonal relations" and effectiveness of teachers(total)with respect to teaching experience, namely, 0-5 years, 5-10 years, and 10 years &above. The F values for "preparation and planning for teaching, classroom management, knowledge of subject-matter etc., teacher characteristics, interpersonal relations and effectiveness of teachers (total)" were found to be 0.878, 0.295, 0.566, 0.442, 0.075, and 0.290 respectively. All the F values calculated were found to be statistically insignificant. In ANOVA table p-values were found to be greater than 0.05, which implies that mean scores of all categories of independent variable, i.e. teaching experience are same. The ANOVA results suggested that for "preparation and planning for teaching, classroom management, knowledge of subject-matter etc., teacher characteristics, interpersonal relations and effectiveness of teachers(total)", the mean scores of groups/categories, 0-5 years, 5-10 years, and 10 years &above were not significantly different.

This implies that teachers with 0-5 years, 5-10 years and 10 years & above of teaching experience did not differ with respect to "preparation and planning for teaching, classroom management, knowledge of subject matter etc., teacher characteristics and interpersonal relations dimensions and effectiveness of teachers(total)", also evident from the mean scores in the below table 4.5.3.3. Figure 4.5.3.3 depicts graphical representation of mean scores of various dimensions of effectiveness of teachers with respect to teaching experience.

Table 4.5.3.3 Descriptive statistics for various dimensions of effectiveness of teachers with respect to teaching experience

Effectivenes	ss of teachers	N	Mean	SD	p-value
	1	100	84.73	8.081	0.004
	2	92	84.92	8.301	0.984
РТР	2	92	84.92	8.301	0.635
	3	308	85.77	7.605	0.033
	1	100	84.73	8.081	0.482
PTP CM KSM TC	3	308	85.77	7.605	0.462
	1	100	108.08		0.829
	2	92	108.95		0.02)
CM	2	92	108.95		1.000
Civi	3	308	108.97		1.000
	1	100	108.08		0.733
	3		308 108.97 10.081 100 54.36 5.342 62 54.47 4.007		0.755
	1				0.988
	2	92	54.47		0.700
KSM	2	92			0.751
KSWI	3	308			0.751
	1	100			0.621
	3	308			0.021
	1	100			0.83
	2	92			0.03
TC	2	92			0.615
10	3	308			0.013
	1	100		10.914 10.205 10.205 10.081 10.914 10.081 5.342 4.987 4.890 5.342 4.890 13.407 12.272 12.272 11.716 13.407 11.716 8.718 8.252 8.252 8.252 8.597 8.718 8.597 42.779 41.110 41.110 40.098	0.968
	3	308	92 54.47 4.987 08 54.90 4.890 00 54.36 5.342 08 54.90 4.890 00 132.82 13.407 92 131.79 12.272 92 133.15 11.716 00 132.82 13.407 08 133.15 11.716 00 86.45 8.718 92 86.01 8.252 92 86.01 8.252 08 86.36 8.597		0.700
	1	100			0.933
	2	92			0.755
IR	2	92			0.937
II.	3	308			0.731
	1	100	86.45		0.995
	3	308	86.36		0.773
	1	100	466.44		0.999
	2	92	466.14		0.777
TETOT	2	92	466.14		0.81
ILIOI	3	308	469.15		0.01
	1	100	466.44	42.779	0.833
Mada. "DTI	3	308	469.15	40.098	0.033

Note: "PTP=preparation and planning for teaching, CM=classroom management, KSM=knowledge of subject matter etc., TC=teacher characteristics, IR=interpersonal relations and TETOT =effectiveness of teacher."

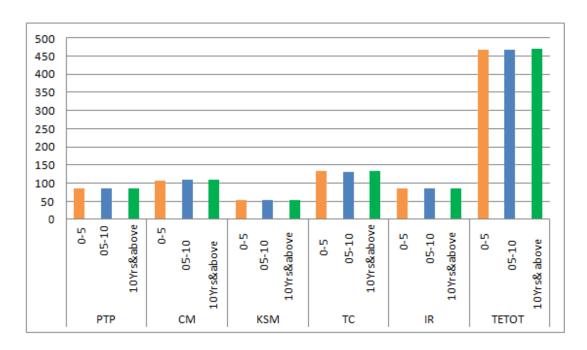


Figure 4.5.3.3: Mean scores of effectiveness of teachers with respect to teaching experience

Note; "PTP=preparation and planning for teaching, CM=classroom management, KSM=knowledge of subject matter etc.,TC=teacher characteristics, IR=interpersonal relations and ET=effectiveness of teachers".

Discussion of Results

The insignificant F-values, depicted no significant differences in "preparation and planning for teaching, classroom management, knowledge of subject-matter etc., teacher characteristics, interpersonal relations dimensions and overall effectiveness of teachers(total)", with respect to groups/categories of teaching experience. This implies that teachers with 0-5 years, 5-10 years and 10 years &above of teaching experience did not differ in "preparation and planning for teaching, classroom management, knowledge of subject-matter etc., teacher characteristics, interpersonal relations dimensions and overall effectiveness of teachers".

As a result, it may be deduced that teachers with 0-5 years, 5-10 years and 10 years &above of teaching experience were similar or equally effective with respect to "preparation and planning for teaching, classroom management, knowledge of subject matter etc., teacher characteristics and interpersonal relations and effectiveness of teachers(total)". Thus from results, it can be inferred that hypothesis 1(c) which states that "there exists no significant difference in effectiveness of secondary school teachers with respect to teaching experience" is thus accepted.

The research conclusions accord with that of (Ghali, 2002; Singh, 2009; & Mohalik, 2020), who found that teaching experience had no bearing on teacher effectiveness. However, (Hanspal and Sahu 2008; Tyagi, 2013) found a considerable difference in teacher effectiveness based on experience.

Hypothesis 1(d): "There exists no significant difference in effectiveness of secondary school teachers with respect to type of school."

This hypothesis was examined by using independent sample t-test and the results have been shown in Table 4.5.4 on the basis of type of school.

4.5.4 Results relating to differences in effectiveness of secondary school teachers with respect to type of school

Table 4.5.4 Mean scores of effectiveness of teachers with respect to type of school

Effectiveness of Teachers	Type of School	N	M	SD	t-value
reactions					
PPT .	Govt.	327	85.52	7.55	0.459
	Pvt.	173	85.18	8.35	
CM	Govt.	327	109.10	9.92	0.943
Civi	Pvt.	173	108.19	10.88	0.515
KSM	Govt.	327	54.80	4.78	0.561
IXONI	Pvt.	173	54.54	5.39	0.501
TC	Govt.	327	132.66	11.70	
	Pvt.	173	133.16	13.02	0.433
IR	Govt.	327	85.97	8.47	1.252
	Pvt.	173	86.97	8.68	1.232
ET(TOT)	Govt.	327	468.06	39.66	0.003
E1(101)	Pvt.	173	468.04	42.91	0.003

Note: "N=number of respondents, M=mean, SD=standard deviation, PPT-preparation and planning for teaching, CM=classroom management, KSM=knowledge of subject matter etc., TC= teacher characteristics, IR=interpersonal relations and ET(TOT)=effectiveness of teachers."

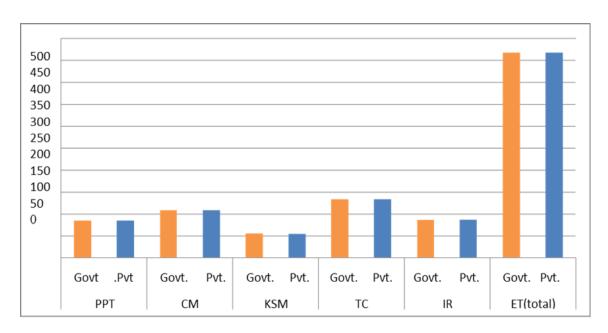


Figure 4.5.4: Mean scores of effectiveness of teachers with respect to type of school

Note: "PTP=preparation and planning for teaching, CM=classroom management, KSM=knowledge of subject matter etc., TC=teacher characteristics, IR=interpersonal relations and ET=effectiveness of teachers."

Table 4.5.4 shows the mean scores and SD of different dimensions, namely i.e., "preparation and planning for teaching, classroom management, knowledge of subject- matter etc., teacher characteristics, interpersonal relations and effectiveness of teachers (total)" of teachers teaching in government and private secondary schools. The mean score of "preparation and planning for teaching, classroom management, knowledge of subject- matter, teacher characteristics, interpersonal relations dimensions and effectiveness of teachers(total)" for teachers teaching in government schools was found to be 85.52, 109.10, 54.80, 132.66, 85.97 and 468.06 respectively; and for teachers teaching in private schools was found to be 85.18, 108.19, 54.54, 133.16, 86.97 and 468.04 respectively. Also figure 4.5.4 depicts the mean scores of "effectiveness of teachers" with respect to type of school.

The SD of dimensions of "preparation and planning for teaching, classroom management, knowledge of subject-matter etc., teacher characteristics, interpersonal relations dimensions and effectiveness of teachers(total)" for teachers teaching in government schools was found to be 7.55, 9.92, 4.78, 11.70, 8.47 and 39.66 respectively; and for teachers teaching in private schools8.35, 10.88, 5.39, 13.02, 8.68 and 42.91 respectively.

Further, the t-values calculated for "preparation and planning for teaching, classroom management, knowledge of subject-matter etc., teacher characteristics, interpersonal relations dimensions and effectiveness of teachers(total)"for teachers

teaching in government and private secondary schools were found to be 0.459, 0.943, 0.561, 0.433,1.252 and 0.003 respectively. All the t- values were found to be statistically insignificant.

Discussion of Results

The insignificant t values revealed that there were no significant differences in "preparation and planning for teaching, classroom management, knowledge of subject- matter, teacher characteristics, interpersonal relations dimensions and effectiveness of teachers (total)" of teachers teaching in government and private schools.

Hence, it can be concluded teachers teaching in government and private schools were similar or equally effective in "preparation and planning for teaching, classroom management, knowledge of subject-matter etc., teacher characteristics, interpersonal relations and overall effectiveness of teachers". Thus from results, it can be concluded that hypothesis 1(d) which states that "there exists no significant difference in effectiveness of secondary school teachers with respect to type of school" is thus accepted.

The results of this study match with those of (Bhardwaj 2009; Toor 2016; Naik and Mani 2018; Kumar 2019), who found that the type of school had no significant impact on teacher effectiveness. Dhillon and Kaur (2010), on the other hand, identified that significant differences in teacher effectiveness depend on the type of school.

4.6 Comparison of perceived organisational climate of secondary school teachers with respect to gender, locality, teaching experience and type of school

Hypothesis 2(a): "There exists no significant difference in perceived organisational climate of secondary school teachers with respect to gender"

This hypothesis was examined by using independent sample t-test and the results have been shown in Table 4.6.1on the basis of gender.

4.6.1 Results relating to differences in perceived organisational climate of secondary school teachers with respect to gender

Table 4.6.1 Mean scores of perceived organisational climate of teachers with respect to gender

Perceived organisational climate	G	N	M	SD	t-value	
RRIR	Male	149	52.07	4.03	1 200	
KKIK	Female	351	52.70	5.29	1.298	
ORGP	Male	149	45.79	3.94	2.145**	
ORGP	Female	351	46.73	4.66	2.145***	
CRSI	Male	149	23.40	2.11	0.64	
CKSI	Female	351	23.55	2.53	0.04	
AID	Male	149	5.84	0.80	2.155**	
ALB	Female	351	6.03	0.92	2.133***	
OC	Male	149	121.26	8.56	1.662	
OC .	Female	351	122.97	11.28	1.662	

Note: "G=gender, M=mean, SD= standard deviation, RRIR=results rewards and interpersonal relations, ORGP=organisational processes, CRSI=clarity of roles and sharing of information, ALB=altruistic behaviour and OC= organisational climate and **Signi at 0.01 level".

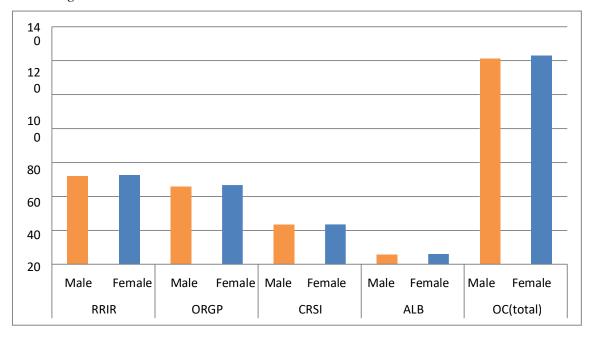


Figure 4.6.1: Mean scores of perceived organisational climate of teachers with respect to gender

Note: "RRIR=results rewards and interpersonal relations, ORGP=organisational processes, CRSI=clarity of roles and sharing of information, ALB=altruistic behaviour and OC= organisational climate".

Table 4.6.1 shows the mean scores and SD of different dimensions, namely "results rewards and interpersonal relations, organisational processes, clarity of roles

and sharing of information, altruistic behaviour and perceived organisational climate (total)" of male and female teachers. The mean scores of "results rewards and interpersonal relations, organisational processes, clarity of roles and sharing of information, altruistic behaviour dimensions and organisational climate (total)" were found to be 52.07, 45.79, 23.40, 5.84and 121.26 respectively for male teachers; and 52.70, 46.73, 23.55, 6.03, and 122.97 for female teachers respectively. Also figure 4.6.1depicts the mean scores of "perceived organisational climate" with respect to gender.

The SD of "results rewards and interpersonal relations, organisational processes, clarity of roles and sharing of information, altruistic behaviour" dimensions and organisational climate (total) was found to be 4.03, 3.94, 2.11, 0.80 and 8.56 respectively; for male teachers; and 5.29, 4.66, 2.53, 0.92 and 11.28 for female teachers respectively.

Further, the t-values calculated for "results rewards and interpersonal relations, organisational processes, clarity of roles and sharing of information, altruistic behaviour" dimensions and organisational climate (total)was found to be 1.298, 2.145, 0.64, 2.155 and 1.662 respectively.

The t-values for "results rewards and interpersonal relations and clarity of roles and sharing of information" dimensions and organisational climate (total) for male and female teachers were found to be insignificant, while the t-values for "organisational processes" and "altruistic behaviour" for male and female teachers found were significant at (0.01) level.

Discussion of Results

The significant t-values displayed that there exist significant differences in the "organisational processes" and "altruistic behaviour" dimensions of perceived organisational climate for male and female teachers. The observation of mean scores of "organisational processes" and "altruistic behaviour" dimension of perceived organisational climate showed that mean scores of female teachers was more than that of the male teachers. While the insignificant t-values for "results rewards and interpersonal relations", "clarity of roles and sharing of information" dimensions and perceived organisational climate (total) indicated that male and female teachers had a same perspective on these dimensions and perceived organisational climate (total).

As a result, it can be inferred, that female secondary school teachers had a better perception of "organisational processes" and "altruistic behaviour", (that is, individual and team development is encouraged, people working in the organisation are consulted before taking any decision and resources are made available; and people in the organisation help each other), as compared to their male counterparts.

While male and female teachers had same perception for "results rewards and interpersonal relations", that is, merit is rewarded, people are evaluated on the basis of results and creative climate sustains, "clarity of roles and sharing of information", that is there is clarity with respect to the roles assigned, new ideas are accepted and problems are shared in a proper way and overall organisational climate. Thus, from results, it can be deduced that hypothesis 2(a) which states that "there exist no significant difference in perceived organisational climate of secondary school teachers with respect to gender" is thus not accepted.

The study's conclusions were consistent to the observations of (Meena 2017; Jothi and Kanmani2019) that male and female employees did not perceive a significant difference in organisational climate. While (Kauts and Hans 2011; Shalmani 2014; Babu and Venkatesh 2016; and Ch and Rashid 2021) revealed significant differences in gender vis-a- vis perceptions of organisational climate.

Hypothesis 2(b): "There exists no significant difference in perceived organisational climate of secondary school teachers with respect to locality".

The above hypothesis was examined by using independent sample t-test and the results have been shown in table 4.6.2 on the basis of locality.

4.6.2 Results relating to differences in perceived organisational climate of secondary school teachers with respect to locality

Table 4.6.2 Mean scores of perceived organisational climate of teachers with respect to locality

Perceived organisational climate	Location	N	Mean	SD	t-value
RRIR	Urban	292	52.66	5.27	0.800
KKIK	Rural	208	52.30	4.47	0.800
ORGP	Urban	292	46.73	4.65	
OKOF	Rural	208	46.06	4.20	1.65
CRSI	Urban	292	23.59	2.38	
CKSI	Rural	208	23.38	2.45	0.919
ALB	Urban	292	6.04	0.90	
ALD	Rural	208	5.87	0.87	2.229**
0.7	Urban	292	122.97	11.13	
OC	Rural	208	121.74	9.70	1.283

Note: "N=Number of participants, SD=standard deviation, RRIR=results rewards and interpersonal relations, ORGP=organisational processes, CRSI=clarity of roles and sharing of information, ALB=altruistic behaviour and OC=perceived organisational climate, ** significant at 0.01 level".

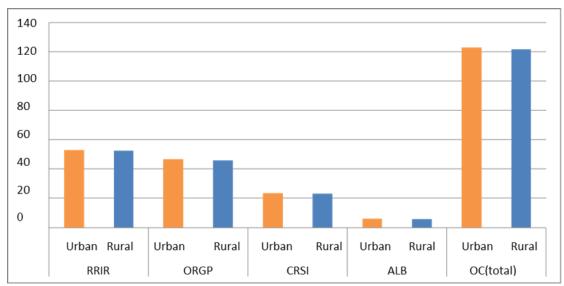


Figure 4.6.2: Mean scores of perceived organisational climate of teachers with respect to locality

Note: "RRIR=results rewards and interpersonal relations, ORGP=organisational processes, CRSI= clarity of roles and sharing of information, ALB=altruistic behaviour and OC= organisational climate".

Table 4.6.2 highlights the mean scores and SD of dimensions namely "results rewards and interpersonal relations, organisational processes, clarity of roles and sharing of information, altruistic behaviour" and organisational climate (total) for teachers teaching in urban and rural secondary schools. The mean scores of "results rewards and interpersonal relations, organisational processes, clarity of roles and sharing of information, altruistic behaviour" dimensions and organisational climate (total) for teachers teaching in urban schools were found to be52.66, 46.73, 23.59, 6.04 and 122.97 respectively; and for teachers teaching in rural schools were found to be 52.30, 46.06, 23.38, 5.87 and 121.74 respectively. Also figure 4.6.2 shows the mean scores of "perceived organisational climate" with respect to locality.

The SD for "results rewards and interpersonal relations, organisational processes, clarity of roles and sharing of information, altruistic behaviour dimensions and organisational climate (total)", for teachers teaching in urban schools was found to be 5.27, 4.65, 2.38, 0.90 and 11.13 respectively; and for teachers teaching in rural schools was found to be 4.47, 4.20, 2.45, 0.87 and 9.70 respectively.

Further, the t-values calculated for "results rewards and interpersonal relations, organisational processes, clarity of roles and sharing of information, altruistic behaviour dimensions and organisational climate (total)" for teachers

teaching in urban and rural secondary schools was found to be 0.800, 1.65, 0.919, 2.229 and 1.283 respectively.

The t-values for "results rewards and interpersonal relations, organisational processes, clarity of roles and sharing of information dimensions and organisational climate (total)"for teachers teaching in urban and rural secondary schools was found to be insignificant but t-value for "altruistic behaviour" dimension was found significant at 0.01 level.

Discussion of Results

The significant t-value displayed significant differences in the "altruistic behaviour" dimension of perceived organisational climate for teachers teaching in urban and rural secondary schools. The observation of mean scores for "altruistic behaviour" dimension showed that mean scores of teachers teaching in urban schools was more than that of the teachers teaching in rural schools. While the insignificant t values for "results rewards and interpersonal relations, organisational processes, clarity of roles and sharing of information and perceived organisational climate (total)" indicated that both teachers teaching in urban and rural secondary schools had similar perception with respect to these dimensions and organisational climate (total).

As a result, it can be deduced that teachers teaching in urban schools had better perception of "altruistic behaviour", that is, people in the organisation help each other, as compared to teachers in rural schools. While both teachers in urban and rural secondary schools had similar perception for "results rewards and interpersonal relations that is, merit is rewarded, people are evaluated on the basis of results and creative climate sustains; organisational processes, that is, individual and team development is encouraged, people working in the organisation are consulted before taking any decision and resources are made available; "clarity of roles and sharing of information", that is there is clarity with respect to the roles assigned, new ideas are accepted and problems are shared in a proper way and overall organisational climate.

As a result of the findings, hypothesis 2(b) which states that "there exists no significant difference in perceived organisational climate of secondary school teachers with respect to locality" is thus not accepted.

The conclusion of the study matches with the outcomes of (Mishra & Acha 2011; Lezha & Meena, 2017) who found no difference in the perception of rural and urban school teachers. On the other hand (Ch& Rashid 2021) had found that perception of organisational climate significantly differed for locality.

Hypothesis 2(c): "There exists no significant difference in perceived organisational climate of secondary school teachers with respect to teaching experience."

The above hypothesis was examined by using one-way ANOVA and the results have been shown in table 4.6.3.1 on the basis of teaching experience.

4.6.3 Results relating to differences in perceived organisational climate of school teachers with respect to teaching experience

To test the hypothesis and to find out if the perceived organisational climate of teachers differs with respect to teaching experience. The respondents were divided into three groups, namely, 0-5 years, 5-10 years, and 10 years &above and One-way ANOVA was employed. Before applying ANOVA, homogeneity of variances must be checked through Levene's test.

Table 4.6.3.1 Test of homogeneity of variances with respect to organisational climate

	Levene's Statistic	df1	df2	Sig.
RRIR	3.037	2	497	0.049
ORGP	1.333	2	497	0.265
CRSI	7.975	2	497	0.000
ALB	3.609	2	497	0.028
OC	2.902	2	497	0.056

Note: "RRIR=results rewards and interpersonal relations, ORGP=organisational processes, CRSI=clarity of roles and sharing of information, ALB=altruistic behaviour and OC= organisational climate".

The above table 4.6.3.1 reveals the results of Levene's test for various dimensions namely "results rewards and interpersonal relations, organisational processes, clarity of roles and sharing of information, altruistic behaviour" and perceived organisational climate (total) of secondary school teachers.

Since p values (0.049, 0.000, 0.028 respectively) were found to be less than 0.05 (p<0.05) for "result rewards and interpersonal relations, clarity of roles and sharing of information and altruistic behaviour" dimensions this indicates that there is no homogeneity of variances, that is unequal variances assumed, hence Welsch test should be applied for these dimensions.

Further for organisational processes and perceived organisational climate (total), p values (0.265 and 0.056 respectively) were found to be greater than 0.05 which implies that there is homogeneity of variances, that is equal variances assumed, hence one way ANOVA can be applied.

Table 4.6.3.2 Welsch test for various dimensions of perceived organisational climate

		Levene's Statistic	df1	df2	Sig.
RRIR	Welch	1.157	2	179.533	0.317
CRSI	Welch	1.751	2	174.517	0.177
ALB	Welch	0.351	2	185.031	0.704

Note; "RRIR=results rewards and interpersonal relations, CRSI=clarity of roles and sharing of information, ALB=altruistic behaviour".

The above table 4.6.3.2 shows the differences in "result rewards and interpersonal relations, clarity of roles and sharing of informations and altruistic behaviour" dimensions with respect to teaching experience, namely, 0-5 years, 5-10 years, and 10 years & above. The values of Welch Statistic for "result rewards and interpersonal relations, clarity of roles and sharing of informations and altruistic behaviour" dimensions were found to be 0.317, 0.177 and 0.704 respectively. The p-values for "result rewards and interpersonal relations, clarity of roles and sharing of information and altruistic behaviour" dimensions were found to be greater than (0.05) hence it could be deduced that mean scores for all categories/groups of four are same. This suggested that "result rewards and interpersonal relations, clarity of roles and sharing of information and altruistic behaviour" dimensions did not differ in regard to teaching experience.

This implies that teachers with 0-5 years, 5-10 years & 10 years & above of teaching experience did not differ with respect to "result rewards and interpersonal relations, clarity of roles and sharing of information and altruistic behaviour" also evident from mean scores of teaching experience in the below table 4.6.3.3.

Table 4.6.3.3 Descriptive statistics for various dimensions of perceived organisational climate

0	C	N	M	S.D
RRIR	1	100	51.96	6.030
	2	92	52.18	4.499
	3	308	52.78	4.682
	Total	500	52.51	4.952
CRSI	1	100	23.09	3.179
	2	92	23.39	2.148
	3	308	23.67	2.176
	Total	500	23.50	2.411
ALB	1	100	5.93	0.998
	2	92	6.03	0.818
	3	308	5.96	0.874
	Total	500	5.97	0.889

Note: "RRIR=results rewards and interpersonal relations, ORGP=organisational processes, CRSI=clarity of roles and sharing of information, ALB=altruistic behaviour."

Further for "organisational processes" and perceived organisational climate (total) of teachers, p values were found to be 0.265 and 0.056, that is, greater than 0.05 which represents that there is homogeneity of variances, that is, equal variances assumed, hence one way ANOVA can be applied for the concerned dimensions. ANOVA results are depicted in the following table 4.6.3.4.

Table 4.6.3.4 Summary of one-way ANOVA for perceived organisational climate

		SS	df	MS	F	Sig.
ORGP	Between Groups	66.302	2	33.151	1.662	0.191
	Within Groups	9915.346	497	19.950		
	Total	9981.648	499			
OC	Between Groups	413.916	2	206.958	1.861	0.157
	Within Groups	55278.202	497	111.224		
	Total	55692.118	499			

Note: "ORGP=organisational processes and OC (total) = organisational climate, df=degree of freedom, SS=sum of squares and MS=Mean square."

The above table 4.6.3.4 shows the differences in "organisational processes" and perceived organisational climate (total) of teachers' vis-a-vis teaching experience. The F- values for "organisational processes" and perceived organisational climate (total) were found to be 1.662 and 1.861 respectively. The F values calculated for "organisational processes" and perceived organisational climate (total) found were statistically insignificant. In ANOVA table p-values were greater than 0.05, which implies that mean scores of all categories of independent variables, i.e. teaching

experience are same. The ANOVA results suggested that for "organisational processes" and perceived organisational climate (total), the mean scores of groups/categories, 0-5 years, 5-10 years, and 10 years &above did not differ significantly. This implies that "organisational processes" and "perceived organisational climate (total)", the mean scores of groups/categories, 0-5 years, 5-10 years, and 10 years &above did not differ significantly also evident from the mean score in the below table 4.6.3.5. Figure 4.6.3.5 depicts the graphical representation of mean scores of various dimensions of "perceived organisational climate" with respect to teaching experience.

Table 4.6.3.5 Descriptive statistics for various dimensions of perceived organisational climate

POC		N	M	S.D	p-value
	1	100	51.96	6.030	0.953
	2	92	52.18	4.499	
RRIR	2	92	52.18	4.499	0.511
KKIK	3	308	52.78	4.682	
	1	100	51.96	6.030	0.428
	3	308	52.78	4.682	
	1	100	45.72	5.091	0.354
	2	92	46.61	4.005	
ORGP	2	92	46.61	4.005	0.999
OKOP	3	308	46.64	4.380	
	1	100	45.72	5.091	0.176
	3	308	46.64	4.380	
	1	100	23.09	3.179	0.719
	2	92	23.39	2.148	
CRSI	2	92	23.39	2.148	0.525
CKSI	3	308	23.67	2.176	
	1	100	23.09	3.179	0.210
	3	308	23.67	2.176	
	1	100	5.93	0.998	0.715
	2	92	6.03	0.818	
ALB	2	92	6.03	0.818	0.769
ALD	3	308	5.96	0.874	
	1	100	5.93	0.998	0.949
	3	308	5.96	0.874	
	1	100	120.77	13.16	0.622
РОСТОТ	2	92	122.18	9.565	
	2	92	122.18	9.565	0.751
	3	308	123.09	9.853	
	1	100	120.77	13.16	0.137
	3	308	123.09	9.853	
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Note: "M=mean, RRIR=results rewards and interpersonal relations, ORGP=organisational processes, CRSI=clarity of roles and sharing of information, ALB=altruistic behaviour." OC= organisational climate."

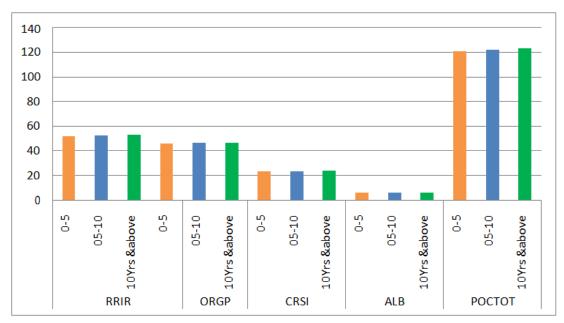


Figure 4.6.3.5: Mean score of perception of organisational climate of teachers with respect to teaching experience

Note: "RRIR=results rewards and interpersonal relations, ORGP=organisational processes, CRSI= clarity of roles and sharing of information, ALB=altruistic behaviour and POC= Perceived organisational climate."

Discussion of Results

The insignificant Welsch statistic values for "results rewards and interpersonal relations, clarity of roles and sharing of information and altruistic behaviour" for teaching experience, indicated that all the teachers had similar perception for "results rewards and interpersonal relations, clarity of roles and sharing of information and altruistic behaviour."

The insignificant F-values showed no significant differences in the "organisational processes" and perceived organisational climate (total) for teaching experience. This implies that all the teachers had similar perception for "organisational processes" and perceived organisational climate (total).

As a result, it can be deduced that teachers with "0-5 years, 5-10 years and 10 years & above" of teaching experience had similar perception for "results rewards and interpersonal relations, organisational processes, clarity of roles and sharing of information, altruistic behaviour" dimensions and overall perceived organisational climate. Thus, from results, it could be deduced that hypothesis 2(c) which states that

"there exists no significant difference in perceived organisational climate of secondary school teachers with respect to teaching experience" is thus accepted.

Studies by Gunbayi, 2007 and Ch and Rashid (2021) found significant differences organisational climate with respect to teaching experience.

Hypothesis 2(d): "There exists no significant difference in perceived organisational climate of secondary school teachers with respect to type of school."

This hypothesis was examined by using independent sample t-test and the results have been shown in Table 4.6.4 on the basis of type of school.

4.6.4 Results relating to differences in perceived organisational climate of secondary school teachers with respect to type of school

Table4.6.4 Mean scores of perceived organisational climate of teachers with respect to type of school

Perceived organisational climate	Perceived organisational climate Type of School		М	SD	t-value
RRIR	Govt.	327	53.01	4.62	3.139**
KKIK	Pvt.	173	51.56	5.41	
ORGP	Govt.	327	46.91	4.26	3.171**
ORGP	Pvt.	173	45.58	4.75	
CRSI	Govt.	327	23.64	2.17	1.752
CKSI	Pvt.	173	23.24	2.80	
ALB	Govt.	327	5.99	0.86	0.614
ALD	Pvt.	173	5.94	0.94	
OC/TOT)	Govt.	327	123.55	9.78	3.218**
OC(TOT)	Pvt.	173	120.39	11.65	

Note: "N=respondents, M=mean, RRIR=results rewards and interpersonal relations, ORGP=organisational processes, CRSI=clarity of roles and sharing of information, ALB=altruistic behaviour and OC=perceived organisational climate."**sign.at 0.01 level.

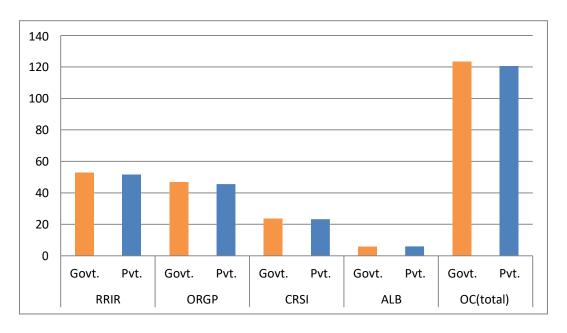


Figure 4.6.4: Mean scores of perception of organisational climate of teachers with respect to type of school

Note: "RRIR=results rewards and interpersonal relations, ORGP=organisational processes, CRSI=clarity of roles and sharing of information, ALB=altruistic behaviour and OC= organisational climate".

Table 4.6.4displays the mean scores and SD of dimensions of perceived organisational climate namely, "results rewards and interpersonal relations, organisational processes, clarity of roles and sharing of information, altruistic behaviour" and organisational climate (total) for teachers teaching in government and private secondary schools. The mean scores of "results rewards and interpersonal relations, organisational processes, clarity of roles and sharing of information, altruistic behaviour dimensions and organisational climate (total)" for teachers teaching in government schools was found to be 53.01, 46.91, 23.64, 5.99 and 123.55 respectively; and for teachers teaching in private schools was found to be51.56, 45.58, 23.24, 5.94 and 120.39 respectively. Also figure 4.6.4 shows the mean scores of "perceived organisational climate" with respect to type of school.

The SD for "results rewards and interpersonal relations, organisational processes, clarity of roles and sharing of information, altruistic behaviour" dimensions and organisational climate (total) for teachers teaching in government schools was found to be 4.62, 4.26, 2.17, 0.86 and 9.78 respectively; and for teachers teaching in private schools was found to be 5.41, 4.75, 2.80, 0.94 and 11.65 respectively.

Further, the t-values calculated for "results rewards and interpersonal relations, organisational processes, clarity of roles and sharing of information, altruistic behaviour" dimensions and organisational climate (total) for teachers teaching in government and private schools was found to be 3.139, 3.171, 1.752, 0.614 and 3.218 respectively.

The t-values for "results rewards and interpersonal relations, organisational processes" dimensions and organisational climate (total) for teachers teaching in government and private schools was found to be significant 0.01 level, where as t-values for "clarity of roles and sharing of information and altruistic behaviour" dimensions for teachers teaching in government and private schools was found to be insignificant.

Discussion of Results

The significant t-values demonstrated significant differences in the "results rewards and interpersonal relations, organisational processes" dimensions and organisational climate (total) of teachers teaching in government and private schools. The mean scores of teachers teaching in government schools was greater than that of teachers in private schools for "results rewards and interpersonal relations and organisational processes and organisational climate (total)". While the insignificant t-values indicated that teachers teaching in government and private schools had similar perception with respect to "clarity of roles and sharing of information and altruistic behaviour" dimensions.

As a result, it can be deduced that teachers teaching in government schools had better perception of "results, rewards and interpersonal relations (that is, performance in the organisation was valued, people in the organisation shared pleasing relations; and roles in the organisation were clearly defined) and organisational processes (that is, people in the organisation trusted each other's ability, the communication channels were open, resources were made available and all people affected by problems were consulted before taking decisions)" as compared to teachers teaching in private schools. Also, the perception of teachers teaching in government schools towards the overall organisational climate was better than that of teachers teaching in private schools. While teachers teaching in government and

private schools had similar perception for "clarity of roles and sharing of information", that is there is clarity with respect to the roles assigned new ideas are accepted and problems are shared in a proper way and altruistic behaviour, that is people in the organisation help each other. Thus, from results, it can be accomplished that hypothesis 2(d) which states that "there exists no significant difference in perceived organisational climate of secondary school teachers with respect to type of school" is thus not accepted.

The outcomes of the study were found in congruence with the findings of (Lenka, Chandra and Gupta 2015; Babu and Venkatesh 2016) that perception of organisational climate significantly differs for type of school.

4.7 Comparison of psychological capital of secondary school teachers with respect to gender, locality, teaching experience and type of school

Hypothesis 3(a): "There exists no significant difference in psychological capital of secondary school teachers with respect to gender."

The above hypothesis was analyzed by using independent sample t-test and the results have been shown in Table 4.7.1 on the basis of gender.

4.7.1 Results relating to differences in psychological capital of teachers with respect to gender

Table 4.7.1 Mean scores of psychological capital of teachers with regard to gender

Psychological Capital	G	N	M	SD	t-value
SELF	Male	149	26.89	1.835	0.504
	Female	351	26.98	1.748	0.304
НОРЕ	Male	149	27.42	1.429	0.857
HOPE	Female	351	27.54	1.520	0.837
PEGI	Male	149	23.35	1.273	0.254
RESI	Female	351	23.38	1.340	0.234
ODTI	Male	149	18.11	1.134	0.077
OPTI	Female	351	18.01	1.113	0.877
PC((+ 1)	Male	149	95.77	3.157	0.45
PC(total)	Female	351	95.91	3.497	0.45

Note: "G=gender, M=mean, SD=standard deviation, SELF=self-efficacy, HOPE=hope, RESI=resilience, OPTI=optimism" and PC= psychological capital".

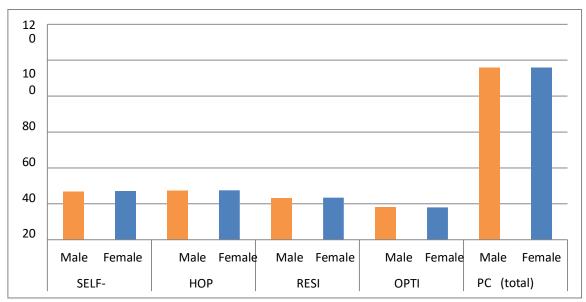


Figure 4.7.1: Mean scores of psychological capital of teachers with regard to gender Note; "SELF=self-efficacy, HOPE=hope, RESI=resilience OPTI=optimism" and PC= psychological capital."

Table 4.7.1 demonstrates the mean scores and SD of various dimensions of psychological capital i.e., "self-efficacy, hope, resilience and optimism and psychological capital (total)" of male and female secondary school teachers. The mean scores of "self- efficacy, hope, resilience and optimism dimensions and psychological capital (total)" for male teachers were found to be 26.89, 27.42, 23.35, 18.11 and 95.77 respectively; and 26.98, 27.54, 23.38, 18.01 and 95.91 for female teachers respectively. Also figure 4.7.1 depicts the mean scores of "psychological capital" with respect to gender.

The SD of "self-efficacy, hope, resilience, optimism dimensions and psychological capital (total)" for male teachers was found to be 1.835, 1.429, 1.273, 1.134and 3.157 respectively; and 1.748, 1.520, 1.340, 1.113 and 3.497for female teachers respectively.

Further, the t-values calculated for "self-efficacy, hope, resilience and optimism dimensions and psychological capital (total)" was found to be 0.504, 0.857, 0.254, 0.877 and 0.45 respectively. The t-values calculated for "self-efficacy, hope, resilience and optimism and psychological capital (total)" were found to be insignificant.

Discussion of Results

The insignificant t-values pointed that both male and female teachers did not differ in "self-efficacy, hope, resilience, optimism" and overall PsyCap. Hence, it can be deduced that both male and female teachers exhibited similar psychological

capital, that is, belief in one's capacity to achieve precise targets in particular situations, perseverance towards targets, enduring and rebounding to find success if faced troubles and difficulties, and have a constructive outlook for immediate and long term achievement.

Thus from results, it can be deduced that hypothesis 3(a) which states that "there exists no significant difference in psychological capital of secondary school teachers with respect to gender" is thus accepted.

The findings corroborate with the findings of Ahmet and Ozbek (2019) who established no difference in the PsyCap levels of teachers pertaining to gender. On the contrary, (Parthi and Gupta, 2016; Demirtas and Kucuk, 2019 and Raj, Tiwari and Rai 2019) found that psychological capital levels of teachers significantly differed for gender variable.

Hypothesis 3(b): "There exists no significant difference in psychological capital of teachers with respect to locality."

The above hypothesis was examined by using independent sample t-test and the results have been shown in Table 4.7.2 on the basis of locality.

4.7.2 Results relating to differences in psychological capital of teachers with regard to locality

Table 4.7.2 Mean scores of psychological capital of teachers with regard to locality

Psychological capital	Location	N	M	SD	t-value
SELF	Urban	292	26.89	1.74	0.95
	Rural	208	27.04	1.82	
HOPE	Urban	292	27.42	1.58	1.531
	Rural	208	27.63	1.36	
RESI	Urban	292	23.30	1.41	1.489
	Rural	208	23.48	1.18	
OPTI	Urban	292	17.98	1.11	1.516
	Rural	208	18.13	1.12	
PC	Urban	292	95.58	3.45	2.254**
	Rural	208	96.27	3.28	

Note; "N=number of participant, SD= standard deviation, M=mean, SELF=self-efficacy, HOPE=hope, RESI=resilience OPTI=optimism and PC= psychological capital and **significant at 0.01".

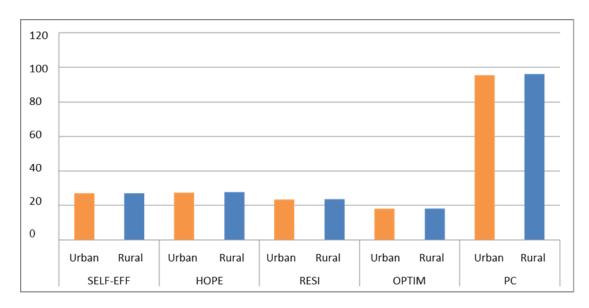


Fig.4.7.2: Mean scores of psychological capital of teachers with regard to locality

Note: "SELF=self-efficacy, HOPE=hope, RESI=resilience OPTI=optimism and PC=psychological capital."

Table 4.7.2 displays the mean score and SD of dimensions namely, "self-efficacy, hope, resilience and optimism" and PsyCap (total) for teachers in urban and rural secondary schools. The mean scores of "self-efficacy, hope, resilience and optimism dimensions and psychological capital (total)" for teachers in urban schools was found to be 26.89, 27.42, 23.30, 17.98 and 95.58 respectively; and for teachers teaching in rural schools was found to be27.04, 27.63, 23.48, 18.13 and 96.27 respectively. Also figure 4.7.2 shows the mean scores of "psychological capital" with respect to locality.

The SD for "self-efficacy, hope, resilience and optimism dimensions and PsyCap (total)" for teachers teaching in urban schools was found to be 1.74, 1.58, 1.41, 1.11 and 3.45 respectively; and for teachers teaching in rural schools was found to be 1.82, 1.36, 1.18, 1.12 and 3.28 respectively.

Further, the t-values calculated for "self-efficacy, hope, resilience and optimism dimensions and psychological capital (total)" for teachers teaching in urban and rural schools was found to be 0.950, 1.531, 1.489, 1.516 and 2.254 respectively.

The t-values with respect to "self-efficacy, hope, resilience and optimism" dimensions of psychological capital were found to be insignificant while t-value with respect to psychological capital (total) found was significant at (0.01) level.

Discussion of Results

The significant t-value showed significant differences in psychological capital (total) of teachers teaching in urban and rural schools. The observation of mean scores of psychological capital (total) displayed that, mean scores of teachers teaching in

rural schools was found to be more than that of teachers in urban schools. While the insignificant t-values indicated that both teachers teaching in urban and rural schools did not differ in "self-efficacy, hope, resilience, optimism" dimensions.

From the aforesaid discussion, it can be deduced that teachers teaching in rural schools exhibited better overall psychological capital, that is, characterized by confidence in one's ability to achieve difficult task, persevering towards goals, sustaining and bouncing back to attain success when surrounded by problems and hardships; and having a positive attitude for success in present and future as compared to teachers teaching in urban schools. Thus from results, it can be deduced that hypothesis 3(b) which states that "there exists no significant difference in psychological capital of secondary school teachers with respect to locality" is thus not accepted.

Tadesse (2019) found that urban school teachers scored significantly higher on "self- efficacy, hope, resilience, and optimism" dimensions of PsyCap as compared to their rural counterparts.

Hypothesis 3(c): "There exists no significant difference in psychological capital of secondary school teachers with respect to teaching experience."

The above hypothesis was examined by using one-way ANOVA and the results have been shown in table 4.7.3.1 on the basis of teaching experience.

4.7.3 Results relating to differences in psychological capital of school teachers with respect to teaching experience

To test the hypothesis, and to find out if the psychological capital of teachers differs with respect to teaching experience, the respondents were divided into three groups/ categories, namely, 0-5 years, 5-10 years, and 10 years & above and One-way ANOVA was employed. Before applying ANOVA, homogeneity of variances must be checked through Levene's test.

The below table 4.7.3.1 displays the results of Levene's test for "self-efficacy, hope, resilience and optimism" dimensions and psychological capital (total) of secondary school teachers. Since p values were found to be greater than 0.05 which indicates that there is homogeneity of variances, that is, equal variances assumed, hence one way ANOVA can be applied. Since p values of psychological capital (total) of teachers was found to be 0.014, that is, less than 0.05, this indicates that there is no homogeneity of variances, that is, unequal variances assumed, hence Welsh test should be applied for psychological capital (total).

Table 4.7.3.1Test of homogeneity of variance for psychological capital

PC	Levene's statistic	df1	df2	Sig.
SELF	2.813	2	497	0.061
HOPE	0.012	2	497	0.988
RESI	0.105	2	497	0.900
OPTI	0.294	2	497	0.745
PC	4.308	2	497	0.014

Note; "SELF=self-efficacy, HOPE=hope, RESI=resilience, OPTI=optimism and PC= psychological capital."

Table 4.7.3.2Summary of one-way ANOVA for psychological capital

]	PC	S.S.	Df	MS	F	Sig.
	Between Groups	0.993	2	0.497	0.158	0.854
SELF	Within Groups	1566.949	497	3.153		
	Total	1567.942	499			
	Between Groups	2.832	2	1.416	0.634	0.531
HOPE	Within Groups	1110.160	497	2.234		
	Total	1112.992	499			
	Between Groups	2.374	2	1.187	0.681	0.507
RESI	Within Groups	866.434	497	1.743		
	Total	868.808	499			
	Between Groups	7.075	2	3.537	2.844	0.059
OPTI	Within Groups	618.125	497	1.244		
	Total	625.200	499			

Note: "SELF=self-efficacy, HOPE=hope, RESI=resilience and OPTI=optimism".

The above table 4.7.3.2 shows the differences in various dimensions namely, "self- efficacy, hope, resilience and optimism" of teachers with respect to teaching experience, namely, 0-5 years, 5-10 years, and 10 years & above. The F-values for "self-efficacy, hope, resilience and optimism" were found to be 0.158, 0.634, 0.681, 2.844 and respectively. All the F-values calculated were found to be statistically insignificant. The ANOVA results indicated that for "self-efficacy, hope, resilience and optimism" the mean scores of groups,0-5 years, 5-10 years, and 10 years &above

did not differ significantly. In ANOVA, table p-values were greater than 0.05, which implies that mean scores of all categories of independent variables, i.e., teaching experience are same. This implies that for "self-efficacy, hope, resilience and optimism" the mean scores of groups,0-5 years, 5-10 years, and 10 years &above did not differ significantly.

Table 4.7.3.3 Welsch tests of equality of means for psychological capital

	Statistic ^a	df1	df2	Sig.
PC(TOT)	0.509	2	185.267	0.602

Note: "PC (total) =psychological capital."

The above table 4.7.3.3 shows value of "Welch Statistic" for psychological capital (total), the value was found to be 0.602. The p value was found to be greater than (0.05) hence it can be summaries that mean for all categories/groups of IV are same. This suggested that psychological capital (total) did not differ with respect to teaching experience. This implies that teachers with 0-5 years, 5-10 years and 10 years &above of teaching experience did not differ with respect to psychological capital (total).

Table 4.7.3.4 Descriptive statistics for psychological capital

PC		N	M	S.D
Psychological	1	100	95.84	3.900
Capital	2	92	96.16	3.043
	3	308	95.79	3.327
	Total	500	95.87	3.396

Dependent variable: "PC=Psychological Capital".

This implies that teachers with 0-5 years, 5-10 years and 10 years & above of teaching experience did not differ with respect to "self-efficacy, hope, resilience, optimism and psychological capital" also evident from the mean scores in the below table 4.7.3.5. Figure 4.7.3.5 depicts graphical representation of mean scores of various dimensions of "psychological capital" with respect to teaching experience.

Table 4.7.3.5 Descriptive statistics for various dimensions of psychological capital with respect to teaching experience

Psychological Capital		N	M	SD	P- Value
	1	100	27.04	2.049	0.943
	2	92	26.96	1.670	
SELF	2	92	26.96	1.670	0.988
SELF	3	308	26.93	1.710	
	1	100	27.04	2.049	0.841
	3	308	26.93	1.710	
	1	100	27.40	1.463	0.504
	2	92	27.64	1.494	
HOPE	2	92	27.64	1.494	0.694
поге	3	308	27.50	1.505	
	1	100	27.40	1.463	0.840
	3	308	27.50	1.505	
	1	100	23.25	1.336	0.892
	2	92	23.34	1.303	
RESI	2	92	23.34	1.303	0.850
KESI	3	308	23.42	1.320	
	1	100	23.25	1.336	0.495
	3	308	23.42	1.320	
	1	100	18.15	1.104	0.878
	2	92	18.23	1.140	
OPTI	2	92	18.23	1.140	0.088
OFTI	3	308	17.95	1.111	
	1	100	18.15	1.104	0.258
	3	308	17.95	1.111	
	1	100	95.84	3.900	0.797
	2	92	96.16	3.900	
РСТОТ	2	92	96.16	3.043	0.576
PCIUI	3	308	95.79	3.327	
	1	100	95.84	3.900	0.993
	3	308	95.79	3.327	

Note: "N= number of participants, M=Mean, SD=standard deviation, SELF=self-efficacy, HOPE=hope, RESI=resilience OPTI=optimism and PC= Psychological Capital."

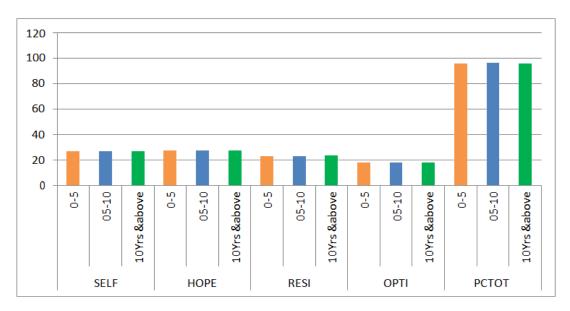


Figure 4.7.3.5: Mean score of psychological capital with respect to teaching experience

Note: "SELF=self-efficacy, HOPE=hope, RESI=resilience OPTI=optimism and PCTOT= psychological capital."

Discussion of Results

The insignificant F-values depicted no significant differences in "self-efficacy, hope, resilience and optimism" dimensions for all categories of teaching experience. This implies that teachers with 0-5 years, 5-10 years and 10 years & above of teaching experience did not differ in "self-efficacy, hope, resilience and optimism" dimensions.

The insignificant Welsch statistic value depicted no significant differences in psychological capital (total) for all categories of teaching experience. This implies that teachers with 0-5 years, 5-10years and 10years &above of teaching experience did not differ in psychological capital (total).

Based on the foregoing discussion, it may be deduced, that secondary school teachers with 0-5 years, 5-10 years and 10 years &above of teaching experience exhibited similar "self-efficacy, hope, resilience and optimism" and overall psychological capital, that is, displayed similar characteristics of confidence in one's ability to achieve difficult task, persevering towards goals, sustaining and returning back to attain success when surrounded by problems and deprivation; and having a positive frame of mind for success in present and years to come.

Thus, from results, it can be presumed that hypothesis 3(c) which states that "there exists no significant difference in psychological capital of secondary school teachers with respect to teaching experience" is thus accepted.

Hypothesis 3(d): "There exists no significant difference in psychological capital of secondary school teachers with respect to type of school."

The above hypothesis was examined by using independent sample t-test and the results have been shown in Table 4.7.4 on the basis of type of school.

4.7.4 Results relating to difference in psychological capital of teachers with respect to type of school.

Table 4.7.4 Mean scores of psychological capital of teachers with respect to type of school

Psychological capital ↓	Type of school	N	M	SD	t-value
SELF	Govt.	327	26.92	1.75	0.634
SEE	Pvt.	173	27.02	1.81	0.031
НОРЕ	Govt.	327	27.44	1.49	1.374
HOPE	Pvt.	173	27.63	1.50	1.374
RESI	Govt.	327	23.32	1.38	1.186
KESI	Pvt.	173	23.47	1.19	1.160
OPTI	Govt.	327	17.94	1.12	2.883**
OPTI	Pvt.	173	18.24	1.09	2.865***
	Govt.	327	95.61	3.38	
PC	Pvt.	173	96.36	3.38	2.349*

Note: "N=number of participants, M= Mean, SD=standard deviation, SELF=self-efficacy, HOPE=hope, RESI=resilience OPTI=optimism and PC= psychological capital, **signi, at 0.01 level; *signi. at 0.05 level."

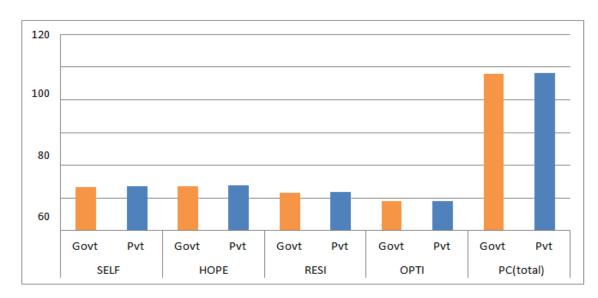


Fig. 4.7.4: Mean scores of psychological capital of teachers with respect to type of school Note; "SELF=self-efficacy, HOPE=hope, RESI=resilience OPTI=optimism and PC=psychological capital."

Table 4.7.4 depicts the mean scores and SD of dimensions namely .i.e. "self-efficacy, hope, resilience and optimism" and psychological capital (total) of teachers teaching in government and private secondary schools. The mean sores of "self-efficacy, hope, resilience and optimism dimensions and psychological capital (total)" of teachers in government schools was found to be 26.92, 27.44, 23.32, 17.94 and 95.61 respectively; and of teachers in private schools was found to be 27.02, 27.63, 23.47, 18.24 and 96.36 respectively. Also figure 4.7.4 shows the mean scores of "psychological capital" with respect to type of school.

The SD for "self-efficacy, hope, resilience and optimism dimensions and psychological capital (total)" of teachers teaching in government schools was found to be 1.75, 1.49, 1.38, 1.12, and 3.38 respectively; and of teachers teaching in private schools was found to be 1.81, 1.50, 1.19, 1.09 and 3.38 respectively.

Further, the t-values calculated for "self-efficacy, hope, resilience and optimism dimensions and psychological capital (total)" of teachers teaching in government and private secondary schools were found to be 0.634, 1.374, 1.186, 2.883 and 2.349 respectively.

The t-values calculated for "self-efficacy, hope and resilience" dimensions were found to be statistically insignificant. While the t-values with respect to "optimism" dimension and "psychological capital (total)" was found to be statistically significant at (0.01) & (0.05) levels respectively.

Discussion of Results

The significant t-values displayed significant differences in the "optimism" dimension and psychological capital (total) for teachers teaching in government and private schools. The observation of the mean scores for "optimism" dimension and psychological capital (total) showed that mean scores of teachers teaching in private schools was greater than that of teachers teaching in government schools. While the insignificant t-values indicated that both teachers in government and private schools did not differ in "self- efficacy, hope and resilience" dimensions. Hence, it can be deduced that both, teachers teaching in government and private schools exhibited similar "self-efficacy, hope and resilience", that is, belief in one's capacity to achieve precise targets in particular situations, perseverance towards targets when necessary redirecting paths to goals, enduring and rebounding to find success if faced troubles and difficulties.

Based on the foregoing discussion, it may be deduced, that teachers teaching in private schools exhibited more "optimism" that is, displayed positive life attitude and positive hopes about future; and overall psychological capital that is, possess individual strengths and good qualities that leads to the betterment of individual, society and organisation as compared to teachers teaching in government schools. Thus from results, it can be deduced that hypothesis 3(d) which states that "there exist no significant difference in psychological capital of secondary school teachers with respect to type of school" is thus not accepted.

Studies by (Hasnain, Hasan, and Chorath 2017 and Tiwari and Rai, 2019) found that the type of school showed its significant main effects for "self-efficacy, resilience and optimism" dimensions of psychological capital.

4.8 Comparison of learning orientation of secondary school teachers with respect to gender, locality, teaching experience and type of school

Hypothesis 4(a): "There exists no significant difference in learning orientation of secondary school teachers with respect to gender."

This hypothesis was examined by using independent sample t-test results have been shown in table 4.8.1 on the basis of gender.

4.8.1 Results relating to differences in learning orientation of secondary school teachers with respect to gender

Table 4.8.1 Mean scores of learning orientation of teachers with respect to gender

Learning Orientation	G	N	M	SD	t-value
	Male	149	81.97	8.06	
CONAF	Female	351	85.14	10.39	3.329**
	Male	149	21.26	4.41	
LEARN	Female	351	22.52	4.67	2.796**
	Male	149	23.80	3.40	
CSPLE	Female	351	23.34	4.66	1.025
	Male	149	127.03	13.60	
LO	Female	351	131.00	17.10	3.138**

Note: "G=gender, M=mean, SD=standard deviation, CONAF=conative and affective learning focus, LEARN=learning independence, CSPLE=committed strategic planning and learning efforts, LO=learning orientation, **signi at 0.01 level."

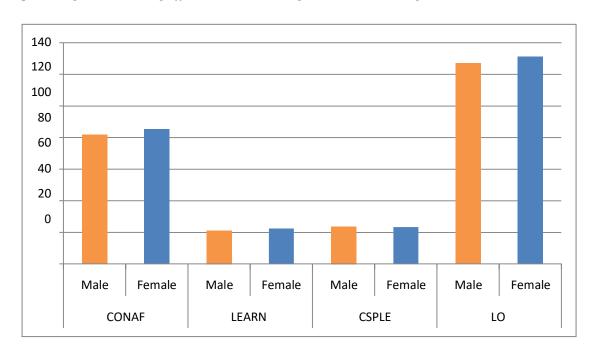


Figure 4.8.1: Mean scores of learning orientation of teachers with respect to gender

Note: "CONAF=conative & affective learning focus, LEARN=learning independence, CSPLE=committed strategic planning & learning efforts, LO=learning orientation."

Table 4.8.1 shows the mean scores and SD for various dimensions, namely, "conative and affective learning focus, learning independence or autonomy and committed strategic planning and learning effort" and learning orientation (total) of

male and female secondary school teachers. The mean scores for "conative and affective learning focus, learning independence or autonomy and committed strategic planning and learning effort" dimension and learning orientation (total) was found to be 81.97, 21.26, 23.80 and 127.03 for male teachers; and 85.14, 22.52, 23.34 and 131.00 for female teachers respectively. Also figure 4.8.1 shows the mean scores of "learning orientation" with respect to gender.

The SD for "conative and affective learning focus, learning independence or autonomy and committed strategic planning and learning effort" dimension and learning orientation (total) was found to be 8.06, 4.41, 3.40 and 13.60 for male teachers; and 10.39, 4.67, 4.66 and 17.10 for female teachers respectively.

Further, the t-values calculated for "conative and affective learning focus, learning independence or autonomy and committed strategic planning and learning effort" dimension and learning orientation (total) were found to be 3.329, 2.796, 1.025 and 3.138 respectively.

The t-values for "conative and affective learning focus, learning independence or autonomy" dimension and learning orientation (total) found were significant at 0.01 level. While for "committed strategic planning and learning effort" dimension of learning orientation t-value found was statistically insignificant.

Discussion of Results

The significant t-values depicted significant differences in "conative and affective learning focus, learning independence or autonomy" dimension and learning orientation (total) of male and female teachers. The observation of mean scores of "conative and affective learning focus, learning independence or autonomy" dimensions and learning orientation (total) of male and female teachers showed that mean scores of female teachers was more than that of the male teachers. While the insignificant t-value indicated that both male and female teachers were similar with regard to "committed strategic planning and learning effort" dimension.

Based on the foregoing discussion, it can be deduced, that female secondary school teachers exhibited better "conative and affective learning focus" (that is, establishing and achieving individual objectives will boost individual growth, wants, and acquiring knowledge performance); learning independence or autonomy (that is,

one's desires and competence to start taking responsibility, take decisions, command, assessing oneself and empower, and organize one's personal learning); and overall learning orientation, that is general disposition to or want to learn, as compared to the male teachers. While both male and female teachers had similar "committed strategic planning and learning effort", that is both male and female teachers embraced similar strategically committed thoughtful and determined efforts to accomplish learning.

Thus, from results, it can be observed that hypothesis 4(a) which states that "there exist no significant difference in learning orientation of secondary school teachers with respect to gender" is thus not accepted.

The present study findings were in congruence with the findings of (Kılıc and Saglam (2010) and Hacıeminoglu (2021) that gender had significant influence on learning orientation.

Hypothesis 4(b): "There exists no significant difference in learning orientation of teachers with respect to locality"

This hypothesis was examined by using independent sample t-test and the results have been shown in table 4.8.2 on the basis of locality.

4.8.2 Results relating to differences in learning orientation of secondary school teachers with respect to locality

Table 4.8.2 Mean scores of learning orientation of teachers with respect to locality

Learning orientation	Location	N	M	SD	t-value
CONAF	Urban	292	84.66	10.29	1.242
CONAF	Rural	208	83.55	9.20	1.242
LEARN	Urban	292	22.35	4.76	1.176
LEARN	Rural	208	21.86	4.44	1.170
CSPLE	Urban	292	23.21	4.63	0.447
CSFLE	Rural	208	23.85	3.84	0.447
LO	Urban	292	130.21	16.80	1.064
LU	Rural	208	129.25	15.42	1.004

Note: "N=number of participants, M= Mean, SD= standard deviation, CONAF=conative & affective learning focus, LEARN=learning independence, CSPLE=committed strategic planning and learning efforts, LO (total) =learning orientation."

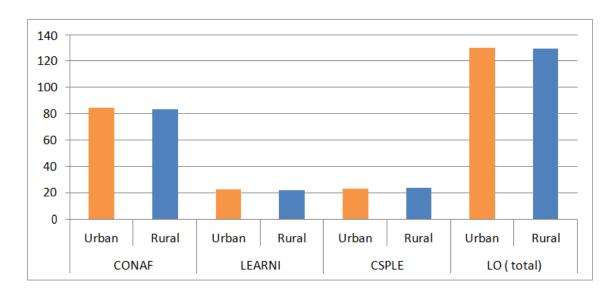


Figure 4.8.2: Mean scores of learning orientation of teachers with respect to locality Note: "CONAF=conative & affective learning focus, LEARN=learning independence, CSPLE=committed strategic planning & learning efforts, LO=learning orientation".

Table 4.8.2 displays the mean scores and SD of dimensions, namely "conative and affective learning focus, learning independence or autonomy, committed strategic planning & learning efforts" and learning orientation (total), of teachers teaching in urban and rural teachers. The mean score of "conative and affective learning focus, learning independence or autonomy, committed strategic planning & learning effort" dimension and learning orientation (total)of teachers teaching in urban schools was found to be 84.66, 22.35, 23.21 and 130.21 respectively; and of teachers teaching in rural schools was found to be 83.55, 21.86, 23.85 and 129.25 respectively. Also figure 4.8.2 shows the mean scores of learning orientation with respect to locality.

The SD for "conative and affective learning focus, learning independence or autonomy, committed strategic planning, learning effort" dimension and learning orientation (total), of teachers teaching in urban schools was found to be 10.29, 4.76, 4.63 and 16.80 respectively; and of teachers teaching in rural schools were found to be 9.20, 4.44, 3.84 and 15.42 respectively.

Further, the t-values calculated for "conative and affective learning focus, learning independence or autonomy, committed strategic planning & learning efforts" dimension and learning orientation (total), of teachers teaching in urban and rural secondary schools were found to be 1.242, 1.176, 0.447 and 1.064respectively. All the t-values were found to be insignificant.

Discussion of Results

The insignificant t values indicated that both teachers teaching in urban and rural schools did not differ in "conative and affective learning focus, learning independence or autonomy, committed strategic planning and learning effort" dimension and learning orientation (total).

Based on the foregoing discussion, it can be deduced, that both teachers teaching in urban and rural secondary schools exhibited similar "conative and affective learning focus" (that is, establishing and achieving individual objectives will boost individual growth, wants, and acquiring knowledge performance); "learning independence or autonomy" (that is, one's desires and competence to start taking responsibility, take decisions, command, assessing oneself and empower, and organize one's personal learning); "committed strategic planning and learning effort", that is, embraced similar strategically committed thoughtful and determined efforts to accomplish learning; and overall learning orientation, that is general disposition to or want for learning. Therefore, from results, it can be accomplished that hypothesis 4(b) which states that "there exist no significant difference in learning orientation of secondary school teachers with respect to locality" is thus accepted.

Hypothesis 4(c): states that "There exists no significant difference in learning orientation of teachers with respect to teaching experience."

The hypothesis was analyzed by using one-way ANOVA and the results be shown in table 4.8.3.1 on the basis of teaching experience.

4.8.3 Results relating to differences in learning orientation of teachers with respect to teaching experience

In order to test the hypothesis, and to find out if the learning orientation of teachers differs with respect to teaching experience, the respondents were divided into three groups/ categories, namely, 0-5 years, 5-10 years, and 10 years & above and Oneway ANOVA was employed. Before applying ANOVA, homogeneity of variances must be checked through Levene's test.

Table 4.8.3.1 Test of homogeneity of variances for learning orientation

LO	Levene's Statistic	df1	df2	Sig.
CONAF	3.854	2	497	0.022
LEARN	5.161	2	497	0.006
CSPLE	0.445	2	497	0.641
LO	2.997	2	497	0.051

Note: "CONAF=conative and affective learning focus, LEARN=learning independence, CSPLE=committed strategic planning and learning efforts, LO=learning orientation".

The above table 4.8.3.1depicts the results of Levene's test for "conative and affective learning focus, learning independence, committed strategic planning and learning efforts" dimension and learning orientation (total) of secondary school teachers. Since p values of "conative and affective learning focus and learning independence or autonomy" dimension of teachers were found to be 0.022 and 0.006 respectively, that is, less than 0.05, this indicates that there is no homogeneity of variances, that is, unequal variances assumed, hence Welsch test should be applied for these dimensions. Further for "committed strategic planning and learning efforts" dimension and learning orientation (total) of teachers, p value was found to be 0.641 and .051, that is, greater than 0.05, which shows that there is homogeneity of variances, that is, equal variances assumed, hence one way ANOVA can be applied for the concerned dimension and learning orientation (total).

Table 4.8.3.2 Robust Tests of equality of means for dimensions of learning orientation

		Levene's Statistic	df1	df2	Sig.
CONAF	Welch	1.517	2	204.511	0.222
LEARN	Welch	5.049	2	208.138	0.007

Note: "CONAF=conative and affective learning focus, LEARN=learning independence".

The above table 4.8.3.2 shows the differences for "conative and affective learning focus and learning independence or autonomy" of teachers with respect to teaching experience, namely, 0-5years, 5-10years, and 10years &above. The values of Welch Statistic for "conative and affective learning focus and learning independence or autonomy" found to be 1.517 and 5.049 respectively. The p value for "conative and affective learning focus" was found to be greater than 0.05(p=0.222), hence it can be inferred that mean scores for all categories/groups of IV are same. This suggested that learning orientation of teachers for "conative and affective learning focus" dimension of learning orientation did not differ with respect to teaching experience. While it was clear that p value for "learning independence or autonomy" dimension was found to be less than 0.05 (p=.007), hence it may be inferred that at least one category of IV differs significantly from other categories. Thus, for paired comparisons, in Post hoc analysis, Games Howell method was applied (because in Welch test p value is less than 0.05(p<0.05). The following table 4.8.3.3 shows the multiple comparisons using Games Howell Method for "learning independence or autonomy".

Table 4.8.3.3 Multiple comparisons for dimensions of learning orientation

DV	TE category	TEC	Mean difference	S.E	Sig.
	1	2	0.778	0.579	0.373
	1	3	1.449*	0.457	0.005
LEARN	2	1	-0.778	0.579	0.373
LEAKN	2	3	0.672	0.534	0.421
2	1	-1.449*	0.457	0.005	
	3	2	-0.672	0.534	0.421

Note: "1=0-5 years, 2=5-10 years, and 3=10 years & above, LEARN=learning independence or autonomy, TE Category=Teaching experience category, TEC= Teaching Experience comparision, *significant at 0.05".

Table 4.8.3.4 Descriptive statistics for learning orientation with respect to teaching experience

I	LO	N	M	SD
	1	100	85.26	8.519
CONAF	2	92	84.96	8.931
CONAF	3	308	83.62	10.485
	Total	500	84.20	9.855
	1	100	23.18	3.591
LEARN	2	92	22.40	4.350
LEARN	3	308	21.73	4.950
	Total	500	22.14	4.628

Note: "N= number of participants, M=mean and SD= standard deviation, 1=0-5 years, 2=5-10 years, and 3=10 years &above CONAF=conative and affective learning focus, LEARN=learning independence or autonomy."

While the p values for teaching experience of 0-5 years and5-10years;0-5years and10years &above; 5- 10years and 10years &above for "learning independence or autonomy" were found to be 0.373, 0.005 and 0.421 respectively. The p value for 0-5 years and 10 years &above for "learning independence or autonomy" was found to be significant (p=.005, p< 0.05), indicated significant differences between 0-5 years and 10 years &above for "learning independence."

Further from table 4.8.3.4 it is quite evident that the mean scores 0-5years, 5-10 years and 10years & above for "learning independence" were found to be23.18, 22.40 and 21.73 respectively. The mean of teachers with (0-5 years) of teaching experience was found to be greater than that of teachers with (10years &above) of teaching experience for "learning independence" dimension. This implies that teachers with 0-5years of teaching experience exhibited greater learning independence/autonomy in comparison to teachers with 10years &above of teaching experience. The reason behind this can be that teachers who are novice in the teaching profession are more enthusiastic, motivated and have greater desire and zeal to accomplish learning in different areas.

Further for "committed strategic planning and learning efforts" dimension and learning orientation (total) of teachers, p value was found to be 0.641 and 0.051, that is, greater than 0.05 which indicates that there is homogeneity of variances, that is, equal variances assumed, hence one way ANOVA can be applied for the concerned dimension and learning orientation (total). The results of ANOVA are depicted in the following table 4.8.3.5

Table 4.8.3.5 Summary of ANOVA for learning orientation with respect to teaching experience

Learning orientation		SS	Df	MS	F	Sig.
	Between Groups	23.813	2	11.907	1.630	0.197
CSPLE	Within Groups	3629.809	497	7.303		
	Total	3653.622	499			
	Between Groups	1113.123	2	556.561	2.339	0.098
LO	Within Groups	118271.139	497	237.970		
	Total	119384.262	499			

Note; "CSPLE=committed strategic planning and learning efforts, LO=learning orientation".

The above table 4.8.3.5 demonstrates the results of ANOVA for "committed strategic planning and learning effort" and learning orientation (total)of teachers for teaching experience. The F-values (1.630, 2.339) for "committed strategic planning and learning effort" dimension and learning orientation (total) were found to be statistically insignificant (p=0.197 and 0.098 respectively p>0.05). In ANOVA table, p-values were greater than 0.05, which implies that mean scores of all categories of IV, i.e. teaching experience are same. The ANOVA results suggested that for "committed strategic planning and learning effort" dimension and learning orientation (total), the mean scores of groups/categories, teaching experience did not differ significantly. This implies that teachers with 0-5 years, 5-10 years and 10 years & above of teaching experience did not differ with respect to "conative and affective learning focus, committed strategic planning and learning effort and learning orientation (total)" but differs significantly with respect to "leaning independence or autonomy" also evident from the mean scores in the below Table 4.8.3.6. Figure 4.8.3.6 depicts graphical representation of mean scores of various dimensions of learning orientation with respect to teaching experience.

Table 4.8.3.6 Descriptive statistics for learning orientation (total) and its dimension

Learning Orie	ntation	N	M	SD	P- Value
	1	100	85.26	8.519	0.969
	2	92	84.96	8.931	0.909
CONAF	2	92	84.96	8.931	0.452
CONAI	3	308	83.62	10.485	0.432
	1	100	85.26	8.519	0.26
	3	308	83.62	10.48	0.20
	1	100	23.18	3.591	0.373
	2	92	22.40	4.350	0.373
LEARN	2	92	22.40	4.350	0.421
LEARIN	3	308	21.73	4.950	
	1	100	23.18	3.591	0.005
	3	308	21.73	4.950	0.003
	1	100	24.94	2.546	0.025
	2	92	25.08	2.722	0.935
Capi E	2	92	25.08	2.722	0.250
CSPLE	3	308	24.56	2.745	0.250
	1	100	24.94	2.546	0.450
	3	308	24.56	2.745	
	1	100	133.38	12.86	0.906
	2	92	132.43	14.42	
	2	92	132.43	14.42	0.356
LO	3	308	129.92	16.43	
	1	100	133.38	12.86	0.126
	3	308	129.92	16.43	

Note: "N=number of participants, M=mean, SD=standard deviation, CONAF=conative & affective learning focus, LEARN=learning independence, CSPLE=committed strategic planning &learning efforts, LO=learning orientation".

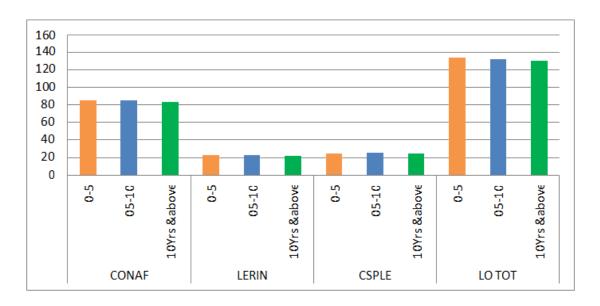


Figure 4.8.3.6: Mean scores of learning orientation of teachers with respect to teaching experience

Note: "CONAF=conative & affective learning focus, LEARN=learning independence or autonomy, CSPLE=committed strategic planning &learning efforts, LO=learning orientation".

Discussion of Results

The insignificant Welsch statistic value for "conative and affective learning focus" dimension with respect to teaching experience indicated that all the teachers had similar "conative and affective learning focus." Further the significant Welsch statistic value for "learning independence or autonomy" dimension indicated that there exist significant differences in the teachers with respect to teaching experience. This implies that teachers with 0-5years of teaching experience exhibited greater learning independence/autonomy in comparison to teachers with 10 years & above years of teaching experience.

Further, the insignificant F-values showed no significant differences in the "committed strategic planning and learning effort" dimension and learning orientation (total), with respect to teaching experience. This implies that teachers with 0-5 years, 5- 10 years and 10 years & above of teaching experience did not differ for "committed strategic planning and learning effort" dimension and learning orientation (total).

Based on the foregoing discussion, it can be deduced that teachers with 0-5 years of teaching experience exhibited greater learning independence or autonomy,

that is, willingness and ability to assume ownership, take decisions, regulate, assess one self and encourage, and advance own learning. While all the secondary school teachers had similar "conative and affective learning focus (setting and accomplishing the personal learning goals will increase personal growth, needs and learning performance);committed strategic planning and learning effort" that is, strategically committed thoughtful and determined efforts to accomplish learning and overall learning orientation that is, one's general disposition to or want to learn better. Thus from results, it can be concluded that hypothesis 4(c) which states that "There exists no significant difference in learning orientation of secondary school teachers with respect to teaching experience" is thus not accepted.

Hypothesis 4(d): "There exists no significant difference in learning orientation of teachers with respect to type of school"

This hypothesis was examined by using independent sample t-test the results have been shown in table 4.8.4 on the basis of type of school.

4.8.4 Results relating to differences in learning orientation of teachers with respect to type of school

Table 4.8.4 Mean scores of learning orientation of teachers with respect to type of school

Learning Orientation	Type of School	N	М	SD	t-value
CONAF	Govt.	327	83.21	11.06	3.089**
CONAF	Pvt.	173	86.05	6.67	3.069
LEADM	Govt.	327	21.33	5.25	5.588**
LEARN	Pvt.	173	23.69	2.49	3.300
CSPLE	Govt.	327	24.53	2.95	2.339**
CSPLE	Pvt.	173	25.12	2.10	2.339***
LO	Govt.	327	129.07	17.67	4.043**
LO	Pvt.	173	134.86	8.95	4.043

Note: "N=number of participants, M= mean and SD=standard deviation, CONAF=conative and affective learning focus, LEARN=learning independence, CSPLE=committed strategic planning & learning efforts, LO=learning orientation, govt.=government, pvt.= private, **signi at 0.01 level".

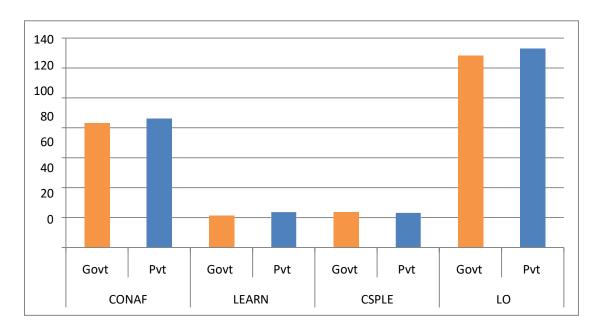


Figure 4.8.4: Mean scores of learning orientation of teachers with respect to type of school

Note: "CONAF=conative and affective learning focus, LEARN=learning independence, CSPLE=committed strategic planning and learning efforts, LO=learning orientation."

Table 4.8.4 represent the mean score and SD of dimensions namely "conative and affective learning focus, learning independence or autonomy and committed strategic planning and learning effort and learning orientation (total)" of teachers teaching in government and private schools. The mean scores of "conative and affective learning focus, learning independence or autonomy and committed strategic planning and learning effort dimension and learning orientation (total)" of teachers teaching in government schools were found to be 83.21, 21.33, 24.53 and 129.07 respectively; and of teachers in private schools were found to be 86.05, 23.69, 25.12 and 134.86 respectively. Also figure 4.7.1 shows the mean scores of "learning orientation" with respect to type of school.

The SD for "conative and affective learning focus, learning independence or autonomy and committed strategic planning and learning effort and learning orientation (total)" of teachers in government schools were found to be 11.06, 5.25, 2.95 and 17.67 respectively and of teachers teaching in private schools was found to be 6.67, 2.49, 2.10 and 8.95 respectively.

Further, the t-values calculated for "conative and affective learning focus, learning independence or autonomy, committed strategic planning and learning effort and learning orientation (total)" of teachers teaching in government and private schools was found to be 3.089, 5.588, 2.339 and 4.043 respectively.

The t-values for "conative and affective learning focus, learning independence or autonomy, committed strategic planning and learning effort dimensions and learning orientation (total)" of teachers teaching in government and private schools were found to be significant at 0.01 level.

Discussion of Results

The significant t-values exhibited significant differences in "conative and affective learning focus, learning independence or autonomy, committed strategic planning and learning efforts dimensions and learning orientation (total)" of teachers teaching in government and private schools. The observation of the mean score for "conative and affective learning focus, learning independence or autonomy, committed strategic planning and learning efforts and learning orientation (total)", showed that mean scores of teachers in private schools was more than teachers teaching in government schools.

Based on the foregoing discussion, it can be deduced that teachers teaching private schools exhibited better "conative and affective learning focus (that is, setting and accomplishing the personal learning goals will increase personal growth, needs and learning performance), learning independence or autonomy" (one's willingness and capacity to assume charge, make decisions, exercise control, analyse and inspire oneself, and control one's personal learning); "committed strategic planning and learning efforts" (embrace strategically committed thoughtful and determined efforts to accomplish learning) and overall learning orientation (that is general disposition to or want to learn) than the teachers teaching in government schools. Thus from results, it can be concluded that hypothesis 4(d) which states that "there exist no significant difference in learning orientation of secondary school teachers with respect to type of school" is thus not accepted.

The statistical technique of independent sample t-test and One way ANOVA were used to study the differences in the means of the variables of interest i.e., effectiveness of secondary school teachers, perceived organisational climate, psychological capital and learning orientation with respect to the demographic variables gender, locality, teaching experience and type of school.

4.9 CORRELATIONAL ANALYSIS

For measuring the relationship in dependent variable (effectiveness of teachers) and the independent variable (perceived organisational climate, psychological capital and learning orientation), Karl Pearson product moment correlation was used. The fourth objective of the study was "to examine the

relationship among effectiveness of secondary school teachers, perceived organisational climate, psychological capital and learning orientation." Keeping in view the objective the aforementioned technique was applied.

4.9.1 Relationship of effectiveness of secondary school teachers with perceived organisational climate, psychological capital and learning orientation

In order to test this hypothesis correlation matrix, employing Karl Pearson product moment correlation, has been prepared so as to find out how each of the independent variable correlates with the dependent variable. The following table 4.9.1 shows the correlation of "effectiveness of secondary school teachers with perceived organisational climate, psychological capital and learning orientation" along with their respective dimensions. While the respective relationship of effectiveness of secondary school teachers with perceived organisational climate; psychological capital and learning orientation has been analysed separately under the following headings.

Table 4.9.1 Summary of correlation in effectiveness of teachers with perceived organisational climate, psychological capital and learning orientation

INDEPENDENT VARIABLES []	EFFECTIVENESS OF TEACHERS AND DIMENSIONS (Dependent Variable)							
IDV	PTP	CM	KSM	TC	IR	ET (total)		
RRIR	.064	.080	.109*	.088	.069	.086		
ORGP	.029	.055	.114*	.088*	.058	.072		
CRSI	.095*	.159**	.190**	.143**	.133**	.152**		
ALB	.184**	.238**	.188**	.215**	.226**	.230**		
OC(Total)	.064	.097*	.143**	.111*	.087	.106*		
SELF	.119**	.126**	.083	.105*	.130**	.123**		
HOPE	.056	.037	.014	.040	.057	.046		
RESI	.094*	.068	.083	.085	.119**	.096*		
OPTI	.032	.042	.041	.037	.048	.043		
PC(Total)	.134**	.122**	.095*	.117**	.155**	.136**		
CONAF	.154**	.155**	.174**	.196**	.183**	.187**		
LEARN	.118**	.132**	.169**	.161**	.132**	.152**		
CSPLE	.112*	.155**	.190**	.146**	.135**	.156**		
LO (Total)	.153**	.165**	.195**	.198**	.179**	.192**		

Note: "PPT-preparation and planning for teaching, CM= classroom management, KSM=knowledge of subject matter etc., TC=teacher characteristics, IR=interpersonal relations, ET(total)=effectiveness of teacher, RRIR=results rewards and interpersonal relations, ORGP=organisational process, CRSI=clarity of roles and sharing of information, ALB=altruistic behaviour, OC(total) organisational climate, SELF=self- efficacy, HOPE=hope, RESI=resilience, OPTI=optimism,

PC(total) =psychological capital, CONAF=conative and affective learning focus, LEARN=learning independence, CSPLE=committed strategic planning and learning efforts, LO(total) =learning orientation, ** significant at 0.01 level & * significant at 0.05 level".

4.9.2 Correlation of effectiveness of secondary school teachers with perceived organisational climate

In this section the relationship of effectiveness of secondary school teachers and perceived organisational climate has been analysed. For realizing the objectives, correlation matrix using method of Karl Pearson product moment correlation, has been prepared for analyzing how perceived organisational climate and its dimensions (independent variable) correlates with effectiveness of teachers and its dimensions (dependent variable). The results have been shown in the following table 4.9.2

Table 4.9.2 Summary of correlation in effectiveness of teachers with perceived organisational climate

INDEPENDENT VARIABLES	—⇒ Ti	TEACHER EFFECTIVENESS AND DIMENSIONS (Dependent Variable)						
*	PTP	PTP CM KSM TC IR ET (Total)						
RRIR	0.064	0.08	0.109*	0.088	0.069	0.086		
ORGP	0.029	0.055	0.114*	0.088*	0.058	0.072		
CRSI	0.095*	0.159**	0.190**	0.143**	0.133**	0.152**		
ALB	0.184**	0.238**	0.188**	0.215**	0.226**	0.230**		
OC(Total)	0.064	0.097*	0.143**	0.111*	0.087	0.106*		

Note: "PPT=preparation and planning for teaching, CM=classroom management, KSM=knowledge of subject matter etc., TC=teacher characteristics, IR=interpersonal relations, ET (total)=effectiveness of teachers, RRIR=results rewards and interpersonal relations, ORGP=organisational processes CRSI=clarity of roles and sharing of information, ALB=altruistic behaviour & OC (total) organisational climate, ** significant at 0.01 level & * significant at 0.05 level."

Table 4.9.2 displays correlation between effectiveness of secondary school teachers and perceived organisational climate. The values of coefficient of correlation for "results rewards and interpersonal relations" dimension with "preparation and planning for teaching, classroom management, knowledge of subject matter etc., teacher characteristics, interpersonal relations and effectiveness of teachers (total)" were found to be 0.064, 0.080, 0.109*, 0.088, 0.069 and 0.086 respectively.

Examination of the correlation matrix revealed that, "results rewards and interpersonal relations" dimension was positively correlated with "knowledge of subject matter etc." dimension(sign. at 0.05 level), while for other dimensions "preparation and planning for teaching, classroom management, teacher characteristics, interpersonal relations, and effectiveness of teachers (total)" the correlation was found to be insignificant.

The value of coefficient of correlations for "organisational processes" dimension with "preparation and planning for teaching, classroom management, knowledge of subject matter etc., teacher characteristics, interpersonal relations" and effectiveness of teachers (total) were found to be 0.029, 0.055, 0.114*, 0.088*, 0.058 and 0.072 respectively. Examination of the correlation matrix revealed that, "organisational processes" dimension was positively correlated with "knowledge of subject matter etc. and teacher characteristics" dimensions (at 0.05level), while for other dimensions "preparation and planning for teaching, classroom management, interpersonal relations and effectiveness of teachers (total)" the correlation was found to be insignificant.

Similarly, the value of coefficient of correlations for "clarity of roles and sharing of information" and "preparation and planning for teaching, classroom management, knowledge of subject matter etc., teacher characteristics, interpersonal relations and effectiveness of teachers (total)" were found to be 0.095*, 0.159**, 0.190**, 0.143**, 0.133** and 0.152** respectively. The results highlighted a positive relationship between "clarity of roles and sharing of information" and "preparation and planning for teaching (sign. at 0.05 level), while for classroom management, knowledge of subject matter etc., teacher characteristics, interpersonal relations and effectiveness of teachers (total)" relationship was found significant at (0.01level).

Similarly, the value of coefficient of correlation for "altruistic behaviour" dimension and "preparation and planning for teaching, classroom management, knowledge of subject matter etc., teacher characteristics, interpersonal relations and effectiveness of teachers (total)" were found to be 0.184**, 0.238**, 0.188**, 0.215**, 0.226** and 0.230** respectively. Examination of the values of coefficient of correlation for "altruistic behaviour" dimension revealed a positive relationship in "altruistic behaviour" and "preparation and planning for teaching, classroom management, knowledge of subject matter etc., teacher characteristics, interpersonal relations dimensions and effectiveness of teachers (total)" (sign. at 0.01 level).

The values of coefficient of correlation for overall perceived organisational

climate and "preparation and planning for teaching, classroom management, knowledge of subject matter etc., teacher characteristics, interpersonal relations and effectiveness of teachers (total)"were found to be 0.064, 0.097*, 0.143**, 0.111*, 0.087 and 0.106* respectively. Examination of values revealed positive relationship between "knowledge of subject matter etc. (significant at 0.01level), while for classroom management, teacher characteristics and effectiveness of teachers (total)" the correlation was significant at (0.05) level.

Discussion of Results

Thus it can be deduced that "clarity of roles and sharing of information and altruistic behavior" dimensions were found to be positively and significantly related to "preparation and planning for teaching, classroom management, knowledge of subject matter etc., teacher characteristics, interpersonal relations dimensions and effectiveness of teachers (total)". Further "results rewards and interpersonal relations" dimension was found to be significantly related to "knowledge of subject matter etc."; while "organisational processes" was found to be significantly related to "knowledge of subject matter etc., and teacher characteristics" of effectiveness of teachers. Though magnitude of relationship in the variables was found to be low, but was positive and significant. Further overall perceived organisational climate was found to be positively and significantly related to "classroom management", "knowledge of subject matter etc"., "teacher characteristics" and overall teacher effectiveness. Additionally, "results rewards and interpersonal relations" dimension was not related to "preparation and planning for teaching, classroom management, teacher characteristics, interpersonal relations and overall effectiveness of teachers"; and "organisational processes" dimension was not related to "preparation and planning for teaching, classroom management, interpersonal relations" and overall effectiveness of teachers.

This implies that better the "results rewards and interpersonal relations" that is, when merit is rewarded, people are evaluated on the basis of results and creative climate sustains, better will be "knowledge of subject matter etc." of teachers. Further, better the "organisational processes", that is, when individual and team development is encouraged, when people working in the organisation are consulted before taking any decision and resources are made available, better will be "knowledge of subject matter etc. and teacher characteristics". Additionally, if there is clarity with respect to the roles assigned to teachers, new ideas are accepted and problems are shared in a proper way then better will be the effectiveness of teachers, that is more "clarity of roles and sharing of information" better will be the "preparation and planning for teaching, classroom management, knowledge of subject matter etc., teacher characteristics, interpersonal relations and overall effectiveness of teachers". In

addition, more the "altruistic behaviour" that is, people in the organisation help each other, better will be "preparation and planning for teaching, classroom management, knowledge of subject matter etc., teacher characteristics, interpersonal relations and overall effectiveness of teachers". Furthermore, better the perception of organisational climate, better will be the "classroom management, knowledge of subject matter etc., teacher characteristics and overall effectiveness of teachers".

Thus from results it is summed up that hypothesis 5 which states that "there exists no significant relationship of effectiveness of secondary school teachers with perceived organisational climate" is not accepted for all the dimensions and overall effectiveness of teachers with overall perceived organisational climate and "clarity of roles and sharing of information" and "altruistic behavior" dimensions; and accepted to some extent for "results rewards and interpersonal relations and organisational processes" dimensions.

Ch and Rashid (2021) explored the impact of organisational climate on secondary school teacher's competence and found a significant correlation between them. Selamat, Samsu and Mishra and Acha (2011) found that teacher efficacy of the school teachers was affected by organisational climate. Raza & Shah (2010) found that organisational climate and performance of the teachers were correlated. Sodhi (2010) found significant relationship between teacher effectiveness of teachers and school organisational climate. On the contrary of this study, Kaur (2018) found no significant relationship between "teacher effectiveness and organisational climate".

4.9.3 Correlation of effectiveness of secondary school teachers with psychological capital Table 4.9.3 Summary of correlation in effectiveness of teachers with psychological capital

INDEPENDENT	$\qquad \qquad \Longrightarrow$	ТЕАСНЕ	R EFFECTIVE (Depende	ENESS AND ent Variable)	DIMENSION	V		
VARIABLES	PPT	CM KSM TC IR I						
SELF	0.119**	0.126**	0.083	0.105*	0.130**	0.123**		
НОРЕ	0.056	0.037	0.014	0.04	0.057	0.046		
RESI	0.094*	0.068	0.083	0.085	0.119**	0.096*		
OPTI	0.032	0.042	0.041	0.037	0.048	0.043		
PC(Total)	0.134**	0.122**	0.095*	0.117**	0.155**	0.136**		

Note: "PPT=preparation and planning for teaching, CM=classroom management, KSM=knowledge of subject matter etc.,TC=teacher characteristics, IR=interpersonal relations, ET(total)=effectiveness of teachers, SELF=self-efficacy, HOPE=hope, RESI=resilience OPTI=optimism PC(total) =psychological capital, ** significant at 0.01 level & * significant at 0.05 level."

Above table 4.9.3 displays correlation of "effectiveness of secondary school teachers with psychological capital". The values of coefficient of correlation for "self-efficacy" with "preparation and planning for teaching, classroom management, knowledge of subject matter etc., teacher characteristics, interpersonal relations and effectiveness of teachers (total)" were found to be 0.119**, 0.126**, 0.083, 0.105*, 0.130** and 0.123** respectively. Examination of the correlation matrix revealed that, "self-efficacy" dimension was positively correlated with "preparation and planning for teaching, classroom management, interpersonal relations and effectiveness of teachers (total)" at 0.01 level while with "teacher characteristics" at 0.05 level; while for "knowledge of subject matter etc." dimension the correlation was found to be insignificant.

The value of coefficient of correlation for "hope" with "preparation and planning for teaching, classroom management, knowledge of subject matter etc., teacher characteristics, interpersonal relations and effectiveness of teachers (total)" were found to be 0.056, 0.037, 0.014, 0.040, 0.057 and 0.046 respectively. Examination of the correlation matrix revealed no significant correlation in "hope" dimension and "preparation and planning for teaching, classroom management, knowledge of subject matter etc., teacher characteristics, interpersonal relations and effectiveness of teachers (total)".

Similarly the value of coefficient of correlation for "resilience" with "preparation and planning for teaching, classroom management, knowledge of subject matter etc., teacher characteristics, interpersonal relations and effectiveness of teachers (total)" were found to be 0.094*, 0.068, 0.083, 0.085, 0.119**, and 0.096* respectively. Examination of the correlation matrix revealed that, "resilience" dimension was positively correlated with "preparation and planning for teaching, interpersonal relations and overall effectiveness of teachers". While for other dimensions "classroom management, knowledge of subject matter etc., teacher characteristics, and interpersonal relations" the correlation was found to be insignificant.

The values of coefficient of correlation for "optimism" with "preparation and planning for teaching, classroom management, knowledge of subject matter etc., teacher characteristics, interpersonal relations and effectiveness of teachers (total)" were found to be 0.032, 0.042, 0.041, 0.037, 0.048 and 0.043 respectively.

Examination of the correlation matrix revealed no significant correlation in "optimism" dimension and "preparation and planning for teaching, classroom management, knowledge of subject matter etc., teacher characteristics, interpersonal relations and effectiveness of teachers (total)".

The values of coefficient of correlation for overall psychological capital and "preparation and planning for teaching, classroom management, knowledge of subject matter etc., teacher characteristics, interpersonal relations and effectiveness of teachers (total)" were found to be 0.134**, 0.122**, 0.095,* 0.117**, 0.155** and 0.136**respectively. Examination of values revealed that overall psychological capital was positively correlated with "preparation and planning for teaching, classroom management, teacher characteristics, interpersonal relations" and effectiveness of teachers (total) at 0.01 level while for "knowledge of subject matter etc." dimension the correlation was found to be significant at (0.05) level.

Discussion of Results

Thus, it can be deduced that "self-efficacy" and overall PsyCap were found to be positively and significantly related to "preparation and planning for teaching, classroom management, knowledge of subject matter etc., teacher characteristics, interpersonal relations and effectiveness of teachers (total)". Further, "resilience" dimension was found to be significantly related to "preparation and planning for teaching, interpersonal relations dimensions and overall effectiveness of teachers". Though magnitude of relationship in the variables was found to be low, but was positive and significant. Additionally, "hope and optimism" dimensions were not related to any of the dimensions and overall effectiveness of teachers.

This implies that greater the "self-efficacy" that is, self-assurance in one's potential to succeed in specific situation, and overall psychological capital of teachers better will be "preparation and planning for teaching, classroom management, knowledge of subject matter etc., teacher characteristics, interpersonal relations and overall effectiveness of teachers". Additionally, greater the "resilience" that is, when confronted with obstacles and adversity, persevering and fighting again to reach excellence better will be "preparation and planning for teaching, interpersonal relations and overall effectiveness of teachers".

As a result of the findings, hypothesis 5 which states that "there exists no significant relationship of effectiveness of secondary school teachers with

psychological capital" is not accepted for all the dimensions and overall effectiveness of teachers with overall psychological capital and self-efficacy and resilience dimensions; and accepted for hope and optimism dimension of psychological capital."

Varadwaj and Varadwaj (2021) found psychological capital as an attribute for the effectiveness of teachers. Huang (2015) found that self-efficacy, hope and optimism of psychological capital are positively related with the creative teaching. Wang (2014) concluded that higher the psychological capital better was the teaching effectiveness, further "self-efficacy" was found to be the best among the four constructs of the psychological capital. Kaur (2018) found measures of teaching competency and measures of psychological capital were correlated with each other. Psychological capital is a crucial antecedent of teacher performance and well-being (Rehman et al., 2016; Wang, Chen, & Hsu, 2014; Huang, Liu, Hsieh, & Chang, 2015). Karakus, et al., 2019 discovered that instructors with a higher level of PsyCap have a more positive outlook for happenings near them and are less harmed by the detrimental effects of unpleasant school experiences.

4.9.4 Correlation of effectiveness of secondary school teachers with learning orientation Table 4.9.4 Summary of correlation in effectiveness of teachers with learning orientation

INDEPENDENT VARIABLES		TEACHER EFFECTIVENESS AND DIMENSION (Dependent Variable)						
4	PPT CM KSM TC IR ET(Total)							
CONAF	0.154**	0.155**	0.174**	0.196**	0.183**	0.187**		
LEARN	0.118**	0.132**	0.169**	0.161**	0.132**	0.152**		
CSPLE	0.112*	0.112* 0.155** 0.190** 0.146** 0.135** 0.156**						
LO(Total)	0.153**	0.165**	0.195**	0.198**	0.179**	0.192**		

Note: "PPT=preparation and planning for teaching, CM=classroom management, KSM=knowledge of subject matter etc., TC=teacher characteristics, IR=interpersonal relations, ET (total)=effectiveness of teachers, CONAF=conative and affective learning focus, LEARN=learning independence, CSPLE=committed strategic planning and learning efforts and LO (total) =learning orientation, ** significant at 0.01 level & * significant at 0.05 level".

The table 4.9.4 displays correlation of effectiveness of secondary school teachers with learning orientation of teachers. The values of coefficient of correlation for "conative and affective learning focus," dimension with "preparation and planning for teaching, classroom management, knowledge of subject matter etc., teacher characteristics, interpersonal relations and effectiveness of teachers (total)" were

found to be 0.154**, 0.155**, 0.174**, 0.196**, 0.183** and 0.187** respectively. Examination of the correlation matrix revealed that, "conative and affective learning focus" dimension was positively correlated (at 0.01 level) with all the dimensions and overall effectiveness of teachers.

The values of coefficient of correlation for "learning independence/ autonomy" dimension with "preparation and planning for teaching, classroom management, knowledge of subject matter etc., teacher characteristics, interpersonal relations and effectiveness of teachers (total)" were found to be 0.118**, 0.132**, 0.169**, 0.161**, 0.132** and 0.152**respectively. Examination of the correlation matrix revealed that, "learning independence/ autonomy" dimension was positively correlated (at 0.01 level) with all the dimensions and overall effectiveness of teachers.

Similarly the values of coefficient of correlation for "committed strategic planning and learning efforts" dimension with "preparation and planning for teaching, classroom management, knowledge of subject matter etc., teacher characteristics, interpersonal relations and effectiveness of teachers (total)" were found to be 0.112*, 0.155**, 0.190**, 0.146**, 0.135** and 0.156** respectively. Examination of the correlation matrix revealed that, "committed strategic planning and learning efforts" dimension was positively correlated (at 0.05 and 0.01 level) with all the dimensions and overall effectiveness of teachers.

The values of coefficient of correlations for "learning orientation (total)" with "preparation and planning for teaching, classroom management, knowledge of subject matter etc., teacher characteristics, interpersonal relations and effectiveness of teachers (total)" were found to be 0.153**, 0.165**, 0.195**, 0.198**,0.179** and 0.192** respectively. Examination of the correlation matrix revealed that, "committed strategic planning and learning efforts" dimension was positively correlated (at 0.01 level) with all the dimensions and overall effectiveness of teachers.

Discussion of Results

Thus it can be deduced that "conative and affective learning focus, learning independence or autonomy, committed strategic planning and learning efforts and learning orientation (total)"were found to be positively and significantly related to "preparation and planning for teaching, classroom management, knowledge of subject matter etc., teacher characteristics, interpersonal relations and effectiveness of teachers (total)". Though magnitude of relationship in the variables was found to be low, but was positive and significant.

This indicates that better the "conative and affective learning focus" (defining and achieving specific learning priorities will improve personalized development, demands, and learning efficiency); "learning independence or autonomy" (that is, willingness and ability to assume ownership, take decisions, regulate, assess one self, encourage and advance own learning); "committed strategic planning and learning efforts", (that is, ones strategically committed thoughtful and determined efforts to accomplish learning) and overall learning orientation, that is, one's general disposition to or want to learn; better will be the "preparation and planning for teaching, classroom management, knowledge of subject matter etc., teacher characteristics, interpersonal relations and overall effectiveness of teachers".

Findings of the results showed that hypothesis 5which states that "There exists no significant relationship of effectiveness of secondary school teachers with learning orientation", is not accepted for all the dimensions and overall effectiveness of teachers with learning orientation and its dimensions, "conative and affective learning focus, learning independence or autonomy and committed strategic planning and learning efforts".

Organisations with a higher learning orientation outperform those with a lower learning orientation, according to studies by (Narver et al., 2001; Li et al, 2008). In a study of the association in learning orientation and organisational performance, Preziosi et al. (2004) discovered that a positive relation in all measures of organisational performance and learning orientation. The expected intervening influence of learning orientation on necessary behavioural adjustments inside the organisation for enhanced performance was further supported by this linear association in learning orientation and performance (Fiol and Lyles 1985, Senge 1990, Garvin 1993, Sinkula 1994).

The correlation between effectiveness of secondary school teachers, perceived organisational climate, psychological capital and learning orientation were quantified using Karl Pearson product moment correlation 'r'.

4.10 REGRESSION ANALYSIS

The fifth objective was, "to analyze the role of perceived organisational climate, psychological capital and learning orientation on the effectiveness of secondary school teachers". To determine the role of "perceived organisational climate, psychological capital and learning orientation on the effectiveness of secondary school teachers", multiple regression analysis was applied. A multivariate

statistical technique called multiple regression analysis, which is a type of general linear modelling, was used to examine the relationships amongst given dependant (criterion) variable and group of independent (predictor) variables (Hair et al., 2010). Multiple regression analysis examines prediction and explanation (regression coefficients, magnitude and statistical significance) for each independent (predictor) variable and attempt to evolve a theoretical reason for the effects of the independent (predictor) variables (Hair et al., 2010). Keeping in mind the objective the aforesaid technique was used.

4.10.1 Regression analysis of perceived organisational climate, psychological capital, learning orientation and effectiveness of secondary school teachers Hypothesis 6 states that "Perceived organisational climate, psychological capital and learning orientation do not play a significant role in the effectiveness of secondary school teachers"

In the case of multiple regressions, it is crucial to check for multicollinearity before examining the relationship in the predictor and response variables. One of the most essential assumptions in regression is that there should be no multicollinearity in variables. Hence the multicollinearity among the independent variables, namely, perceived organisational climate, psychological capital and learning orientation was checked. The variance inflation factor (VIF) value of perceived organisational climate, psychological capital and learning orientation was found to be 1.069, 1.046 and 1.025 respectively. Some studies reveal that VIF value less than 10 is acceptable (Hair et al., 1995) whereas other studies reveal that the limit value of VIF is 5 at maximum (Ringle et al., 2015). If the VIF value is larger than 10 or the tolerance is less than 0.1, then multicollinearity is a concern to be addressed. The resultant VIF value of perceived organisational climate, psychological capital and learning orientation is less than the threshold value. Henceforth, regression analysis may be carried forward.

Table 4.10.1.1Summary of regression for perceived organisational climate, psychological capital, learning orientation and effectiveness of teachers

Model	R	\mathbb{R}^2	Adj.R ²	S.E.E.
1	0.264 ^a	0.070	0.064	39.445

Predictors: (constant), "perceived organisational climate (total), psychological capital (total) and learning orientation (total), dependent variable: effectiveness of secondary school teachers (total)".

From the table 4.10.1.1 it is clear that "perceived organisational climate (total), psychological capital (total) and learning orientation(total)"were significantly related to the effectiveness of teachers (total). The coefficient of correlation found was 0.264 which revealed that all the four variables were related to each other.

From the model summary table 4.10.1.1 the value of R²was found to be 0.070 and Adj.R² was found to be 0.064 which indicates that 6.4% of variability in effectiveness of secondary school teacher can be accounted to "perceived organisational climate, psychological capital and learning orientation". This implies that all the three independent variables namely "perceived organisational climate, psychological capital and learning orientation" can explain 6.4% of variance in the dependent variable (effectiveness of teachers). There may be numerous factors that contribute to this variance, but this model with three independent variables can account for 6.4% of variance. The conclusion of the current study is supported by Babu& Kumari's (2013) finding that "organisational climate is the predictor of teacher effectiveness" while, Tadesse (2019) pinpointed that "psychological capital is the best predictor of teacher's professionalism."

Table 4.10.1.2 Summary of ANOVA for regression analysis

Model	SS	df	MS	F	Sig.
Regression	57795.063	3	19265.021	12.382	0.000 ^b
Residual	771745.887	496	1555.939		
Total	829540.950	499			

Predictors: "perceived organisational climate (total), psychological capital (total) and learning orientation (total), dependent variable: effectiveness of secondary school teachers (total, SS=sum of squares, df=degree of freedom and MS=mean sum of squares."

From the ANOVA table 4.10.1.2, it is evident that regression model is statistically significant (df1= 3, df2 =496, F = 12.38) with p-value=0.000 (p-value less than 0.05) which indicated that overall regression model applied can predict the dependent variable (effectiveness of teachers).

Table 4.10.1.3 Summary of coefficients for regression analysis

Model	US	C	SC	T	т	Т	Т	Sig.	CS	
Model	В	S.E.	В	1	Sig.	Tolerance	VIF			
Constant	158.301	60.431		2.620	0.009					
OC	0.434	0.173	0.113	2.514	0.012	0.935	1.069			
PC	2.018	0.532	0.168	3.796	0.000	0.956	1.046			
LO	0.481	0.116	0.182	4.162	0.000	0.976	1.025			

Predictors: "USC=unstandardized coefficient, SC=standardized coefficients and CS=collinearity statistics, OC= organisational climate (total), PC=psychological capital (total) and LO=learning orientation (total); dependent variable: effectiveness of secondary school teachers (total".

Table 4.10.1.3 shows the regression coefficients which exhibit the mean variation in the dependent variable for one unit change in the predictor variable while keeping the other predictors constant. Unstandardized β values for "perceived organisational climate, psychological capital and learning orientation" were found to be 0.434, 2.018 and 0.481 respectively. This means that one unit increase in "perceived organisational climate" will lead to 0.434 increases in effectiveness of teachers. Since the value of coefficient was found to be (sig. at 0.05 level), t=2.514 (p<0.05), so it can be concluded that "perceived organisational climate" would predict effectiveness of teachers when other variables are constant. Further, one unit increase in psychological capital, will lead to 2.018 increases in effectiveness of teachers. Since the value of coefficient was found to be (sig. at 0.05 level), t = 3.796 (p<0.05), so it can be concluded that "psychological capital" would predict the effectiveness of teachers when other variables are constant. Similarly, this indicates that one unit increase in "learning orientation", will lead to 0.481 increase in "effectiveness of teachers". The value of the coefficient was found to be (sign.at 0.05 level, t= 4.162 (p<0.05), so it can be concluded that "learning orientation" would predict the effectiveness of teachers when other variables are constant.

Thus, based on std. β values, it can be indicated that all the three variables, namely "perceived organisational climate, psychological capital and learning orientation" are making contribution towards predicting effectiveness of teachers. Out of all the three variables, "learning orientation" made the strongest contribution, followed by "psychological capital" and "perceived organisational climate".

Hence "perceived organisational climate, psychological capital and learning orientation" were the predictors of effectiveness of teachers. The regression equation for all the variables can be written as;

Effectiveness of secondary school teachers (Y) = 158.301 + 0.434 (perceived organisational climate) + 2.018(psychological capital) + 0.481(learning orientation).

In order to predict the dimension-wise role of "perceived organisational climate, psychological capital and learning orientation" (independent variables) on "preparation and planning for teaching, classroom management, knowledge of subject-matter, etc., teacher characteristics, and interpersonal relations" dimensions of effectiveness of teachers, regression analysis was done. Dimension-wise multi-collinearity of all the independent variables was checked before carrying out the regression analysis.

4.10.2 Dimension-wise role of perceived organisational climate, psychological capital and learning orientation (predictor variables) on "preparation and planning for teaching."

The variance inflation factor (VIF) values for "results rewards and interpersonal relations, organisational processes, clarity of roles and sharing of information, altruistic behavior, self-efficacy, hope, resilience, optimism, conative and affective learning focus, learning independence or autonomy and committed strategic planning and learning efforts" were found to be 2.748, 2.337, 1.961, 1.348, 1.076, 1.103, 1.087, 1.071, 2.284, 2.251, and1.968 respectively were found to be less than the threshold value,(VIF<10 is acceptable(Hair et al.,1995), limit value of VIF is 5 at maximum (Ringle et., al., 2015). Henceforth, regression analysis can be carried out.

Table 4.10.2.1 Summary of regression for preparation and planning for teaching

Model	R	\mathbb{R}^2	Adj.R ²	S.E.E.
1	.281ª	.079	.058	7.599

Predictors: (constant), "RRIR=results rewards and interpersonal relations, ORGP=organisational processes, CRSI=clarity of roles and sharing of information, ALB=altruistic behaviour, SELF=self-efficacy, HOPE=hope, RESI=resilience, OPTI=optimism, PC=psychological capital, CONAF=conative and affective learning focus, LEARN=learning independence, CSPLE=committed strategic planning and learning efforts, LO=learning orientation": dependent variable: "preparation and planning for teaching".

From the table 4.10.2.1 it is clear that dimensions of "perceived organisational climate, namely, results rewards and interpersonal relations, organisational processes, clarity of roles and sharing of information and altruistic behavior; dimensions of psychological capital, that is, self-efficacy, hope, resilience and optimism; and

dimensions of learning orientation viz. conative and affective learning focus, learning independence/autonomy, and committed strategic planning and learning efforts" are significantly related to the "preparation and planning for teaching" dimension. The coefficient of correlation values for all the dimensions of "perceived organisational climate, psychological capital and learning orientation" were found to be 0.281 which reveals that dimensions of all the variables are related to each other.

From the model summary table 4.10.2.1 the value of R²was found to be 0.079 and adjusted R²was found to be 0.058 which means that 5.8% of variability in "preparation and planning for teaching" dimension can be accounted to various dimensions namely "results rewards and interpersonal relations, organisational processes, clarity of roles and sharing of information, altruistic behavior, self-efficacy, hope, resilience, optimism, conative and affective learning focus, learning independence or autonomy and committed strategic planning and learning efforts." This implies that dimensions of all the three independent variables namely "perceived organisational climate, psychological capital and learning orientation" can explain 5.8% of variance in the dependent variable, that is, preparation and planning for teaching.

Table 4.10.2.2 Summary of ANOVA for regression analysis

Model	SS	df	MS	F	Sig.
Regression	2420.066	11	220.006	3.810	.000 ^b
Residual	28180.516	488	57.747		
Total	30600.582	499			

Predictors: "Constant, RRIR=results rewards and interpersonal relations, ORGP=organisational processes, CRSI=clarity of roles and sharing of information, ALB=altruistic behaviour, SELF=self-efficacy, HOPE=hope, RESI=resilience, OPTI=optimism, PC=psychological capital, CONAF=conative and affective learning focus, LEARN=learning independence, CSPLE=committed strategic planning and learning efforts, LO=learning orientation"; Dependent Variable: "preparation and planning for teaching, SS=sum of squares, df=degree of freedom, MS=mean sum of squares."

From the ANOVA table 4.10.2.2, it is obvious that the regression model is statistically significant (df1= 11, df2 = 488, df=499 F = 3.810) with (p-value < 0.05) which pointed that overall regression model can predict "preparation and planning for teaching" dimension.

Table 4.10.2.3 Summary of coefficients for regression analysis

	1	USC	SC			CS	
Model	В	S.E.	В		Sig.	Tolerance	VIF
(Constant)	38.690	11.980		3.230	0.001		
RRIR	-0.030	0.114	-0.019	-0.260	0.795	0.364	2.748
ORGP	-0.105	0.116	-0.060	-0.905	0.366	0.428	2.337
CRSI	0.289	0.198	0.089	1.464	0.144	0.510	1.961
ALB	1.396	0.444	0.159	3.143	0.002	0.742	1.348
SELF	0.585	0.199	0.132	2.938	0.003	0.930	1.076
НОРЕ	0.206	0.239	0.039	0.861	0.390	0.907	1.103
RESI	0.291	0.269	0.049	1.084	0.279	0.920	1.087
OPTI	0.032	0.315	0.005	0.103	0.918	0.934	1.071
CONAF	0.091	0.052	0.114	1.743	0.082	0.438	2.284
LEARN	0.044	0.110	0.026	0.400	0.689	0.444	2.251
CSPLE	0.023	0.176	0.008	0.131	0.895	0.508	1.968

Predictors; "Constant, CS=Collinearity statistics, USC=unstandardized coefficient, SC=standardized coefficient, RRIR="results rewards and interpersonal relations, ORGP=organisational processes, CRSI=clarity of roles and sharing of information, ALB=altruistic behaviour, SELF=self-efficacy, HOPE=hope, RESI=resilience, OPTI=optimism, PC=psychological capital, CONAF=conative and affective learning focus, LEARN=learning independence, CSPLE=committed strategic planning and learning effort, LO=learning orientation"; dependent variable="preparation and planning for teaching."

In Table 4.10.2.3 the β values for various dimensions of "perceived organisational climate, namely, results rewards and interpersonal relations, organisational processes, clarity of roles and sharing of information and altruistic behavior" were found to be -0.030, -0.105, 0.289 and 1.396 respectively. All the values of coefficient were found to be insignificant, so it can be concluded that "results rewards and interpersonal relations, organisational processes and clarity of roles and sharing of information" would not predict the "preparation and planning for teaching" dimension when other variables are constant. Further, coefficient value for "altruistic behaviour" found was significant. at (0.05) level, t=3.143 (p<0.05), hence "altruistic behaviour" would predict the "preparation and planning for teaching" dimension when other variables are constant (that is, one unit increase in altruistic behavoiour will lead to 1.396 increase in "preparation and planning for teaching" dimension).

While β values for "self-efficacy, hope, resilience and optimism" were found to be 0.585, 0.206, 0.291 and 0.032 respectively. All values of coefficient were found to be insignificant, so it can be concluded that "hope, resilience and optimism" would not predict the "preparation and planning for teaching" dimension when other variables are constant. Further, coefficient value for "self-efficacy" found was(sig. at 0.05 level) at t= 2.938 (p<0.05), so it can be deduced that "self-efficacy" would predict the "preparation and planning for teaching" dimension when other variables are constant.(i.e. one unit increase in "self-efficacy" will lead to 0.585 increase in preparation and planning for teaching dimension).

Further, β values for, "conative and affective learning focus, learning independence/ autonomy and committed strategic planning and learning efforts" were found to be 0.091,0.044 and 0.023 respectively. All values of coefficient were found to be insignificant, so it can be concluded that "conative and affective learning focus, learning independence/ autonomy and committed strategic planning and learning efforts" would not predict preparation and planning for teaching dimension when other variables are constant.

Thus, based on std. β values, it was found that out of all the dimensions of perceived organisational climate and psychological capital, only "altruistic behavior and self-efficacy" respectively were making contribution towards predicting the preparation and planning for teaching dimension. Altruistic behaviour, made the strongest contribution followed by self- efficacy. Hence "altruistic behaviour and self-efficacy" were the predictors of "preparation and planning for teaching" dimension.

The regression equation for all the variables can be written as; Preparation and planning for teaching (Y) = 38.690 + -0.030 (RRIR) +(-0.105) ORGP +(0.289) CRSI +1.396(ALB) + 0.585(SELF) +0.206 (HOPE)+ 0.291(RESI)+0.032(OPTI) +0.091 (CONAF)+0.044(LEARN)+ 0.023(CSPLE).

4.10.3 Dimension-wise role of perceived organisational climate, psychological capital and learning orientation on "classroom management".

The variance inflation factor (VIF) values for "results rewards and interpersonal relations, organisational processes, clarity of roles and sharing of information, altruistic behavior, self-efficacy, hope, resilience, optimism, conative and affective learning focus, learning independence or autonomy and committed strategic planning and learning efforts" were found to be 2.748, 2.337, 1.961, 1.348, 1.076, 1.103, 1.087, 1.071, 2.284, 2.251 and 1.968 respectively, all values were found to be in an acceptable range as mentioned beforehand. Henceforth, regression analysis can be carried out.

Table 4.10.3.1Summary of regression analysis for classroom management

N.	Iodel	R	\mathbb{R}^2	Adj.R ²	S.E.E.
	1	.338ª	0.114	0.094	9.766

Predictors: Constant, "RRIR=results rewards and interpersonal relations, ORGP=organisational processes, CRSI=clarity of roles and sharing of information, ALB=altruistic behaviour, SELF=self-efficacy, HOPE=hope, RESI=resilience, OPTI=optimism, PC=psychological capital, CONAF=conative and affective learning focus, LEARN=learning independence, CSPLE=committed strategic planning and learning efforts, LO=learning orientation, dependent variable= classroom management and S.E.E.=standard error of estimate."

From the table 4.10.3.1 it is clear that dimensions of perceived organisational climate, namely, "results rewards and interpersonal relations, organisational processes, clarity of roles and sharing of information and altruistic behavior; dimensions of psychological capital, that is, self-efficacy, hope, resilience and optimism; and dimensions of learning orientation viz. conative and affective learning focus, learning independence/ autonomy, and committed strategic planning and learning efforts" are significantly related to "classroom management" dimension. The coefficient of correlation values for all the dimensions of "perceived organisational climate, psychological capital and learning orientation" was found to be 0.338 which reveals that dimensions of all the variables are related to each other.

From the model summary table 4.10.3.1 the value of R²was found to be 0.114 and adjusted R²was found to be 0.094 which means that 9.4% of variability in "classroom management" dimension can be accounted to various dimensions of "perceived organisational climate, psychological capital and learning orientation." This implies that all the dimensions "results rewards and interpersonal relations, organisational processes, clarity of roles and sharing of information, altruistic behavior, self-efficacy, hope, resilience, optimism, conative and affective learning focus, learning independence or autonomy and committed strategic planning and learning efforts" can explain 9.4% of variance in the dependent variable, that is, "classroom management"

Table 4.10.3.2 Summary of ANOVA for regression analysis

Model	S.S	df	MS	F	Sig.
Regression	5984.83	11	544.075	5.704	0.000^{b}
Residual	46545.27	488	95.380		
Total	52530.10	499			

Predictors; "Constant, RRIR=results rewards and interpersonal relations, ORGP=organisational processes, CRSI=clarity of roles and sharing of information, ALB=altruistic behaviour, SELF=self-efficacy, HOPE=hope, RESI=resilience, OPTI=optimism, PC=psychological capital, CONAF=conative and affective learning focus, LEARN=learning independence, CSPLE=committed strategic planning and learning efforts, LO=learning orientation"; dependent variable: "classroom management, SS=sum of squares, df=degree of freedom, MS=mean sum of squares."

From the ANOVA table 4.10.3.2, it is clear that regression model is statistically significant (df1= 11, df2 = 488, df = 499 F = 5.704) with (p-value < 0.05) which suggested that overall regression model can predict "classroom management" dimension.

Table 4.10.3.3 Summary of coefficients for regression analysis

		U.S.C	S.C.			C.S	S.
Model	В	S.E.	В	T	Sig.	Tolerance	VIF
(Constant)	41.394	15.396		2.689	.007		
RRIR	-0.151	0.146	-0.073	-1.031	0.303	0.364	2.748
ORGP	-0.133	0.149	-0.058	-0.892	0.373	0.428	2.337
CRSI	0.747	0.254	0.175	2.941	0.003	0.510	1.961
ALB	2.319	0.571	0.201	4.063	0.000	0.742	1.348
SELF	0.850	0.256	0.147	3.324	0.001	0.930	1.076
НОРЕ	0.218	0.307	0.032	0.710	0.478	0.907	1.103
RESI	0.153	0.345	0.020	0.444	0.658	0.920	1.087
OPTI	0.186	0.404	0.020	0.460	0.646	0.934	1.071
CONAF	0.076	0.067	0.073	1.138	0.256	0.438	2.284
LEARN	0.047	0.142	0.021	0.334	0.739	0.444	2.251
CSPLE	0.274	0.227	0.072	1.210	0.227	0.508	1.968

Predictors: "Constant, CS=Collinearity statistics, USC=unstandardized coefficient, SC=standardized coefficient, ,RRIR=results rewards and interpersonal relations, ORGP=organisational processes, CRSI=clarity of roles and sharing of information, ALB=altruistic behaviour, SELF=self-efficacy, HOPE=hope, RESI=resilience, OPTI=optimism, PC=psychological capital, CONAF=conative and affective learning focus, LEARN=learning independence, CSPLE=committed strategic planning and learning efforts, LO=learning orientation": dependent variable: "classroom management".

In the Table 4.10.3.3 the β values for "results rewards and interpersonal relations, organisational processes, clarity of roles and sharing of information and altruistic behavior" were found to be -0.151, -0.133, 0.747 and 2.319 respectively. Since coefficient values for "results rewards and interpersonal relations and organisational processes" found were insignificant, hence these dimensions would not predict the "classroom management" dimension, when other variables are constant. Further, coefficient values for "clarity of roles and sharing of information and altruistic behaviour" found were significant at 0.05 level, (t= 2.941 and t= 4.063) respectively (p<0.05), so it can be concluded that "clarity of roles and sharing of information and altruistic behaviour" would predict the "classroom management" dimension of when other variables are constant(that is, classroom management dimension score would increase by 0.747 and 2.319 respectively for every unit increase in "clarity of roles and sharing of information and altruistic behaviour").

While β values for "self-efficacy, hope, resilience and optimism" were found to be 0.850, 0.218, 0.153 and 0.186respectively. All the values of coefficient for "hope, resilience and optimism" were found to be insignificant so it can be concluded that "hope, resilience and optimism" would not predict the "classroom management" dimension when other variables are constant. While coefficient value for "self-efficacy" was found to be (sign. at0.05 level) at t= 3.324 (p<0.05), so it can be concluded that "self-efficacy" would predict the "classroom management" dimension when other variables are constant (that is, classroom management dimension score would increase by 0.850 for every unit increase in "self-efficacy."

Further, β values for "conative and affective learning focus, learning independence/ autonomy and committed strategic planning and learning efforts" have been observed to be 0.076, 0.047 and 0.274respectively. All coefficient values found were insignificant, so it can be concluded that "conative and affective learning focus, learning independence/ autonomy and committed strategic planning and learning efforts" would not predict the "classroom management" dimension when other variables are constant.

Thus, based on std. β values, it can be indicated that that out of all the dimensions of "perceived organisational climate and psychological capital" only "clarity of roles and sharing of information", "altruistic behaviour" and "self-efficacy" were making contribution towards predicting the "classroom management"

dimension. "Altruistic behaviour" made the strongest contribution, followed by "self-efficacy" and "clarity of roles and sharing of information". Hence "altruistic behavior, clarity of roles and sharing of information and self-efficacy" were the predictors of "classroom management" dimension. The regression equation for all the variables can be written as:

Classroom management (Y) = 41.394 + (-0.151) RRIR+(-0.133) ORGP +(0.747) CRSI +2.319 (ALB) + 0.850 (SELF) +0.218 (HOPE) + 0.153(RESI) +0.186 OPTI) +0.076 (CONAF) +0.047(LEARN) + 0.274(CSPLE).

4.10.4 Dimension-wise role of perceived organisational climate, psychological capital and learning orientation on "knowledge of subject matters etc".

The variance inflation factor (VIF) values for "results, rewards and interpersonal relations, organisational processes, clarity of roles and sharing of information, altruistic behavior, self-efficacy, hope, resilience, optimism, conative and affective learning focus, learning independence or autonomy and committed strategic planning and learning efforts" were found to be 2.748, 2.337, 1.961, 1.348, 1.076, 1.103, 1.087, 1.071, 2.284, 2.251 and 1.968 respectively. These values were observed to be less than the threshold value as mentioned beforehand. Henceforth, regression analysis can be carried out.

Table 4.10.4.1 Summary of regression for knowledge of subject matters etc.

Model	R	\mathbb{R}^2	Adj.R ²	S.E.E.
1	.322ª	.103	.083	4.784

Predictors: "Constant, RRIR=results rewards and interpersonal relations, ORGP=organisational processes, CRSI=clarity of roles and sharing of information, ALB=altruistic behaviour, SELF=self-efficacy, HOPE=hope, RESI=resilience, OPTI=optimism, PC=psychological capital, CONAF=conative and affective learning focus, LEARN=learning independence, CSPLE=committed strategic planning and learning efforts, LO=learning orientation." DV: "knowledge of subject matter etc."

From the table 4.10.4.1 it is clear that dimensions of perceived organisational climate, namely, "results rewards and interpersonal relations, organisational processes, clarity of roles and sharing of information and altruistic behavior; dimensions of psychological capital, that is, "self-efficacy, hope, resilience and

optimism" and dimensions of learning orientation viz. "conative and affective learning focus, learning independence/ autonomy, and committed strategic planning and learning efforts" are significantly related to "knowledge of subject matters etc." dimension. The coefficient of correlation value for all the dimensions of "perceived organisational climate, psychological capital and learning orientation" was found to be 0.322 which reveals that dimensions of all the variables are associated to each other.

From table 4.10.4.1, the value of R²was found to be 0.103 and adjusted R²was found to be 0.083 which means that 8.3% of variability in "knowledge of subject matters etc." can be accounted to various dimensions of "perceived organisational climate, psychological capital and learning orientation". This implies that all the dimensions "results rewards and interpersonal relations, organisational processes, clarity of roles and sharing of information, altruistic behavior, self-efficacy, hope, resilience, optimism, conative and affective learning focus, learning independence or autonomy and committed strategic planning and learning efforts" can explain 8.3% of variance in the dependent variable, that is, "knowledge of subject matters etc."

Table 4.10.4.2 Summary of ANOVA for regression analysis

Model	S.S	Df	Mean Square	F	Sig.
Regression	1288.708	11	117.155	5.119	0.000 ^b
Residual	11168.242	488	22.886		
Total	12456.950	499			

Predictors: "(constant), RRIR=results rewards and interpersonal relations, ORGP=organisational processes, CRSI=clarity of roles and sharing of information, ALB=altruistic behaviour, SELF=self-efficacy, HOPE=hope, RESI=resilience, OPTI=optimism, PC=psychological capital, CONAF=conative and affective learning focus, LEARN=learning independence, CSPLE=committed strategic planning and learning effort, LO=learning orientation." DV: "knowledge of subject matter etc., SS=sum of squares, df=degree of freedom, MS=mean sum of squares."

From the ANOVA table 4.10.4.2, it is clear that the regression model is statistically significant (df1= 11, df2 = 488, df =499 F = 5.119) with (p-value = 0.05) which showed that overall, regression model applied is statistically significant and can predict "knowledge of subject matter etc." dimension.

Table 4.10.4.3 Summary of coefficients for regression analysis

Model	U.S.	C	S.C	T	Sig.	CS	
Model	В	S.E	В	1	Jig.	Tolerance	VIF
(Constant)	19.070	7.542		2.529	0.012		
RRIR	-0.086	0.072	-0.085	-1.203	0.230	0.364	2.748
ORGP	0.030	0.073	0.027	0.413	0.680	0.428	2.337
CRSI	0.399	0.124	0.192	3.204	0.001	0.510	1.961
ALB	0.610	0.280	0.108	2.180	0.030	0.742	1.348
SELF	0.320	0.125	0.114	2.554	0.011	0.930	1.076
НОРЕ	0.060	0.151	0.018	0.395	0.693	0.907	1.103
RESI	0.184	0.169	0.049	1.087	0.277	0.920	1.087
OPTI	0.170	0.198	0.038	0.858	0.391	0.934	1.071
CONAF	0.0250	0.033	0.049	0.756	0.450	0.438	2.284
LEARN	0.059	0.069	0.054	0.843	0.400	0.444	2.251
CSPLE	0.192	0.111	0.104	1.727	0.085	0.508	1.968

Predictors: (constant), "CS=Collinearity statistics, USC=unstandardized coefficient, SC=standardized coefficient, RRIR=results rewards and interpersonal relations, ORGP=organisational processes, CRSI=clarity of roles and sharing of information, ALB=altruistic behaviour, SELF=self-efficacy, HOPE=hope, RESI=resilience, OPTI=optimism, PC=psychological capital, CONAF=conative and affective learning focus, LEARN=learning independence, CSPLE=committed strategic planning and learning efforts, LO=learning orientation." "Dependent variable: knowledge of subject matter etc."

In Table 4.10.4.3 the β values for "results rewards and interpersonal relations, organisational processes, clarity of roles and sharing of information and altruistic behavior" were found to be -0.086, 0.030, 0.399 and 0.610respectively. The coefficient values for "results rewards and interpersonal relations, organisational processes and clarity of roles and sharing of information" found were insignificant, hence these dimensions would not predict the "knowledge of subject matter etc." dimension when other variables are constant. Further, coefficient value for "clarity of roles and sharing of information and altruistic behavior" was found to be (sign. at 0.05 level, t=3.204 and t=2.180) respectively (p<0.05),so it can be concluded that "clarity of roles and sharing of information and altruistic behavior" would predict the "knowledge of subject matter etc." dimension when other variables are constant (that

is, "knowledge of subject matter etc." dimension score would increase by 0.399 and 0.610 respectively for every unit increase in "clarity of roles and sharing of information and altruistic behavior."

While β values for "self-efficacy, hope, resilience and optimism" were observed to be0.320, 0.060, 0.184 and 0.170 respectively. Since coefficient values for "hope, resilience and optimism" were seems to be insignificant, so it can be summarized that these dimensions would not predict the "knowledge of subject matter etc." dimension when other variables are constant. Since the value of coefficient for "self-efficacy" was found to be (sign. at 0.05 level), t=2.554 (p<0.05), so it can be concluded that "self-efficacy" would predict the "knowledge of subject matter etc." dimension when other variables are constant (i.e. one unit increase in "self-efficacy" will lead to 0.320, increase in "knowledge of subject matter etc." dimension).

Further, β values for "conative and affective learning focus, learning independence/ autonomy and committed strategic planning and learning efforts" were found to be 0.025, 0.059 and 0.192 respectively. Since the values of coefficient for "conative and affective learning focus, learning independence/autonomy and committed strategic planning and learning efforts" were found to be insignificant, so it can be concluded that these dimensions would not predict "knowledge of subject matter etc." dimension when other variables are constant.

Thus, based on std. β values, it can be inferred that out of all the dimensions of "perceived organisational climate and psychological capital" only "clarity of roles and sharing of information and altruistic behavior" and "self-efficacy" respectively were making contribution towards predicting the "knowledge of subject matter etc." dimension. "Clarity of roles and sharing of information" made the strongest contribution, followed by "self- efficacy" and "altruistic behaviour". Hence "clarity of roles and sharing of information, altruistic behaviour and self-efficacy" were the predictors of "knowledge of subject matter etc." dimension. The regression equation for all the variables can be written as;

Knowledge of subject matter etc. (Y) = 19.070 + -0.086 (RRIR) +0.030 (ORGP)+0.399 CRSI +0.610 (ALB) + 0.320 (SELF) +0.060 (HOPE) + 0.184(RESI) +0.170 OPTI)+0.025 (CONAF) +0.059 (LEARN) + 0.192(CSPLE).

4.10.5 Dimension-wise role of perceived organisational climate, psychological capital, learning orientation on "teacher characteristics."

The variance inflation factor (VIF) values for results, "rewards and interpersonal relations, organisational processes, clarity of roles and sharing of information, altruistic behavior, self-efficacy, hope, resilience, optimism, conative and affective learning focus, learning independence or autonomy and committed strategic planning and learning efforts" were found to be 2.748, 2.337, 1.961, 1.348, 1.076, 1.103, 1.087, 1.071, 2.284, 2.251 and1.968respectively. These values were observed to be less than the threshold value. Henceforth, regression analysis can be carried out.

Table 4.10.5.1 Summary of regression analysis for teacher characteristics

Model	R	\mathbb{R}^2	Adj.R ²	S.E.E.	
1	.321ª	.103	.083	11.643	

Predictors: (constant), "RRIR=results rewards and interpersonal relations," ORGP=organisational processes, CRSI=clarity of roles and sharing of information, ALB=altruistic behaviour, SELF=self-efficacy, HOPE=hope, RESI=resilience, OPTI=optimism, PC=psychological capital, CONAF=conative and affective learning focus, LEARN=learning independence, CSPLE=committed strategic planning and learning efforts, LO=learning orientation." "Dependent variable: teacher characteristics and S.E.E.=standard error of estimate."

From the table 4.10.5.1 it is clear that dimensions of perceived organisational climate, namely, "results rewards and interpersonal relations, organisational processes, clarity of roles and sharing of information and altruistic behavior"; dimensions of psychological capital, that is, "self-efficacy, hope, resilience and optimism"; and dimensions of learning orientation viz. "conative and affective learning focus, learning independence/ autonomy, and committed strategic planning and learning efforts" are significantly related to "teacher characteristics" dimension. The coefficient of correlation value for all the dimensions of "perceived organisational climate, psychological capital and learning orientation" was found to be 0.321, which reveals that dimensions of all the variables are associated with each other.

From the table 4.10.5.1 the value of R² was found to be 0.103, and adjusted R² was found to be 0.083 which means that 8.3% of variability in "teacher characteristics" dimension can be accounted to various dimensions namely "results rewards and interpersonal relations, organisational processes, clarity of roles and sharing of information, altruistic behavior, self-efficacy, hope, resilience, optimism, conative and affective learning focus, learning independence or autonomy and committed strategic planning and learning efforts."This implies that all the dimensions "results rewards and interpersonal relations, organisational processes, clarity of roles and sharing of information, altruistic behavior, self-efficacy, hope, resilience, optimism, conative and affective learning focus, learning independence or autonomy and committed strategic planning and learning efforts" can explain 8.3% of variance in the dependent variable, that is, "teacher characteristics" dimension.

Table 4.10.5.2 Summary of ANOVA for regression analysis

Model	SS	Df	MS	F	Sig.
Regression	7614.4	11	692.218	5.106	0.000 ^b
Residual	66155.238	488	135.564		
Total	73769.637	499			

Predictors: (constant), "RRIR=results rewards and interpersonal relations, ORGP=organisational processes, CRSI=clarity of roles and sharing of information, ALB=altruistic behaviour, SELF=self-efficacy, HOPE=hope, RESI=resilience, OPTI=optimism, PC=psychological capital, CONAF=conative and affective learning focus, LEARN=learning independence, CSPLE=committed strategic planning and learning efforts, LO=learning orientation." "Dependent variable: teacher characteristics, SS=sum of squares, df=degree of freedom, MS=mean sum of squares."

From the ANOVA Table 4.10.5.2, it is clear that the regression model is statistically significant (df1= 11, df2 = 488, df (total) =499, F = 5.106) with (p-value <0.05) which showed that overall regression model can predict "teacher characteristics" dimension.

Table 4.10.5.3 Summary of coefficients for regression analysis

	U.S.C		S.C			CS	
Model	В	S.E	В	T	Sig.	Tolerance	VIF
(Constant)	51.451	18.355		2.803	.005		
RRIR	-0.217	0.174	-0.088	-1.245	0.214	0.364	2.748
ORGP	0.053	0.178	0.019	0.296	0.767	0.428	2.337
CRSI	0.643	0.303	0.128	2.124	0.034	0.510	1.961
ALB	2.327	0.681	0.170	3.419	0.001	0.742	1.348
SELF	0.885	0.305	0.129	2.903	0.004	0.930	1.076
НОРЕ	0.266	0.367	0.033	0.725	0.469	0.907	1.103
RESI	0.373	0.412	0.040	0.905	0.366	0.920	1.087
OPTI	0.222	0.482	0.020	0.460	0.646	0.934	1.071
CONAF	0.164	0.080	0.133	2.056	0.040	0.438	2.284
LEARN	0.142	0.169	0.054	0.842	0.400	0.444	2.251
CSPLE	0.019	0.270	0.004	0.070	0.944	0.508	1.968

Predictors: (constant), "CS=Collinearity statistics, USC=unstandardized coefficient, SC=standardized coefficient, RRIR=results rewards and interpersonal relations, ORGP=organisational processes, CRSI=clarity of roles and sharing of information, ALB=altruistic behaviour, SELF=self-efficacy, HOPE=hope, RESI=resilience, OPTI=optimism, PC=psychological capital, CONAF=conative and affective learning focus, LEARN=learning independence, CSPLE=committed strategic planning and learning effort, LO=learning orientation." "Dependent variable: teacher characteristics."

In Table 4.10.5.3 the β values for "results rewards and interpersonal relations, organisational processes, clarity of roles and sharing of information and altruistic behavior" were found to be -0.217, 0.053, 0.643 and 2.327respectively. Since the value of coefficient for "results rewards and interpersonal relations, organisational processes and clarity of roles and sharing of information" found were insignificant, so it can be concluded that these dimensions would not predict the "teacher characteristics" dimension when other variables are constant. Further, the value of coefficient for "clarity of roles and sharing of information and altruistic behaviour" was found to be (sign at 0.05 level, t= 2.124 and t=3.419 respectively (p<0.05),so it can be concluded that "clarity of roles and sharing of information and altruistic behaviour" would predict the "teacher characteristics" dimension when other variables are constant(that is, one unit increase in "clarity of roles and sharing of

information and altruistic behaviour" will lead to 0.643 and 2.327 respectively increase in "teacher characteristics" dimension).

While β values for "self-efficacy, hope, resilience and optimism" were found to be 0.885, 0.266, 0.373 and 0.222 respectively. The values of coefficient for "hope, resilience and optimism" found were insignificant, so it can be observed that these dimensions would not predict the "teacher characteristics" dimension when other variables are constant. Since the value of coefficient for "self-efficacy" was found to be (sign. at 0.05 level, t= 2.903 (p<0.05), so it may be concluded that "self-efficacy" would predict the "teacher characteristics" dimension when other variables are constant (i.e. one unit increase in "self- efficacy" will lead to 0.885, increase in "teacher characteristics" dimension).

Further, β values for "conative and affective learning focus, learning independence/ autonomy and committed strategic planning and learning efforts" were found to be 0.164,0.142 and 0.019 respectively. Since the values of coefficient for "learning independence/ autonomy and committed strategic planning and learning efforts" found were insignificant, so it can be concluded that these dimensions would not predict the "teacher characteristics" dimension when other variables are constant. While coefficient value for "conative and affective learning focus" found was (sign. at 0.05 level, t= 2.056 (p<0.05), so it can be concluded that "conative and affective learning focus" would predict the "teacher characteristics" dimension when other variables are constant (i.e. one unit increase in "conative and affective learning focus" will lead to 0.164, increase in "teacher characteristics" dimension).

Thus, based on std. β values, it can be observed that out of all the dimensions of "perceived organisational climate and psychological capital", only "altruistic behavior" and "self-efficacy" respectively were making contribution towards predicting the "teacher characteristics" dimension. "Altruistic behaviour" made the strongest contribution, followed by "self-efficacy", "clarity of roles and sharing of information and conative and affective learning focus". Hence, "altruistic behaviour, self-efficacy, clarity of roles and sharing of information and conative and affective learning focus" were the predictors of "teacher characteristics" dimension.

The regression equation for all the variables can be written as; Teacher Characteristics (Y) = 51.451 + -0.217 (RRIR) +0.053 (ORGP) +0.643 CRSI+2.327 (ALB) + 0.885 (SELF) +0.266 (HOPE) + 0.373(RESI) +0.222(OPTI) +0.164 (CONAF) +0.142 (LEARN) + 0.019(CSPLE).

4.10.6 Dimension-wise role of perceived organisational climate, psychological capital and learning orientation (predictor variables) on "inter-personal relations."

Dimension-wise multi-collinearity of all the independent variables was checked before carrying out the regression analysis. The variance inflation factor (VIF) values for results, "rewards and interpersonal relations, organisational processes, clarity of roles and sharing of information, altruistic behavior, self-efficacy, hope, resilience, optimism, conative and affective learning focus, learning independence or autonomy and committed strategic planning and learning efforts" were found to be 2.748, 2.337, 1.961, 1.348, 1.076,1.103, 1.087, 1.071, 2.284, 2.251 and 1.968 respectively. These values were observed to be less than the threshold value. Henceforth, regression analysis can be carried out.

Table 4.10.6.1 Summary of regression for inter-personal relations

Model	R	\mathbb{R}^2	Adj.R ²	S.E.E.
1	.338ª	.114	.094	8.130

Predictors: (constant), "RRIR=results rewards and interpersonal relations, ORGP=organisational processes, CRSI=clarity of roles and sharing of information, ALB=altruistic behaviour, SELF=self-efficacy, HOPE=hope, RESI=resilience, OPTI=optimism, PC=psychological capital, CONAF=conative and affective learning focus, LEARN=learning independence, CSPLE=committed strategic planning and learning efforts, LO=learning orientation." "Dependent variable: interpersonal relation and S.E.E= standard error of estimate".

From the table 4.10.6.1it is clear that dimensions of perceived organisational climate, namely, "results rewards and interpersonal relations, organisational processes, clarity of roles and sharing of information and altruistic behavior; dimensions of psychological capital, that is, self-efficacy, hope, resilience and optimism; and dimensions of learning orientation viz. conative and affective learning focus, learning independence/ autonomy, and committed strategic planning and learning efforts" are significantly related to the "interpersonal relations" dimension. The coefficient of correlation value for all the dimensions of "perceived organisational climate, psychological capital and learning orientation" was found to be 0.338, which reveals that dimensions of all the variables are related to each other.

From the model summary table 4.10.6.1 the value of R² was found to be 0.114 and adjusted R² was found to be 0.094 which means that 9.4% of variability in "interpersonal relations" dimension can be accounted to various dimensions of perceived organisational climate, psychological capital and learning orientation. This implies that all the dimensions "results rewards and interpersonal relations, organisational processes, clarity of roles and sharing of information, altruistic behavior, self-efficacy, hope, resilience, optimism, conative and affective learning focus, learning independence or autonomy and committed strategic planning and learning efforts" can explain 9.4% of variance in the dependent variable, that is, "interpersonal relations."

Table 4.10.6.2 Summary of ANOVA for regression analysis

Model	SS	Df	MS	F	Sig.
Regression	4168.602	11	378.964	5.734	.000 ^b
Residual	32253.100	488	66.092		
Total	36421.702	499			

Predictors: (constant), "RRIR=results rewards and interpersonal relations, ORGP=organisational processes, CRSI=clarity of roles and sharing of information, ALB=altruistic behaviour, SELF=self-efficacy, HOPE=hope, RESI=resilience, OPTI=optimism, PC=psychological capital, CONAF=conative and affective learning focus, LEARN=learning independence, CSPLE=committed strategic planning and learning efforts, LO=learning orientation." "Dependent variable: interpersonal relation, SS=sum of squares, df=degree of freedom, MS=mean sum of squares."

From the ANOVA table 4.10.6.2, it is evident that regression model is statistically significant (df1= 11, df2 = 488, df (total) =499 F=5.734) with (p-value=0.05) which indicated that overall regression model can predict "interpersonal relations" dimension.

Table 4.10.6.3 Summary of coefficients for regression analysis

Model	U.S.C		S.C	Т	Sig.	C S	
	В	S.E	В		8	Tolerance	VIF
(Constant)	23.596	12.816		1.841	0.066		
RRIR	-0.160	0.122	-0.093	-1.314	0.190	0.364	2.748
ORGP	-0.032	0.124	-0.017	-0.258	0.796	0.428	2.337
CRSI	0.489	0.211	0.138	2.313	0.021	0.510	1.961
ALB	1.843	0.475	0.192	3.879	0.000	0.742	1.348
SELF	0.707	0.213	0.147	3.321	0.001	0.930	1.076
НОРЕ	0.213	0.256	0.037	0.832	0.406	0.907	1.103
RESI	0.442	0.288	0.068	1.538	0.125	0.920	1.087
OPTI	0.157	0.337	0.021	0.465	0.642	0.934	1.071
CONAF	0.124	0.056	0.143	2.224	0.027	0.438	2.284
LEARN	0.026	0.118	0.014	0.218	0.828	0.444	2.251
CSPLE	0.041	0.189	0.013	0.218	0.827	0.508	1.968

Predictors: (constant), "CS=Collinearity statistics, USC=unstandardized coefficient, SC=standardized coefficient, RRIR=results rewards and interpersonal relations, ORGP=organisational processes, CRSI=clarity of roles and sharing of information, ALB=altruistic behaviour, SELF=self-efficacy, HOPE=hope, RESI=resilience, OPTI=optimism, PC=psychological capital, CONAF=conative and affective learning focus, LEARN=learning independence, CSPLE=committed strategic planning and learning efforts, LO=learning orientation." "Dependent variable: interpersonal relation".

In table 4.10.6.3 the β values for "results rewards and interpersonal relations, organisational processes, clarity of roles and sharing of information and altruistic behavior" were found to be -0.160, -0.032, 0.489 and 1.843respectively. Since coefficient values for "results rewards and interpersonal relations, and organisational processes" were found to be insignificant, so it can be inferred that these dimensions would not predict the "interpersonal relations" dimension when other variables are constant. Further, the value of coefficient for "clarity of roles and sharing of information" and "altruistic behaviour" found were significant at 0.05 level, t=2.313 and t=3.879 respectively(p<0.05), so it can be concluded that "clarity of roles and sharing of information and altruistic behaviour" would predict the "interpersonal relations" dimension when other variables are constant(that is, one unit increase in

"clarity of roles and sharing of information and altruistic behaviour" will lead to 0.489 and 1.843 increase in "interpersonal relations" dimension.

While β values for "self-efficacy, hope, resilience and optimism" were found to be 0.707, 0.213, 0.442 and 0.157 respectively. Since coefficient values for "hope, resilience and optimism" found were insignificant, so it can be concluded that these dimensions would not predict the "interpersonal relations" dimension when other variables are constant. Further the value of coefficient for "self-efficacy" was found to be (sign. at 0.05 level, t=3.321) (p<0.05), so it can be concluded that "self-efficacy" would predict the "interpersonal relations" dimension when other variables are constant.

Further, β values for "conative and affective learning focus, learning independence/ autonomy and committed strategic planning and learning efforts" were found to be 0.124,0.026 and 0.041 respectively. Since coefficient values for "learning independence/ autonomy and committed strategic planning and learning efforts" were found to be insignificant, so it can be concluded that these dimensions would not predict the "interpersonal relations" dimension when other variables are constant. Further, the value of coefficient for "conative and affective learning focus" dimension was found to be (sign. at0.05 level, t= 2.224, (p<0.05), so it can be finalized that "conative and affective learning focus" would predict the "interpersonal relations" dimension when other variables are constant.

Thus, based on std. β values, it can be indicated that out of all the dimensions of "perceived organisational climate, psychological capital and learning orientation only, clarity of roles and sharing of information and altruistic behavior; self-efficacy; and conative and affective learning focus" respectively were making contribution towards predicting the "interpersonal relations" dimension. Altruistic behaviour, made the strongest contribution, followed by self-efficacy, clarity of roles and sharing of information and conative and affective learning focus. Hence "altruistic behavior, self-efficacy, clarity of roles and sharing of information and conative and affective learning focus" were the predictors of the "interpersonal relations" dimension. The regression equation for all the variables can be written as;

Interpersonal relations (Y) = 23.596 + -0.160 (RRIR) +0.032 (ORGP) +0.489 CRSI+1.843 (ALB) + 0.707 (SELF) +0.213 (HOPE) + 0.442(RESI) +0.157(OPTI) +0.124 (CONAF) +0.026 (LEARN) + 0.041(CSPLE).

Thus, it can be deduced that, overall "perceived organisational climate, psychological capital and learning orientation" made a unique and significant contribution towards predicting the outcome variable, i.e. "effectiveness of secondary school teachers", while with respect to dimensions, "altruistic behavior, self-efficacy, clarity of roles and sharing of information and conative and affective learning focus" predicted the outcome variable. Therefore hypothesis 6 which states that "perceived organisational climate, psychological capital and learning orientation do not play a significant role in the effectiveness of secondary school teachers" is thus not accepted.

The predictive role of multiple independent variables, perceived organisational climate, psychological capital and learning orientation on the dependent variable, effectiveness of secondary school teachers was estimated using multiple linear regression 'R'. The percentage of change in the dependent variable, effectiveness of secondary school teachers, for unit change simultaneously on independent variables, perceived organisational climate, psychological capital and learning orientation was quantified using coefficient of determination R².

Note: The results obtained on applying all the statistical techniques were either significant for the level of significance $\alpha = 0.05$ or 0.01.

CHAPTER – V

SUMMARY, CONCLUSIONS, RECOMMENDATIONS AND DIRECTIONS FOR FUTURE RESEARCH

Previous chapter deals with the analysis and interpretations and present chapter consisted of summary, conclusions, recommendations and suggestions for future research. In the previous chapter, analysis and interpretation of the data have been carried out. The findings with reference to the objectives of the study have been discussed in the present chapter. The discussions of the results are very important; otherwise, the entire research exercise would remain in futility. With a view to provide the significance of the results, major findings were discussed and conclusions were drawn accordingly. Therefore, this chapter is devoted to major findings, discussion of findings and conclusions of the present research.

5.1 Summary

Education develops the mind and empowers the individuals. The social, economic, political conditions and cultural milieu of any society has reflection in its educational system. Emphasizes on good standard of education, accountability of teachers, curriculum revision, embracing of new technologies, stakeholders' involvement, periodic assessment, role of regulatory bodies etc., are germane for the renovation and rejuvenation of any education system. The key figure in any educational system is the teacher. "Without good teachers even the best of system is bound to fail and with good teachers even the defects of a system can be largely overcome" says Humayun Kabir (n.d). The teacher is the most crucial factor in ensuring outcomes of learning; therefore, teachers' quality becomes centre stage to the improvement of whole education system. Good in (1959), defined "teacher effectiveness as the ability and interaction between the physical, intellectual, and psychological interests of the students, content efficiency of the teachers and the social needs." In the present study, "effectiveness of secondary school teachers refers to teacher effectiveness as measured through teacher effectiveness scale" by Kulsum, 2011. According to Kulsum (2011), "teacher effectiveness refers to the competences in teachers, needed for their function and roles as well as planning and preparation for teaching, classroom management and knowledge of subject matter etc., teaching

characteristics and their interpersonal relations." "Teacher effectiveness can be thought in terms of characteristics of a teacher, his personality, attitudes, process (teacher-pupil interaction) and production variable (outcomes of teaching-learning process, namely pupil achievement)". In the present study "teacher effectiveness" includes five areas, namely "preparation and planning for teaching", "classroom management discipline, motivation, interaction, evaluation", "knowledge of subject-matter its delivery and presentation including black board summary", "personality characteristics of teachers" and "inter-personal relations of teachers with others" (Kulsum, 2011).

Linked with the quality of education system is the organisational climate of the school. According to Stern (1970) "organisational climate reflects a person's perception of the organisation to which he belongs. It is a set of unique characteristics and features that is perceived by the employees about their organisation, which serves as a major force in influencing their behavior."

Litwin and Stringer (1968), "stated that shared beliefs and values of organisational members constitute the perceived work environment". In a broad sense organisational climate refers to social environment of the organisation. Alternatively, Babu and Kumari (2013) defined, "organisational climate as the formal system of task and reporting relationships that controls, coordinates and motivates employees so that they cooperate to achieve an organisation's goals." In the present study, perceived organisational climate refers to organisational climate as perceived by secondary school teachers and measured through "organisational climate scale" by (Pethe et.al., 2010). "Organisational climate refers to a set of perceived attribute of an organisation and its sub system as reflected in the way an organisation deals with its members, groups and issues" (Pethe et.al, 2010). Organisational climate comprises of the following four factors, namely, "results, rewards and interpersonal relations", "organisational processes", "clarity of roles and sharing of information" and "altruistic behaviour" (Pethe et.al, 2010).

Apart from the above mentioned organisational factors, the teacher must be physically and mentally healthy and psychological strong and sound. Luthans et. al., (2004) believed that in the globalized and technological innovative 21st century the competitive advantage for a long haul of social, economic and human capital is difficult to maintain as it was in the past. Urbanization, globalization and

technological innovations have brought new challenges for all workers of different organisation. In the present study, "psychological capital refers to the current state of individual's psychological capital through the four constructs" namely "self-efficacy", "hope", "optimism" and "resilience." (Luthans et.al., 2007) "Psychological capital could be visualized as a positive frame of mind set of an individual for development, which is specified by (a) having conviction (self-efficacy) to confront and apply some significant endeavors to accomplish the mission of daunting tasks (b) making a worthwhile attribution (hope) about pulling off desired breakthrough now and in the offing (c) persisting toward aims and whenever necessary, reorienting ways to ambitions in order to triumph and (d) when saddled by problems and hardships, enduring and making a comeback and way beyond (resiliency) to secure success" Luthans et al., (2007). A self- efficacious, hopeful, resilient and optimistic teacher can bring desirable changes in the behaviour of the students. Much work has been done on psychological capital in different fields and organisations but there is dearth of investigation in the field of education, especially schools.

Learning plays indispensable role in the life of every human being. It cannot be confined to classroom learning, reading, writing or arithmetic; rather it is a global term, which has a permanent impression on the individuals. It's a never ending, lifelong process. Whenever a change, modification or development occurs in the behavior of some individuals learning occurs.

In the present study, "learning orientation refers to individuals' general disposition to learn and assess how individuals may enjoy or want to learn" measured through learning orientation questionnaire by Martinez, (2005). Learning orientation model employs three individual factor constructs in order to portray the four specific learning orientations along learning orientation continuum. The individual factors that control successful learning consists of "conative and affective learning focus, learning independence or autonomy, committed strategic planning and learning effort; while the learning orientation continuum consists of four types of learners namely, transforming learners, performing learners, conforming learners and resistant learners" (Martinez, 2001).

In the present study, secondary stage schools' teachers were selected keeping in mind the importance of this stage. In this stage the students develop the capacity for independent thinking. Teachers also focus on developing the habit of 'how to think'

rather than 'what to think' (Souza et.al.,2020). In the present study secondary school teachers, refers to teachers (teaching classes 9-10) and having qualification of graduation with B.Ed. working in government and private schools affiliated and recognized by PSEB. In the present study the investigator tried to find out how far the organisational factors, that is, perceived organisational climate, individual factors, psychological capital and learning orientation are related to the effectiveness of secondary school teachers. Hence the present study was undertaken towards investigating the "effectiveness of secondary school teachers in relation to perceived organisational climate psychological capital and learning orientation".

Significance

"The destiny of India is being shaped in her classroom", (Kothari Commission Education Report, 1964-66). In a knowledge-driven economy, education affects the degree of a society's profitability, comfort, and safety and security. "On the quality and number of persons coming out of our schools and colleges will depends our success in the great enterprise of national reconstruction whose principal objective is to raise the standard of living of our people" (IEC 1964-66. Vol.1). Education, according to the Kothari Commission (1964-66), has the potential to be a strong tool for social, economic, and political change. Education is the only tool that could be utilized to ratify change without resorting to any violent revolution. Teachers are the architects who design their students' future. The immense efforts of teachers,' makes its' nation prosper.

Effective teachers have been central for the betterment of the educational system including the success of students. Many factors like family involvement, community involvement, good infrastructure, curricula, reduced class size contributes to the student achievement and progress of school but still the role of 'effective teachers' is the most prominent factor. A close perusal of related literature revealed inconsistencies in the results as reported by various researchers, further not much work has been done in the field of teacher effectiveness. Review of literature revealed inconsistencies in the findings of teacher effectiveness with reference to demographic variables viz, gender (Dar and Ponraj (2022); Nabi (2019) and Toor 2016), type of school (Bhardwaj, 2009), locale (Roy and Halder, 2018), stream (Kumar,2019) and teaching experience (Ghali,2002; Singh,2009; and Mohalik,2020). Additionally, most of the research work concerning teacher effectiveness regarding different variables has been carried out in the advanced countries such as United Nation, Germany,

France and Australia (Marsh & Hattie, 2002). In the present study, the investigator has studied the effectiveness of teachers in relation to three factors namely, perceived organisational climate, psychological capital and learning orientation.

To achieve the desired performance organisational climate should be favorable both for the teachers and the students. The perceived organisational climate reflects the way an individual sees the organisation to which he or she belongs. For creating conducive organisational climate, the employer must understand their human force in a better way and efforts should be undertaken to identify what motivates their performance. Significant differences with respect to gender (Ch & Rashid, 2021; Babu & Venkatesh 2016), type of school (Meena, 2017, Gupta, 2009 locality Ch & Rashid, 2021) teaching experience (Ch& Rashid, 2021) and organisational climate were found. In contrast, no differences in gender (Meena, 2017, Sodhi, 2010 & Jothi and Kanmani, 2019 Sodhi, 2010), stream (Sodhi 2010), length of service (Sodhi 2010), and type of school(Sodhi 2010; Kaur, 2018) with respect to organisational climate were found. Indeed, a close look at the analysis made about different studies, indicated no conclusive trend regarding perceived organisational climate on effectiveness of teachers with respect to demographic variables. This could be because different samples from different age groups, localities, streams, and other criteria were used in these investigations. Still further investigations are required to substantiate these findings. Further as compared to advanced countries less research work has been done in India in the field of teacher effectiveness and its relation to organisational climate specifically with respect to secondary school teachers.

Out of the numerous factors that affect teacher efficiency, the most influential factors are teaching aptitude, organisational climate, and various personality factors like self-efficacy, resilience, optimism and orientation towards learning. Individuals are important to economic production (Gavin & Mason, 2004), and "flat world" antagonism has empowered or persuaded everyone from all across the universe to cooperate and contribute (Friedman, 2007). Hence, organisations should embrace a different perspective of human resource management to ensure their long-term learning and expansion in such a highly competitive environment. Keeping in mind the above situation of working people, there are two areas where the researchers have focused in the last few decades. Positive organisational behavior, being the first one, and psychological capital, being the second one. Review of literature revealed that psychological capital was much studied in other fields, than education, so

psychological capital of teachers, especially, secondary school, needs to be explored as these teachers deal with adolescents fleeting through a turbulent phase of life. Since psychological capital is developmental in nature, hence has relevance for all individuals irrespective of organisation. Higher levels of psychological capital among teachers will enable them to be strong communicators, adaptable and capable enough to deal with the troubles and challenges in schools.

Researches in the field of neuroscience in the last decades highlighted the influence of emotions on learning and memory. Since decades much emphasizes was laid on cognitive element but new researches showed that emotions also play a very significant role in learning. "In order to understand educational experiences, emotions and motivation need to be considered alongside cognition" (Hannula 2006, as cited in Kim& Pekrun, 2014). A general disposition, willingness and desire for learning among the teachers can serve as a motivating force for the students to build similar zeal, willingness and enthusiasm for learning. In fact the tendency for learning among teachers has influence on the educational outcomes of students. The present problem provoked research in the yet to be examined field of learning orientation, and its association with the teacher effectiveness. Moreover, it was quite clear from the related literature that several studies were conducted in the area of teacher effectiveness but to the best of the knowledge of researcher effectiveness of teachers has not been adequately explored vis-à-vis perceived organisational climate, psychological capital and learning orientation. So the present study was the first of its kind exploring all the influential factors vis-a-vis effectiveness of teachers.

The present study has contribution in the identification of various factors that promote or hinder the effectiveness of teachers. The study focused on the specific dominant dimensions of organisational climate, psychological capital and learning orientation that affect teachers' effectiveness. The present study has implications for administration, for promoting the effectiveness of teachers so as to ensure the holistic progress of students. Additionally, the study has potential to make important contribution, supplying recommendations for practice and giving guidelines to government so as to formulate such favourable organisational terms and conditions for teachers in schools that boost the level of psychological capital among teachers and encourage them to be lifelong transforming learners.

Hence, due to paucity of research with respect to effectiveness of teachers in relation to perceived organisational climate, psychological capital and learning orientation; the inconsistencies in research findings as well as the greater concern for providing quality education to the present and future generation for good academic achievements, holistic development and progress of nation at large inspired the investigator to carry out the present study.

Statement of the problem

"Effectiveness of secondary school teachers in relation to perceived organisational climate, psychological capital and learning orientation"

The objectives of the study were as follows:

- 1) To study the levels of effectiveness of secondary school teachers and psychological capital.
- 2) To study the perception of teachers towards organisational climate of secondary schools.
- 3) To find out difference in effectiveness of secondary school teachers, perceived organisational climate, psychological capital and learning orientation with respect to gender, locality, teaching experience and type of school.
- 4) To examine the relationship among effectiveness of secondary school teachers, perceived organisational climate, psychological capital and learning orientation.
- To analyze the role of perceived organisational climate, psychological capital and learning orientation in the effectiveness of secondary school teachers.

Research Design

The purpose of any research design is to provide full information relevant to the problem under investigation at a minimum cost. The present study was conducted to study "the effectiveness of secondary school teachers in relation to perceived organisational climate, psychological capital and learning orientation" in the three cultural regions of Punjab namely, Doaba, Majha and Malwa. All the four tools employed, namely, "teacher effectiveness scale; organisational climate scale; psychological capital questionnaire and learning orientation questionnaire" were administered on the secondary school teachers teaching in government schools and private schools affiliated/recognized to PSEB, Mohali.

Method and Sample

As per the objectives and hypotheses of the study the investigator employed descriptive survey method. The population for the study included all the teachers serving in secondary schools of Punjab affiliated/recognized to (PSEB). Stratified multistage random sampling method was employed. Three cultural regions of Punjab, viz., Doaba, Majha and Malwa were taken. Out of these three regions, three districts one district from each region i.e., Jalandhar from Doaba, Pathankot from Majha and Ludhiana from Malwa were selected. For the selection of districts from each region, districts comparable in literacy rate and with considerable gap in literacy rate of males and females were taken into consideration. From each district, one educational block was selected and for selecting the educational block, from the selected districts of each region, moderate, low and high level of educational development in educational blocks of Punjab was taken into consideration, along with it availability of government and private secondary schools both in rural and urban areas was also taken into consideration. For moderate level of educational development, Pathankot block from Pathankot, for low level of educational development, Ludhiana-1 from Ludhiana and for high level of educational development, Jalandhar East from Jalandhar, was selected. From each of the selected educational blocks, twenty two (22) schools (10 rural, 12 urban) from Pathankot; thirty (30) schools (14rural, 16 urban) from Jalandhar and thirty one (31) schools (14 rural, 17 urban) from Ludhiana were selected. Further out of these only those schools were selected from each of the educational block which had teachers of all experiences (0-5 years), (5-10 years) and (more than 10 years). Written permission from, Director State Council for Educational Research and Training (SCERT) Chandigarh, Mohali to collect data from teachers teaching in secondary schools of Punjab affiliated/ recognized to (PSEB), Mohali was taken. A representative sample of secondary school teachers (600 teachers with 165 males and 435 females) from all the selected schools of three districts, were selected proportionately.

On the basis of sample size calculator, a sample of 382 was sufficient, but in order to overcome the problem of unengaged responses, missing values and outliers oversampling was done and a sample of 600 was collected. For collecting the data related to the study purpose, secondary school teachers were personally contacted by the investigator which was sufficiently greater than the calculated three hundred and

eighty-two sample size. Few of the teachers didn't respond and few teachers returned incomplete forms so as recommended by Hair et al. (2010), hence after data cleaning process a sample of 500 was finalized for analysis and interpretation.

Tools Used

- 1. Teacher Effectiveness Scale (2011) by Dr. Umme Kulsum.
- 2. Organisational Climate Scale (2010) by Sanjyot Pethe, Sushama Chaudhari and Upinder Dhar.
- 3. Psychological Capital Questionnaire (2007) by Luthans, Avolio, Avey and Norman.
- 4. Learning Orientation Questionnaire (2005) by Martinez.

Procedure of Data Collection

For the present study, the investigator himself personally collected the data. The Director (SCERT) Chandigarh, Mohali granted authorization to collect data from teachers teaching in secondary schools in Punjab that are affiliated/recognised by the PSEB, Mohali. The investigator went to the DEO (District Education Office) in each of the concerned districts, Pathankot, Ludhiana, and Jalandhar, on the orders of the Director (SCERT), and gathered the list of schools. After that, approval was obtained from the heads of the relevant institutions, and a time frame was established in advance for tool administration. The intent of the study was explained to the teachers, and any worries they had about filling out personal information and responding in the questionnaire and scales were dispelled. The respondents were motivated to give answers carefully and truthfully. Their cooperation was sought by assuring them, that their results would be kept strictly confidential. The requirement of the study was to take secondary school teachers from government schools and private schools. It took 6-7 months for data collection. Then on these selected teachers all the four tools, namely, teacher effectiveness scale, organisational climate scale; psychological capital questionnaire and learning orientation questionnaire were administered. The total data was collected from all the schools, that is, government and private from each selected district, belonging to each cultural region of Punjab namely, (Doaba, Majha and Malwa). The districts selected for data collection were Jalandhar, Ludhiana and Pathankot. The data for this study was obtained by the investigator himself. Hence the data of the concerned variables in the study was collected.

Statistical Techniques used

- 1. In descriptive statistics, mean, SD and Z-score, percentage analysis were used.
- 2. In the inferential statistics, t-test, One way ANOVA, correlation, 'r' and multiple regression analysis were used.

Graphical representation of data

Graphical representation of data was done, wherever possible and required.

5.2 Conclusions

After analyzing the data, objective-wise following conclusions were drawn for the study:

Levels of effectiveness of secondary school teachers and psychological capital

- Majority of teachers i.e. 37.6% were at "moderately effective level," followed by 27% at "below average," 13.2% at "above average," 9.8% at "highly effective," 7.6% at "highly ineffective," 4.8% at "most effective," and no teacher was found at "most ineffective level" for overall "effectiveness of secondary school teachers."
- Majority of teachers i.e. 38% were at "moderately effective level" followed by 28.2% at "below average," 13.2% at "above average," 9.8% at "highly effective," 6.8% at "highly ineffective," 3.4% at "most effective" and "0.6% at most ineffective level" for "preparation and planning for teaching" dimension.
- Majority of teachers i.e. 37.2% were at "moderately effective level," followed by 25.4% at "below average," 16.4% at "above average," 8.8% at "highly effective," 7.4% at "highly ineffective", 4.2% at "most effective" and 0.6% at "most ineffective level" for "classroom management" dimension.
- Majority of teachers i.e. 30.2% were at "moderately effective level," followed by 26.4% at "below average," 18.4% at "above average," 12.8% at "highly effective," 9.2% at "highly ineffective," 1.4% at "most effective," and 1.6% at "most ineffective level" for "knowledge of subject-matter etc." dimension.
- Majority of teachers i.e. 38% were at "moderately effective level", followed by 25.8% at "below average", 15% at "above average," 8.6% at "highly effective," 7.6% at "highly ineffective," 5% at "most effective" and none of the teachers found at "most ineffective level" for "teacher characteristics" dimension.

- Majority of teachers i.e. 39.4% were at "moderately effective level," followed by 24.2% at "below average," 15.6% at "above average," 10.2% at "highly effective," 7.2% at "highly ineffective," 3.2% at "most effective" and 0.2% at "most ineffective level" for "interpersonal relations" dimension.
- Majority of teachers i.e. 76.4% were at "high level," and 23.6% were found to be at "medium level," for overall "psychological capital."
- Majority of teachers i.e. 60% were at "high level," and 40% were found to be at "medium level" for "self-efficacy" dimension.
- Majority of teachers i.e. 72.2% were at "high level," and 27.8 % were found to be at "medium level" for "hope" dimension.
- Majority of teachers i.e. 79.4% were at "high level," and 20.6% were found to be at "medium level" for "resilience" dimension.
- Majority of teachers i.e., 65.2% were at "high level," and 34.8% were found to be at "medium level" for "optimism" dimension.

Perception of teachers towards organisational climate of secondary schools

- Most of the teachers i.e. 60.4% perceived the "organisational climate" as "medium" i.e. favourable, followed by 20.4% as "low" i.e., less favourable; and 19.2% as "high" i.e. highly favourable for overall "perceived organisational climate".
- Most of the teachers i.e. 56.8% perceived the "organisational climate" as "medium" i.e., favourable, followed by 22.4% as "high" i.e. highly favourable; and 20.8% as "low" i.e. "less favourable" for "result rewards and interpersonal relations" dimension.
- Most of the teachers i.e. 50% perceived the "organisational climate" as "medium" i.e., favourable, followed by 28.4% as "high" i.e. highly favourable; and 21.6% as "low" i.e. less favourable for "organisational processes" dimension.
- Most of the teachers i.e. 41% perceived the "organisational climate" as "medium" i.e., favourable, followed by 30% as "low" i.e. less favourable; and 29% as "high" i.e. highly favourable for "clarity of roles and sharing of information" dimension.

• Majority of teachers i.e. 39% perceived the "organisational climate" as "medium" i.e., favourable, followed by 32% as "high" i.e. highly favourable; and 29% as "low" i.e. less favourable for "altruistic behaviour" dimension.

Comparison of effectiveness of secondary school teachers with respect to gender, locality, teaching experience and type of school

- Male and female secondary school teachers differed significantly with respect to "preparation for teaching and planning, classroom management, knowledge of subject-matter, teacher characteristics and interpersonal relations dimensions and overall effectiveness of teachers".
- Female secondary school teachers were more effective in "preparation for teaching and planning, classroom management, knowledge of subject-matter, teacher characteristics and interpersonal relations dimensions and overall effectiveness of teachers" as compared to their male counterparts.
- Teachers teaching in urban and rural secondary schools did not differ with regard to "preparation for teaching and planning, classroom management, knowledge of subject-matter, teacher characteristics and interpersonal relations dimensions and overall effectiveness of teachers".
- Teachers teaching in urban and rural secondary schools were similar and equally effective in "preparation and planning for teaching, classroom management, knowledge of subject-matter, teacher characteristics, interpersonal relations dimensions and overall effectiveness of teachers".
- Teachers with "0-5 years, 5-10 years and 10 years & above" of teaching experience did not differ with respect to "preparation and planning for teaching, classroom management, knowledge of subject-matter, teacher characteristics, interpersonal relations dimensions and overall effectiveness of teachers".
- Teachers with "0-5 years, 5-10 years and 10 years & above" of teaching experience were similar and equally effective in "preparation and planning for teaching, classroom management, knowledge of subject-matter, teacher characteristics, interpersonal relations dimensions and overall effectiveness of teachers".
- Teachers teaching in government and private secondary schools did not differ significantly with respect to "preparation and planning for teaching, classroom

management, knowledge of subject-matter, teacher characteristics, interpersonal relations dimensions and overall effectiveness of teachers".

• Teachers teaching in government and private secondary schools were similar and equally effective in "preparation and planning for teaching, classroom management, knowledge of subject-matter, teacher characteristics, interpersonal relations dimensions and overall effectiveness of teachers".

Comparison of perceived organisational climate of secondary school teachers with respect to gender, locality, teaching experience and type of school

- Male and female secondary school teachers did not differ significantly with respect to "results rewards and interpersonal relations, clarity of roles and sharing of information" dimensions and overall "perceived organisational climate" but differed significantly with respect to "organisational processes and altruistic behaviour" dimensions.
- Female secondary school teachers had a better perception of "organisational processes and altruistic behaviour" in schools as compared to their male counterparts.
- Teachers teaching in urban and rural secondary schools did not differ significantly with respect to "results rewards and interpersonal relations, organisational processes, clarity of roles and sharing of information" dimensions and overall "perceived organisational climate" but differed significantly with respect to "altruistic behaviour" dimension.
- Teachers teaching in urban schools perceived more "altruistic behaviour" in schools as compared to their rural school counterparts.
- Teachers with "0-5 years, 5-10 years and 10 years & above" of teaching experience did not differ with respect to "results rewards and interpersonal relations, organisational processes, clarity of roles and sharing of information, altruistic behaviour" dimensions and overall "perceived organisational climate".
- Teachers with "0-5 years, 5-10 years and 10 years & above" of teaching experience had similar perception for "results rewards and interpersonal relations, organisational processes, clarity of roles and sharing of information, altruistic behaviour" dimensions and overall "perceived organisational climate" in schools.

- Teachers teaching in government and private schools did not differ significantly with respect to "clarity of roles and sharing of information and altruistic behaviour" dimensions but differed significantly with respect to "results rewards and interpersonal relations and organisational processes" dimensions and overall "perceived organisational climate".
- Teachers teaching in government schools had a better perception of "results, rewards and interpersonal relations and organisational processes" and overall perceived "organisational climate" in schools as compared to their private school counterparts.

Comparison of psychological capital of secondary school teachers, with respect to gender, locality, teaching experience and type of school

- Male and female secondary school teachers did not differ significantly with respect to "self-efficacy, hope, resilience, optimism" dimensions and overall "psychological capital".
- Both male and female secondary school teachers exhibited similar "self-efficacy, hope, resilience, optimism" and overall "psychological capital".
- Teachers teaching in urban and rural secondary schools did not differ significantly with respect to "self-efficacy, hope, resilience, optimism" dimensions but differed significantly with respect to overall "psychological capital".
- Teachers teaching in rural schools exhibited better overall "psychological capital" as compared to their urban schools counterparts.
- Teachers with "0-5 years, 5-10 years and 10 years & above" of teaching experience did not differ with respect to "self-efficacy, hope, resilience, optimism dimensions and overall psychological capital".
- Teachers with "0-5 years, 5-10 years and 10 years & above" of teaching experience exhibited similar "self-efficacy, hope, resilience and optimism" and overall "psychological capital."

- Teachers teaching in government and private schools did not differ significantly with respect to various dimensions of "psychological capital" namely, "self-efficacy, hope and resilience" but differed significantly with respect to "optimism" dimension and overall "psychological capital".
- Teachers teaching in private schools exhibited more "optimism" and overall "psychological capital" as compared to their government schools counterparts.

Comparison of learning orientation of secondary school teachers with respect to gender, locality, teaching experience and type of school

- Male and female secondary school teachers did not differ significantly with respect to "committed strategic planning and learning effort" dimension, but differed significantly with respect to "conative and affective learning focus, learning independence or autonomy" dimensions and overall "learning orientation".
- Female secondary school teacher exhibited better "conative and affective learning focus, learning independence or autonomy" and overall "learning orientation" as compared to their male counterparts.
- Teachers teaching in urban and rural secondary schools did not differ significantly with respect to "conative and affective learning focus, learning independence or autonomy, committed strategic planning, learning effort" and overall "learning orientation".
- Both teachers teaching in urban and rural secondary school teachers exhibited similar "conative and affective learning focus, learning independence or autonomy, committed strategic planning and learning effort" and overall "learning orientation".
- Teachers with "0-5 years, 5-10 years and 10 years & above" of teaching experience did not differ with respect to "conative and affective learning focus, committed strategic planning and learning effort" dimensions and overall learning orientation but differed significantly with respect to "learning independence or autonomy" dimension.
- Teachers with (0-5 years) of teaching experience exhibited greater "learning independence or autonomy" in comparison to teachers with 10 years & above of teaching experience.

- Teachers teaching in government and private schools differed significantly with respect to "conative and affective learning focus, learning independence or autonomy, committed strategic planning and learning efforts" and overall "learning orientation".
- Teachers teaching private schools exhibited better "conative and affective learning focus, learning independence or autonomy, committed strategic planning and learning efforts" dimensions and overall "learning orientation" as compared to their government school counterparts.

Relationship of effectiveness of secondary school teachers with perceived organisational climate, psychological capital and learning orientation

- Positive and significant correlation was found in "preparation and planning for teaching, classroom management, knowledge of subject matter etc., teacher characteristics, interpersonal relations dimensions and overall effectiveness of teachers" with "clarity of roles and sharing of information and altruistic behaviour" dimensions of "perceived organisational climate".
- Positive and significant correlation was found in "knowledge of subject matter etc.", dimension with "results rewards and interpersonal relations" dimension of perceived organisational climate. No significant correlation was found in "preparation and planning for teaching, classroom management, teacher characteristics, interpersonal relations dimensions and overall effectiveness of teachers" with "results rewards and interpersonal relations" dimensions of "perceived organisational climate".
- Positive and significant correlation was found in "knowledge of subject matter etc. and teacher characteristics" dimensions with "organisational processes" dimension of perceived organisational climate. No significant correlation was found in "preparation and planning for teaching, classroom management, interpersonal relations dimensions and overall effectiveness of teachers" with "organisational processes" dimension of "perceived organisational climate".
- Positive and significant correlation was found in "preparation and planning for teaching, classroom management, knowledge of subject matter etc., teacher

characteristics, interpersonal relations and overall effectiveness of teachers" with "self-efficacy" and overall "psychological capital".

- Positive and significant correlation was found in "preparation and planning for teaching, interpersonal relations dimensions and overall effectiveness of teachers" with "resilience" dimension of "psychological capital".
- No significant correlation was found in "hope and optimism" dimensions of psychological capital and any of the dimensions as well as overall "effectiveness of secondary school teachers".
- Positive and significant correlation was found in "preparation and planning for teaching, classroom management, knowledge of subject matter, teacher characteristics, interpersonal relations dimensions and overall effectiveness of teachers" with "conative and affective learning focus, learning independence or autonomy, committed strategic planning and learning efforts" dimensions and overall "learning orientation".

Role of perceived organisational climate, psychological capital and learning orientation in the effectiveness of secondary school teachers

- "Perceived organisational climate, psychological capital and learning orientation" were the significant predictors of "effectiveness of secondary school teachers". Out of all the three variables, learning orientation made the strongest contribution, followed by "psychological capital" and "perceived organisational climate".
- "Altruistic behaviour and self-efficacy" were the predictors of "preparation and planning for teaching" dimension of "effectiveness of teachers". "Altruistic behaviour" made the strongest contribution, followed by "self-efficacy."
- "Altruistic behaviour, clarity of roles and sharing of information, and self-efficacy" were the predictors of "classroom management" dimension of "effectiveness of teachers". "Altruistic behaviour" made the strongest contribution, followed by "self-efficacy and clarity of roles and sharing of information."
- "Clarity of roles and sharing of information, altruistic behaviour and selfefficacy" were the predictors of "knowledge of subject matter etc." dimension of

"effectiveness of teachers". "Clarity of roles and sharing of information" made the strongest contribution, followed by "self-efficacy and altruistic behaviour."

- "Altruistic behaviour and clarity of roles and sharing of information, self-efficacy and conative and affective learning focus" were the predictors of "teacher characteristics" dimension of "effectiveness of teachers". "Altruistic behaviour" made the strongest contribution, followed by "self-efficacy, clarity of roles and sharing of information and conative and affective learning focus."
- "Altruistic behaviour and clarity of roles and sharing of information, self-efficacy and conative and affective learning focus" were the predictors of the "interpersonal relations" dimension of effectiveness of teachers. "Altruistic behaviour", made the strongest contribution, followed by "self-efficacy", "clarity of roles and sharing of information" and "conative and affective learning focus".

5.3 Implications and Recommendations

The first objective of the study was, "to study the levels of effectiveness of secondary school teachers and psychological capital."

In the present study, majority of teachers of secondary schools belonged to "moderately effective level" of effectiveness of teachers. This implies that school authorities should try to identify the factors that are either lacking or are acting as hindrance in the way towards most effective level of teacher effectiveness. Further to improve the level of effectiveness of teachers online feedback system with anonymity must be introduced for students, as they are the real stakeholders, recipients and evaluators, so that they can give authentic feedback regarding the various parameters pertaining to effectiveness of teachers. The feedback generated may throw light on the strengths and pinpoint the weak areas that need to be addressed. Regular teacher evaluation should be done by the school principals and constructive feedback should be given so as to improve the level of effectiveness of teachers. Apart from this, feedback should be taken from all the stakeholders (school authorities, parents and society at large) so as to bring improvement, as teacher is the axis around which the whole education system revolves. Additionally, school authorities should organize faculty development programs, in-service programmes, refresher courses and similar other courses and programmes from time to time so as to improve the level of effectiveness of teachers in secondary schools.

In the present study, majority of teachers of secondary schools exhibited medium to high psychological capital. Teachers with medium psychological capital should be identified and training programmes to enhance their psychological capital should be provided by the schools. According to the literature, peoples' psychological capital levels can be improved through short-term intervention and education (Luthans et al., 2004, Youssef& Luthans, 2007). These training programmes comprise activities to enhance self-efficacy, hope, resilience, and optimism, as well as overall psychological capacity (Luthans et al., 2007). The PsyCap intervention's fundamental objective is to develop an integrated roadmap for all four PsyCap state-like capacities. While the design of the intervention is aimed to improve each component (self-efficacy, optimism, hope, and resilience), research to date indicates that PsyCap is synergistic and individuals perceive an overall response higher than the sum of the four components of the training (Luthans, Avey et al., 2006; Luthans, Avey & Patera, 2007).

For example in the hope component, individuals start by choosing essential targets that they will use during the sessions. The educator can go over the relevance of (1) possessing concrete end points to assess success; (2) having an approach (rather than avoidance) framework that allows attendees to work toward goal attainment rather than avoiding from intended goals (e.g., moving forward into a quality target rather than attempting to avoid product rejection); and (3) using what Snyder (2000) refers to as a "stepping" method to identify sub goals as a way to receive the rewards of even small accomplishments. While Taylor et al. (1998) offered a stress coping method that is consistent with this.

With respect to hope dimension of psychological capital participants have taken ownership of a personally valuable and realistically demanding goal, are prepared for hurdles, and are ready to implement numerous contingency plans (i.e., other pathways to achieve the objective). Finally, the PsyCap training intervention encourages participants to identify recent personal failures in their job area, which might range from severe setbacks (such as losing a key customer) to minor setbacks (such as missing a project deadline). Following the participants' instant emotions to the observed setback, the facilitator elaborates on examples of a firm sense of reality and an ideal resilient method for framing a setback, in line with Fredrickson's (2001) expand and build optimism approach.

The second objective of the study was, "to study the perception of teachers towards organisational climate of secondary schools."

• Majority of secondary school teachers perceived the organisational climate as medium i.e. favourable, or less favourable. Factors underlying medium and low perception of organisational climate, viz. lack of clarity of roles, unsupportive environment, lack of involvement in decision making, neglect of teachers problem, availability of needed resources, etc. needs to be recognized and school authorities should focus on the reduction of those factors so as to develop a favourable perception of teachers for organisation climate.

The third objective of the study was "to find the difference in effectiveness of secondary school teachers, perceived organisational climate, psychological capital and learning orientation with respect to gender, locality, teaching experience and type of school."

Female secondary school teachers were found to be more effective with respect to the various dimensions of effectiveness of teachers, viz. "preparation for teaching and planning, classroom management, knowledge of subject-matter, teacher characteristics and interpersonal relations and overall effectiveness of teachers" as compared to their male counterparts. This implies that special emphasis must be given to find out the reasons behind lagging of male teachers individually at school level, such as the problems being faced by them in teaching effectively etc., and accordingly necessary steps may be taken to enhance their teacher effectiveness. Further the male teachers should be encouraged and motivated to attend various faculty development programmes, in-service programmes, orientation programmes and similar other courses to refresh and update their knowledge, skills and attitudes. Apart from this it also implies that since females are being suppressed in this patriarchal society, many female teachers in order to prove their mettle are putting in more efforts in comparison to the male teachers. It also implies that female teachers should also be more encouraged and their efforts should be recognized and publically acknowledged so that they not only continue to put their efforts but also add more zeal and enthusiasm in their teaching and attain a sense of satisfaction. Further it may be due to the fact that in general teaching is perceived more of a female oriented job, as females can better understand the needs, interest and requirements of the children, but it does not imply that teaching is restricted to females only as, teachers day is celebrated in the commemoration of Dr. Radha Krishnan. In fact, male teachers should follow their female counterparts to improve their effectiveness as teachers. Further during the selection and recruitment, stringent measures should be adopted so that the deserving effective candidates are selected. Additionally, the effectiveness of teacher is affected by several factors, individual, organisational and societal, and not limited to classroom teaching.

- Further teaching is an individual and personal skill, and the effectiveness of teachers is not dependent on locality or type of school or number of years of teaching experience. This implies that stringent selection and recruitment measures should be adopted for selection of suitable teachers for whom teaching profession is not by chance but by choice. This also reiterates the conduct of teacher eligibility test for selection fitting people at appropriate places.
- Female secondary school teachers had a better perception of "organisational processes and altruistic behaviour" in schools as compared to their male counterparts. This implies that congenial, helping, gender discrimination free organisational climate is being provided in the secondary schools, female teachers are being consulted, their opinions and viewpoints are being given due credit and weightage in any of the decision making process. Further needed resources are being made available to fulfill their basic needs and requirements, be individual or related to logistics involved in teaching learning process and ensuring their general wellbeing. This further implies that such type of organisational climate should be maintained and followed by others. Further, factors need to be identified by the school authorities that made the male teachers to perceive less involvement in individual and team development, and decision making, meagerness of availability of resources and feeling of inadequacy and dissatisfaction regarding helping nature of people in the organisation.
- Teachers teaching in urban schools perceived more "altruistic behaviour" in schools as compared to their rural school counterparts. This implies that may be teachers in urban schools are more aware of importance of networking and social support in today's society and world at large and realize that it is a small world; moreover sufficient availability of resources in the urban schools can be instrumental in helping each other. Further it pinpoints towards identifying the hidden factors and psychological mechanisms that underlie for less favourable perception of altruistic

behavior by teachers teaching in rural schools. Moreover in rural schools the number of recruited teachers is less, so the teachers feel overburdened, hence government should fill the vacant posts, so that the teachers do not feel overwhelmed and develop a less favourable perception towards the organisational climate of school.

- Organisational climate perception of teachers remains the same irrespective of number of years of teaching experience, this implies that there is no discrimination or biasness among teachers with respect to number of years of teaching experience, that is, the organisation treats all the new joinees and experienced members equally and the same should be continued so that the new joinees do not feel neglected, bullied and overworked.
- Teachers teaching in government schools had a better perception of "results, rewards and interpersonal relations and organisational processes" and over all organisational climate in schools as compared to their private school counterparts. This implies that teachers teaching in government schools are being rewarded for their efforts, publically acknowledged through awards, and appreciation letters by Government are being given to teachers for their outstanding efforts in teaching. It also implies that free hand and needed resources are being made available to teachers to implement their creative ideas. Further their opinions and viewpoints are being recognized in any decision making process. This further implies that same strategies should be adopted and followed by private schools also, teachers should be given due recognition for their efforts, their outstanding efforts should be more applauded, constructive feedback by immediate heads and authorities should be given instead of reprimand. Additionally free and creative environment should be developed and facilitated through availability of needed resources, more and more opportunities for individual and team development should be provided. Individual and team development through training programmes, FDP's and similar other programmes should be encouraged and enhanced. Security of jobs in private schools is a big issue; government should frame stringent policies and should ensure transparency regarding teacher attrition in private sector. Low salaries drawn by the teachers in private schools, does not develop a favouarble perception towards the concerned organisation and has a bearing on their effectiveness as teachers. Hence government should frame such policies and should take such measures that ensure the provision of adequate salary to the teachers.

- Both male and female secondary school teachers exhibited similar "self-efficacy, hope, resilience, optimism" and overall "psychological capital". This implies that both male and female teachers have similar optimistic outlook, level of self-efficacy on the accomplishment of a certain task, hopefulness, and ability to tackle challenging tasks under challenging circumstances. This further implies that despite the prevalence of gender bias in the society, the women are equally at par with respect to psychological capital with their men counterparts in the work situation.
- Teachers teaching in rural schools exhibited better overall psychological capital as compared to their urban schools counterparts. This indicates that factors that have made teachers teaching in rural schools develop higher psychological capital needs to be identified. Teachers teaching in rural schools have greater self-belief regarding accomplishment of specific task, are more hopeful, have greater capacity to spring back in adversity/hardships and have positive attitude concerning present and future goals due to inadequacy and scarcity of needed resources (human or material), remoteness, backwardness and lack of basic infrastructural facilities in the schools, which develops an approach to face life, to be hopeful, resilient and believe in ones capacities. Moreover this implies that teachers teaching in urban schools need to build more psychological capital, may be easy availability of resources, modernity and good infrastructural facilities though facilitate, but act as a hindrance towards building a higher psychological capital.
- No matter how many years of teaching experience a teacher has, their psychological capital is unaffected. This implies that newly hired or veteran teachers demonstrate similar positive attitudes, self-efficacy with regard to executing a particular task, hopefulness, and similar capability to tackle the onerous assignment in harsh surroundings. Similar practices should continue so that new teachers won't feel left out by more upbeat, self-assured, hopeful, and resilient senior staff members.
- Teachers teaching in private schools exhibited more optimism and overall psychological capital as compared to their government schools counterparts. Teachers teaching in private schools exhibited greater positive attitude, self-belief regarding accomplishment of specific task, more hopefulness and greater capacity to bounce back in adversity, as survival in private sector is a challenge in itself as one has to be

on one's toes, work hard, continuously update one's knowledge, skills and attitudes due to prevalence of cut throat competition and job insecurity. Further, this implies that teachers teaching in government schools needs to develop higher psychological capital and should make maximum use of the opportunities available in the government sector instead of taking the things for granted. Additionally the factors that are acting as hindrances in the way towards developing strong psychological capital in government school teachers' needs to be identified.

- Female secondary school teacher exhibited better "conative and affective learning focus, learning independence or autonomy" and overall learning orientation as compared to their male counterparts. This implies that female teachers set their personal learning goals, believe in personal growth, take responsibility, are self-motivated; self-assess themselves, motivated and have greater general disposition and willingness to learn. This may be due the fact that they are living in patriarchal society where gender discrimination is prevalent, hence to prove themselves, their worth, they are more determined and have greater will and desire to learn. Hence female teachers should be more encouraged, motivated and appreciated to maintain this disposition to learn. Further the male teachers should also imitate their female counterparts and should develop a general disposition and willingness to learn so as to promote their personal growth.
- Learning is wholly personalized, and an individual's distinct potential for and commitment toward learning are unrelated to where they are located. No matter where one is, whether in the city or the village, one can learn at any moment. This suggests that educators in rural and urban settings shared a similar orientation to learning, i.e., similar in terms of self-evaluation, self-motivation, and taking ownership of their own learning. Further the individuals in rural areas are not deficient in their ability to learn than their metropolitan counterparts.
- Secondary school teachers with 0-5 years of teaching experience exhibited greater learning independence or autonomy in comparison to teachers with 10 years & above of teaching experience. This indicates that teachers with 0-5 years of teaching experience had greater desire, zeal and enthusiasm to learn, they self-assess and self-motivate and manage their own learning to prove themselves, to attain a sense of satisfaction and appreciation from their seniors. Teachers with more than five years of

teaching experience should strive to learn, continuously update and brush up their knowledge, skills and attitudes, come out of their comfort zones for better academic outputs.

- Teachers teaching in private schools exhibited better "conative and affective learning focus and learning independence or autonomy, committed strategic planning and learning efforts" and overall learning orientation as compared to their government school counterparts. This implies that teachers teaching in private schools set their personal learning goals to promote their personal growth, they self- assess themselves are self-motivated; take responsibility to manage their own learning; employ exceptional imaginative ideas and planning talents and endeavours, enlarge their personal goals, and try to induct betterment and change, and exhibit general disposition and willingness to learn. Since teachers in private sector face severe competition, they have to prove their competency, so for their survival they have to self-assess, self-motivate themselves, and update their knowledge, skills and attitudes to prove their worth. In contrast, the teachers teaching in government schools have job security and they do not face any kind of constant competition and threat related to job. Further attending various in-service courses is a mandate in contrast to private sector teachers who plan their own learning to hone their knowledge and skills to fit in the changing demands of education industry. Hence the government school teachers should try to encash the opportunities available for learning to them to the fullest and in the real sense and not for name sake and should gradually build a taste and desire for more and more learning instead of being in their comfort zones.
- Both the factors that promotes or hinders the effectiveness of teachers, perceived organisational climate, psychological capital and learning orientation of teachers needs to be identified and adequately addressed. Additionally there can be certain other hidden factors that act as hindrance in the way towards willingness to learn needs to be identified.

Fourth objective of the study was, "to examine the relationship among effectiveness of secondary school teachers, perceived organisational climate, psychological capital and learning orientation."

- A positive and significant correlation was found in effectiveness of secondary school teachers with perceived organisational climate. This implies that heads and school authorities should realize the importance and implication of maintaining a congenial and favorable organisational climate, as it may eventually affect the effectiveness of teachers and consequently the students' academic performance. It can be said that whatever type of organisation climate a teacher perceives, the effectiveness in terms of teaching also varies. Hence it is the responsibility of the government, administrators, planners and private organisations to clearly define the roles and responsibilities of teachers, their problems and opinions should be recognized and addressed, should be involved in decision making as they are at the grass root level; encourage and motivate the teachers to come up with innovative ideas time to time, teachers should be rewarded and publically appreciated for their best efforts; further sufficiency of resources in terms of basic facilities, viz. infrastructural, teaching learning materials, etc. should be ensured and favouarble and helping and supportive climate should sustain in the organisation. In fact there is a direct proportionality in the organisational climate and effectiveness of teachers, better the perception of organisational climate, better will be the effectiveness of teachers.
- A positive and significant correlation was found in effectiveness of teachers with psychological capital. This points that administrators, heads may empower their teachers by offering training programs aimed at enhancing their psychological capital; as better the psychological capital better will be the effectiveness of teachers.
- A positive and significant correlation was found in effectiveness of teachers with learning orientation. This signifies that setting personal learning goals, focusing on personal growth, self-assessing own learning needs, willingness to learn and putting planned and determined efforts to attain learning goals, may eventually affect the effectiveness of teachers and consequently the students' academic performance. Hence the school authorities and heads should appreciate the teachers who exhibit such kind of keenness and willingness towards learning, so that the same kind of keenness and want to learn becomes infectious in the teaching community.

Fifth objective of the study was "to analyze the role of perceived organisational climate, psychological capital and learning orientation in the effectiveness of secondary school teachers."

Perceived organisational climate, psychological capital and learning orientation were found to be significant predictors of effectiveness of secondary school teachers. This implies that conducive, helping and supportive organisational climate, where there is clarity of roles assigned, rewards are based on performance, opinion of teachers are recognized and given due weightage, individual and team development is emphasized, contributes towards the effectiveness of teachers, hence the same should be maintained. Further, psychological capital that is self-belief regarding accomplishment of specific task, hopefulness, capacity to spring back in adversity/ hardships and have positive attitude concerning present and future goals contributes towards the effectiveness of teachers, hence more training programmes that further enhance psychological capital of teachers should be provided. Additionally, learning orientation that is, general disposition and willingness to learn contributes towards the effectiveness of teachers, hence the teachers should be appreciated for such desire and keenness towards learning. Schools should provide ample opportunities to teachers to update their knowledge, skills and attitudes as effectiveness of teachers has direct bearing on student academic performance.

5.4 Limitations and suggestions for future research

- 1. The main emphasizes of present study was on the direct relation of effectiveness of teachers with perceived organisation climate, psychological capital and learning orientation. Future studies can be undertaken by exploring the mediating and moderating role of perceived organisation climate, psychological capital and learning orientation on effectiveness of teachers. Additionally, various other psychological variables, such as psychological hardiness, psychological empowerment, well-being, structural distance, etc., can be explored their relationship, mediating and moderating roles can be examined for effectiveness of teachers.
- 2. "Teacher effectiveness scale a standardized scale by Kulsum (2011)" was used without modification though focused on limited role of technology. Since there is always a scope for improvement so needed modifications, additions can be done in the scales.

- 3. The present conceptual framework of study may be established quantitatively first and may be brought to practice by principals /administration to improve the effectiveness of their teachers. Then, the principal's perception on the effectiveness of the teachers may be included as an extension of the present framework by the concerned stakeholders.
- 4. The concerned study was delimited to the secondary school teachers of Punjab. Future research can be conducted at primary level, college level as well as at university level on different populations in order to explore the association in effectiveness of teachers, perceived organisational climate and learning orientation. Additionally, similar study can be conducted across different regions/cultures to determine norms and levels of various constructs, effectiveness of teachers, psychological capital, perceived organisation climate and learning orientation.
- 5. The present study was conducted on government and private schools affiliated/ recognised to Punjab School Education Board. Future studies can be conducted in CBSE recognized/affiliated schools (public, private, or privately managed and aided).
- 6. Pedagogy subject of secondary school teachers as categorical variable can be explored with respect to effectiveness of teachers and learning orientation.
- 7. The present study found the differences in the learning orientation of teachers with respect to gender, location, teaching experience and type of school. Further studies can be conducted to identify the learning orientation profiles of teachers.
- 8. As an extension of the present framework, future research can be conducted on the variables based on qualitative analysis.

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APPENDICES

- 1. Teacher Effectiveness Scale by Dr. Umme Kulsum
- 2. Organisational Climate Scale by Sanjyot Pethe, Sushama Chaudhari and Upinder Dhar.
- 3. Psychological Capital Questionnaire by Luthans, Avolio, Avey and Norman.
- 4. Learning Orientation Questionnaire by Martinez.

Teacher Effectiveness Scale by Dr. Umme Kulsum

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INSTRUCTIONS

If we perceive the best and the worst effective teachers and the other categories of them in terms of the rungs of the picture of the ladder given here, we can say that the best effective teachers could be placed on the 10th (highest) rung of the ladder and the worst effective ones on the 0th rung of the ladder. If one travels from the bottom to the top of the picture of the ladder given here, one would be having teachers with higher levels of effectiveness. If one travels from the top to the bottom of the picture of the ladder, one would be having teachers with lower and lower levels of effectiveness.

You have been a teacher at the Secondary School level for quite some time now. Hence, by now you might have attained some level (status) in respect of your effectiveness as a teacher. Also you might have been aspiring to attain some better level (status) in the next three years in terms of your being an effective teacher.

Please read the statements given on the next pages and indicate the step number on which you think you are now in the picture of the ladder in respect of your effectiveness as a teacher and the step number you aspire to reach in the picture of the ladder in respect of your effectiveness in the next three years, keeping in view the maximum possible effectiveness (BEST) of teachers and the least possible effectiveness (WORST) of teachers, as a frame of reference for your rating.

This is not an examination for you. There are no right or wrong answers in your responses. You should feel free in marking your responses. You may please start now.

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Consumable Booklet of TES-KU 5 Step Step number Sr. number aspiring to SCORE STATEMENTS No. you are attain in the on Now Next Three Years 13. I have good expression. My knowledge of subject-matter is up-to-date. 15. I invite my students for discussion outside class hours. 16. I value interaction of my students during teaching-learning sessions. I keep on acquiring new knowledge. 18. I am emotionally balanced. 19. I do not discriminate students for personal reasons. I am objective in evaluating my students. П 21. I am reasonably active. 22. I take a great deal of interest in parentteacher association meetings. 23. I make my teaching interesting by giving examples and situations that are familiar to students. 24. I try to stimulate the intellectual curiosity of my students during my classes. AREA C В D E Sr. No. 23 16 20 24 14 18 17 13 21 15 19 22 SCORE

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Organisational climate Scale

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19.	Working with	7	6	5	4	3	2	1	Working with	
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21.	Resources are	7	6	5	4	3	2	1	Resources are not (
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Psychological capital questionnaire (PCQ)

Instructions: Below are the statements that decide how you may think about yourself right now. Use the following scale indicates your level of agreement or disagreement with each statement.

- 1. Strongly Disagree
- 2. Disagree
- 3. Somewhat Disagree
- 4. Somewhat Agree
- 5. Agree
- 6. Strongly Agree.

1.	I feel confident analyzing a long-term problem to find a solution.	1 2 3 4 5 6
2.	At the present time, I am energetically pursuing my work goals.	123456
3.	I usually manage difficulties one way or another at work.	123456
4.	I usually take stressful things at work in stride. 1 2 3 4 5 6	
5.	In this job, things never work out the way I want them to.	123456

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Note: As per copyright norms, the entire PCQ scale is not permitted to be presented

Learning Orientation Questionnaire

Purpose: This survey asks how you personally rate characteristics and reactions which are typical of your GENERAL or usual approach to learning. Think of your most TYPICAL learning situations when you answer this survey. Remember, there are no right or wrong answers, simply answer as realistically as possible.

Instructions: For each statement, circle one number in the range between 1 and 7 to describe your usual learning approach.

Examples:

- (1) If you believe the statement is almost always uncharacteristic or untrue of you, circle the number 1 for Very Uncharacteristic of Me.
- (2) If a statement is almost always characteristic or true of you, circle the number 7 for Very Characteristic of Me.
- (3) Or, select one of the remaining numbers in the range between 1 to 7 to describe yourself.
- 1. I push myself to accomplish personal learning goals beyond those expected by the School Principal.
- 2. I enjoy learning.
- 3. The School Principal is the best person to monitor, evaluate, and determine how well I learn.
- 4. I look for additional information sources that help me learn about new topics.

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