SCHOOL CLIMATE AND STUDENTS' ACADEMIC ACHIEVEMENT IN SECONDARY SCHOOLS OF BUNO BEDELE ZONE

A THESIS SUBMITED TO THE DEPARTMENT OF EDUCATIONAL PLANNING AND MANAGEMENT IN PARTIAL FULFILLMENT OF THE REQUIREMENTS FOR MASTER OF ARTS DEGREE IN SCHOOL LEADERSHIP

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Declaration

The researcher hereby declares that the thesis entitled "**school climate and students' academic achievement in Secondary Schools of Buno Bedelle Zone**'' prepared under the guidance of Main advisor Bekalu Ferede (Assoc. Professor) and Co advisor Tadesse Abera (Asst. Professor) is my original work and all sources that was referred to and quoted by indicated and acknowledged with complete references.

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This thesis has been submitted for examination with my approval as the University advisor.

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Chair Person

 _____   _____   _____

                Name   Sign   Date

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Acronyms and Abbreviation

CTB: Collegial Teacher Behavior

DPB: Directive Principal Behavior

DTB: Disengaged Teacher Behavior

EGSLCE: Ethiopian General School Leaving Certificate Examination

GEQIP: General Education Quality Improvement Program

ITB: Intimate Teacher Behavior

MLC: Members of Learning Community

Moe: Ministry of Education

OCB: Organizational Citizenship Behavior

OCDQ: Organizational Climatic Description Questionnaire

OCI: Organizational Climatic Index

OHI: Organizational Health Index

RPB: Restrictive Principal Behavior

SES: Socio Economic Status

SIP: School Improvement Program

TDP: Teacher Development Programs

SPB: Supportive Principal Behavior

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Abstract

The purpose of this study was to examine if a relationship exists between school climate and students' achievement in Bunno Bedelle secondary schools setting, and to investigate whether the various elements of school climate have independent effects on students' academic achievement. A correlational research design was employed. School climate was measured using Organizational Climate Descriptive Questionnaire (OCDQ) developed by Sing and Katoch (2017), and student achievement was assessed using students' average scores at the Ethiopia General School Leaving Certificate Examination (EGSLCE) of 10th grade in the year 2016/17 - 2018/19. A total of 34 schools, 260 teachers, 10 principals, 10 vise Principals and 3 supervisors were involved using random and stratified sampling. Descriptive statistics such as mean and standard deviation, Pearson r correlation coefficient and multiple regression analysis were applied for the data analysis. The results indicate that school climate has a significant and positive relationship with student achievement in Buno Bedelle secondary schools. The collegial teacher behavior, intimate teacher behavior, supportive principal behavior and directive principal behavior were significantly and positively correlated to students' academic achievement while the restrictive principal behavior and disengaged teacher behavior sub scale were not. The six factors used as predictor variables in the regression model were shown to have a significant relationship with student achievement when viewed as a whole, but they generated more varied results when examined individually. The collegial teachers' behavior is the most positive predictor of student achievement in Bunno Bedelle secondary schools. Similarly intimate teacher behavior, supportive principal behavior and directive principal behavior are also found to be significant predictor of academic achievement. This study found no independent effect of restrictive principal behavior and disengaged teacher behavior on students' achievement. The researcher concluded achievement difference comes due to school climate differences. It is recommended that school leaders should design school improvement plans (SIP) that involve the school climate construct. School principals need to think how to develop collegial and intimate relationship between school life which latter bring better students' academic achievement. For the future research the school climate sub variable like teachers' performance (GPA), teachers' pedagogical skills and students' academic achievement should be considered.

***Key words:** School Climate; Students' Achievement; Teacher Behavior; Principal Behavior*

<div align="center">**CHAPTER ONE**</div>

INTRODUCTON

This chapter consists of, background of the study, statement of the problems, main objectives of the study, basic questions, and significance of the study, delimitation and limitation of the study.

1.1. Back ground of the Study

Education is a process by which human being transmits knowledge to generations. Students learn definite curriculum in definite time by definite teachers in school. School across Ethiopia struggle with the means by which students' achievement can be raised. It is known that many factors like cognitive abilities of students, socioeconomic factors, gender, parental involvement; principal leadership style, teacher and student engagement and method of instruction affect negatively students' achievement and whole school performance (Lacour & Tissington, 2011, Sanders, Wright, & Horn, 1997).   Research found that one possible means would be making school climate conducive and positive (Vasquez, 2012; & Abeya, 2017).

Appropriate and attractive school environment increase students achievement by increasing over all school performance. School principal and teachers have lion's share in increasing students' academic performance which is the goal of school performance and one indicator of school performance. Student inter into the new environment during their transition from elementary school to high school, unless they are treated positively until adapting the new environment it may lead them to confusion and dropout. As they enter high school, students may encounter a number of organizational differences from the elementary school setting, such as increased student body size policy changes, stricter grading procedures and increased expectations for classroom behavior (Eccles & Midgley, 1988) and exposure to a greater number of teachers and instructional styles (Roderick, 1995). For students to follow their education well there must be positive and orderly climate appropriate for learning and teaching process. The relationship between school principal and teacher, teacher and teacher, student and teacher, student and student might be healthy and friendly; this leads to high motivation to learn and give birth to good students' academic performance regardless of other negative factors affect students' academic achievement.

School climate refers to the quality and character of school life. It includes physical structure of the school building, interpersonal relationships, teaching and learning practices, and organizational structures. A sustainable, positive school climate fosters youth development and learning necessary for a productive, contributing and satisfying life in a democratic society. This climate includes norms, values, and expectations that support people feeling socially, emotionally and physically safe, people are engaged and respected, students, families, and educators work together to develop, live and contribute to a shared school vision. Educator's model and nurture attitudes that emphasize the benefits and satisfaction gained from learning. Each person contributes to the operations of the school and the care of the physical environment. Hoy and Miskel (2005) defined school climate as "the set of internal characteristics that distinguish one school from another and influence the behaviors of each school's members" (p. 185). Bradshaw, Waasdorp, Debnam, and Johnson (2014) referred to school climate as "shared beliefs, values, and attitudes that shape interactions between students, teachers, and administrators and set the Parameters of acceptable behavior and norms for the school. School climate is a product of teacher and student social interactions, and is influenced by educational and social values" (p. 594). Schools that set high standards for academic performance, set an orderly and serious learning environment, and maintain definite standards of performance tend to do better academically than schools that do not (Abeya, 2017).

Students' academic achievement is the result of learning prompted by teaching activity by the teacher and produced by the student. In different literature school performance and academic achievement is used as synonyms. Chen (2019) defined that academic performance is the knowledge and skills that students have mastered in a subject or course. It measure how well students have performed in the various assessment items set for them based on some educational criteria determined by professional educators. It is an issue that deeply concerns students, parents, teachers and authorities. From a humanistic approach, Martinez (2007) states that academic performance is "the product given by the students and it is usually expressed through school grades" (p. 34). Through student performance in the assessment items such as essay, tests and examinations. Student performance are determined in ranking as to educational standards that they have reached that is pass, credit, distinctions, great distinctions and so on.

School performance sometimes it is known as school readiness, academic achievement and school performance. In Ethiopia grade 10 and grade 12 national examinations are given to

evaluate the school performance and students' academic performance. Common observation shows that some parents have lost confidence in the ability of most of the public secondary schools to guarantee successful academic performance of their children. When some students passed their secondary school Certificate Examination in some schools, others failed the examinations in some other schools. It is assumed that the type of school climate of an organization is responsible for this because a school has unique characteristics and these characteristics of the school tend to distinguish one school from the other. As the students' promotion of their examination is different, the organizational climate of those schools is also different.

Favorable school climate promotes good relationship between principals and teachers and among school stakeholders which promotes school performance (Hoy & Tarter, 1997). School principals should, thus, actively support and motivate teachers, students and the rest of the staff members to create a favorable working atmosphere within the school. Such an effort of the principal would help to develop an orderly and a productive school climate which improves the students' achievement and overall effectiveness of the schools.

School climate studies provide useful information for school administrators who are interested in building healthy relations in their schools. For these leaders who seek innovative ways of improving their school environment and, thus, the academic success of their students, school climate studies merit some attention. This study, in particular, provides further insights on the topic of organizational school climate as it focuses on the relationship between organizational school climate and students' academic achievement in secondary schools of Buno Bedelle zone. Therefore, the motivation for conducting this study was initially derived from a wish to assess the relationship between organizational school climate and students' academic achievement also to identify the major challenges that affect students' academic achievement in secondary schools found in Ethiopia, Oromia region, Buno Bedelle zone.

1.2. Statement of the problem

Different schools exhibit different types of climate. In some schools, the atmosphere might be healthy and friendly while in other, it may be tensed hence, students' academic performance seems to be a function of the school climate. In spite of the fact that the numerous reforms like school improvement program have implemented at all levels of schools (MOE, 2008), it is

common to see dissatisfaction of the community that there is lack of conducive and friendly school climate in Buno Bedelle zone in general and in secondary school in particular. The research literature has shown that this factor is correlated with student achievement and does have some effect on the latter (Barton, 2004; Klinger, 2000; Malecki & Demaray, 2006; Willie, 2001). Socio economic status only affects the performance of students coming from low economic family backgrounds. Additional external factors have been identified as playing important roles in determining academic success (Barnard, 2004; Oppdenaker & Damme, 2001; Uline & Tschannen-Moran, 2008). The school climate, discipline and physical facilities have significant influence on academic achievement of secondary school students (Okoji, 2015; LN Makewa, Role, Role, & Yegoh, 2011). However, regarding secondary schools in Buno Bedelle zone, much budget and enough human power has been assigned to each school. Concerning human power, minimum of one director/ principals, two vise principals and qualified teachers with minimum qualification of bachelor degree is assigned in each school. So, the question here is, why not high academic performance?

Past researchers have conducted study in developed countries (Vasquez 2012; Cohen, McCabe, Michelli, & Pickeral, 2009; Freiberg, 1998; Marshall, 2006; Milam, 2014; NSCC, 2011; Thapa et al., 2013; Tschannen-Moran, 2011) but very few in Ethiopia (Abeya, 2017; Woldegerima, 2014, Dagnaw, 2014), they found that school climate has a significant and positive relationship with student achievement. Moreover, Vasquez in his literature review had described that he couldn't find any study on school climate in developing countries. In the research he had conducted in Belize which is one of the developing countries, he found out that school climate has a significant and positive relationship with student achievement. His finding was similar to those research studies conducted in developed countries like Virginia, Ohio, and New Jersey schools. In this regard, Abeya (2017) also discovered that school climate has a significant and positive relationship with student achievement in Ethiopian secondary schools, however, a weak one. So that the researcher is going to conduct this study using another instrument called organizational climate descriptive questionnaire (OCDQ) which measures the interpersonal relationship between principals and teachers and students' academic achievement. School climate which is characterized by many factors, in fact, is directly related to the overall development of students; and, hence, the influence of school climate either positively or

negatively is related not only to immediate student achievement but also its effect seems persists for future life (Hoy, Hannum, & Tschannen-Moran, 1998).

Different school climate researches have shown that, positive school climate plays vital roles to student academic performance. To alleviate, if not completely solve the existing problems, it is obligatory that principals and teachers should struggle to establish an attractive, orderly and positive school climate of their schools in order to facilitates the teaching learning processes and ultimately improve students' academic performance.

Researchers in the field have suggested that studying the climate of schools, enables the practitioners to identify those dragging factors, then immediately act on them and improve schools functioning (Hoy & Miskel, 1997). This study examined how one such factor (organizational school climate and its subscales) can affect student achievement in the Buno Bedelle zone secondary schools context. It help principals and teachers to identify factors that affect students' academic performance and to direct to establish an attractive, orderly and positive school climate in the teaching learning processes which improve students' academic performance.

To the knowledge of the researcher, a research done on the relationship between school climate and student performance using the organizational climate descriptive questionnaire (OCDQ) developed by Sing and Katoch (2017), which focuses on interpersonal relationship between principals and teachers is very limited. Besides, most school climate studies have been conducted in developed countries. This study, however, is conducted in Buno Bedelle zone secondary schools, where the number of students, dynamics, management, and systems of schools in general differ from those of the developed ones.

Furthermore, the researcher believed that, if there is open interpersonal relationship between principals and teachers it will have a significant positive impact on students' academic performance. Hence the study tried to assess the correlation between school climate and students' academic performance based on interpersonal relationship between principals and teachers in Buno Bedelle zone secondary schools. From near past researchers experience in secondary school of Buno Bedelle zone grade 10 national examinations some school perform better score (grades) than the other schools. This tells us that there is a great difference in student

performance due to different reasons, one which the researcher going to study. This study investigates how one such factor school climate affects student achievement in Buno Bedelle secondary school educational context. It seeks to find out whether school climate has relation with students' academic achievement in Buno Bedelle secondary schools. To this end the following research questions will be considered:

i.   What type of school climate is predominant in secondary schools of Buno Bedelle zone?
ii. Is there significant relationship between school climate and students' academic achievement in secondary schools of Buno Bedelle zone?
iii. Which sub-climate is a stronger predictor of students' academic achievement in secondary schools of Buno Bedelle zone?

1.3. Objective of the Study

1.3.1. General Objective

The general objective of the study is to point out/examine the relationship between school climate and students' academic achievement and explore the extent to which the school climate factors affect students' academic achievement in secondary schools of Buno Bedelle zone.

1.3.2. Specific Objectives

The study would have the following specific objectives:-

1. To identify type of school climate predominant in secondary schools of Buno Bedele zone.
2. To know if there is significant relationship between school climates and students' academic achievement in secondary schools of Buno Bedele zone.
3. To identify the sub-school climate which is stronger predictor of students' academic achievement in secondary schools of Buno Bedele zone?

1.4. Significance of the Study

Many schools in Oromia in general and Buno Bedelle zone in particular are suffering from delivering quality education to enhance student achievement. The increased emphasis on quality education and student achievement is causing many schools to engage in an assessment to determine how best to improve student performance. This study would highlight one aspect of education that leaders can examine in their schools, if their purpose is to improve the school

effectiveness. This study would be provided important information to school leaders and teachers as it would give them an additional opportunity to consider when looking at school climate factors that can possibly influence student academic achievement.

Furthermore, this information becomes very useful in the planning process particularly in school improvement plan for the fact that the study were focused on two subscales of school climate openness of interpersonal relations between principals and teachers (principals' behavior and teachers' behavior). Depending on this, the researcher hoped that the result of the study would have the following significance.

1. It might provide with information for the Buno Bedelle zone educational experts and the secondary school principals on how to establish an inviting, orderly and positive school climate.
2. The study identified the factors affecting students' achievement and it helps principals to include in school improvement plan to do on it.
3. It may give some clue for teachers on school climate regarding principal and teachers relations in secondary schools of Buno Bedelle zone.
4. The final findings of the study would become additional inputs to conduct research on related or similar topic in school climate area.

1.5. Delimitation of the Study

To make the study more specific and manageable this research is delimited to secondary schools of Buno Bedelle zone because the researcher works there. In this research emphasis would be given to relation of school climate and students' academic achievement in secondary schools of Buno Bedelle zone. It is difficult to include all schools which found in the zone due to time and budget constraint also pandemic disease which forced people and students to stay at home. Therefore, to make it more manageable and specific this study would be focused on the secondary schools of Buno Bedelle zone.

1.6. Limitations of the study.

There is a shortage of empirical studies carried out on school climate and students' academic achievement in developing countries, difficulty of developing instrument to collect data, shortage of time and problem related to corona (covid-19). The researcher managed the limitations by

referring research of developed countries, by using standardized instrument developed by Sing and Katoch (2017), by adjusting his time wisely and by using preventive method (wearing face mask and using sanitizer). This therefore, would affect the result of the study to some extent.

1.7. Operational Definition of Key Terms

1. School climate: interpersonal relationship between teachers and principals (principals' behavior and teachers' behavior).

2. Academic achievement: is the score of students on grade 10 national examination as measured by EGSLCE.

3. Collegial behavior: teachers' behavior that is open and professional interaction among teachers. They are enthusiastic accepting and mutually respectful of professional competence.

4. Intimate Behavior. Reflects a cohesive strong network of social support among faculty, teachers know each other well are close personal friends and socialize.

5. Disengaged Behavior: lack of meaning of professional activities. Teachers are simply putting in time and going through the motions.

6. Supportive Behavior: Principals' behaviors which reflect a concern for teachers and open to suggestions, respect teachers' professional competence and give constructive criticism.

7. Directive Behavior: principals' behavior with constant control over all teachers and school activities.

8. **Restrictive Behavior:** hinders rather than facilitating teacher work, burdens with busy work.

1.8. Organization of the Study

This study is organized in to five chapters. The first chapter deals with background of the study, statements of the problem, basic research questions, and objectives of the study, significance of the study, delimitation of the study, limitation of the study and organization of the study. The second chapter of the study presents the review of related literature. Chapter three included the research design and methodology. The forth chapter deals with data presentation, analysis and interpretation. The last chapter focused on summary, conclusions and recommendations

INTRODUCTION

Review of related literature help the researcher to understand various written materials on related research topic and to expand the knowledge of the researcher on the study area. In conducting Review of related literature various definition of school climate are emerged, but the researcher takes one definition which is matched with the project. Using that definition the review literature addresses two main areas of organizational school climate: principal behavior and teacher behavior which shows openness of interpersonal relationship between teachers and principal which in fact affect school performance in general and students' academic achievement in particular. Openness of interpersonal relationship between teachers and principals measured by School Organizational Climate Descriptive Questionnaire (OCDQ).Dependent variable students' academic achievement is measured by average score of students scored on Ethiopian General School Leaving Certificate Examination (EGSLCE) of grade 10 in2016/17 _ 2018/2019 secondary schools of Buno Bedelle zone.

2.1. Definition and Concept of School climate

Organizational climate, which was of significant interest in the 1960s and 1970s and is central to the studies conducted on human relations and organizational behavior (Sisman, 2011a), has been perceived for the first time as a general concept that reflects the sustainability of the quality of organizational life (Hoy & Miskel, 2011). Many definitions have been proposed for organizational climate to date, indicating that there is no consensus on the definition. The first and most renowned conceptualization concerning organizational climate was by Halpin and Croft (1962). Halpin and Croft (1962) explain organizational climate as characteristics that vary between the open and closed ends of the scale. The most well-known conceptualization and measurement of organizational climate in schools is the pioneering study of elementary schools by Halpin and Croft (1962, 1963). Their approach was to identify the critical aspects of teacher-teacher and teacher-head master/mistress interactions in schools. Halpin (1966) express the organizational/school climate as personality of a school and describes the institution on the basis

of their social interactions between the teacher and the head master/mistress and among members of the teaching staff.

School climate refers to the quality and character of the school life. It is the heart and soul of the school that attracts a child, teacher and administrator to be there each school day. A positive school climate helps people feel socially, emotionally and physically safe in schools. Moreover, it has been emphasized that, school climate is the interpersonal interactions among the school community that either positively or negatively affects students' cognitive, social and psychological development (Haynes, Emmons, & Ben-Avie, 1997). The interpersonal interaction which greatly affects school organizational climate is that takes place between teachers and principals of the school which in turn affect students' academic achievement and school performance.

Researchers define school climate in different ways. As it was defined by Johnson (1993) school climate may include anything from environmental aspects of the school to the personalities of the students and educators as well as academic performance, levels of physical activity, and the processes and materials used throughout instructional procedures. School climate is about that quality of a school that helps each individual feel personal worth, dignity, and importance, while simultaneously helping create a sense of belonging to something beyond ourselves (Freiberg & Stein, 1999). School climate can also be described as a complex construct that is recognized as an important variable of effective schools. The school that fulfills the needs for the school climate can make a difference and consequently could have better students' academic performance. According to the national school climate council sustainable positive school climate promotes students' academic performance and social development. As a matter of fact, school environment varies significantly from organization to organization. Although some schools feel friendly, attractive, and supportive, others feel awkward, unwelcoming, and even unsafe. The feelings and attitudes that are offered by a school's environment are referred to as school climate.

Even though it is difficult to provide a concise definition for school climate, most researchers agree that it is a multidimensional construct that includes physical, social, and academic dimensions. A research conducted in secondary schools in Benue State, in Nigeria had shown that School climate, discipline and physical facilities have significant influence on academic

achievement of secondary school students (Oguche et al., 2015).Positive school climate is related to many positive students' outcomes, higher academic performance, and better mental health and less bullying. Improving school climate can be used as a preventative approach to reduce disruptive behavior and to improve attendance, achievements, and students' parent satisfaction with school.

It is important to note that, no single variable determines a school's climate. Nevertheless, the interaction of numerous school and classroom issues can produce a fabric of support that allows or enables all members of the school community to teach and learn at best levels (Freiberg, 1998). Although, different researchers define school climate from different perspectives, the researcher considers and pin point to the definition that gives emphasis on principal behavior. Principal behaviors perceived as supportive and collegial not overly directive or restrictive (Uline & Moran, 2008) and teachers' behavior, the teachers and their heads must share a relationship based on equality and mutual respect to create a better and positive organizational climate (Babu, 2013). The openness of interpersonal relationship of principal and teacher play a great role in increasing school performance and students' academic performance since teachers and principal play lion share in school. There are saying that students look like their teacher and school like their principals. Generally a look at the school climate literature quickly reveals there is no consensus over a single definition for the term for the purpose of this study the definition that gives emphasis on principal and teacher behavior was taken.

2.2. School climate studies

School can be considered as a social meeting place. Organizational structures of schooling vary only slightly from one country to another. Any School around the world at least have a group of students, teacher, fixed times for instruction, starting and stopping the school day and administrative structures that are mostly hierarchical. Moreover, the problems of schooling are also universal: student boredom as evident by lack of attendance (truancy); leaving school before reaching a specified age (dropping out) use of stimulants that diminish participation (drugs, drinking alcohol and tobacco abuse) (Freiberg, 1996).

2.3. Types of School climate

2.3.1. Healthy school climate

Researchers suggested that the success of students is affected by various factors; whatsoever the case numerous research findings have concluded that healthy school climate and student achievement are related (Eliss, 2008; Jankens, 2011; Macneil, Parter & Busch, 2009). The presence of strong relationship among school community is a manifestation of positive school climate. In a positive school climate, students and staff are caring, respectful, and committed to their communities; in such schools, these important values live and breathe without any external pressure and each member of the school community is more likely to have positive relationships and help each other. They feel safe physically and emotionally in school and have clear and consistent rule and discipline. A positive school climate helps people feel socially, emotionally and physically safe in schools (Weissbourd, Bouffard & Jones, 2013; Kappan, 1987; Wikipedia, the free encyclopaedia).

Researchers (Eliss, 2008; Jankens, 2011; Macneil, Parter & Busch, 2009) have demonstrated that positive school climate is linked with student engagement in school, academic achievement and positive social development. Furthermore, studies have shown the existence of significant difference in student achievement between schools with positive school climate and school with unhealthy or poor school climate. Additionally, teachers set high but achievable goals for students, retain high standards of performance, and promote a serious and orderly learning environment. Furthermore, students are engaged in their school work, are highly motivated and respect other high achieving students. Finally, in healthy schools, teachers like each other, trust each other', are eager about their work, and recognized positively by the school. Teachers are very much proud of their school (Hoy et al. 1990).

In healthy school climate students feel physically and emotionally safe, they are welcomed and supported, misbehavior is handled to help them to learn from their mistakes, teachers are democratic and friendly so that students do not fear to ask and answer question. Leader always communicate vision for community and parents visit the school regularly.

2.3.2. Unhealthy School Climate

It is very simple to understand the general conditions of unhealthy schools' climate, because it is enough to look at the opposite aspects of healthy school climate. Unhealthy schools are characterized by poor interpersonal relation between school members, low attendance of students and high dropout; they believe that school belongs to government only. In such schools, there is little support among and between the school community; and it can be said that, the communication between the school leaders and teachers is either very low or broken. This in turn creates deteriorating staff self-confidence and teachers don't feel good about their jobs and the organization /school / where they are working in. They become nervous and act unfriendly, distrustful, and self-protective. Principal and community point their finger to government for the failure in that school. Such schools with unhealthy climate faced unnecessary interference from every directions and being unable to obey its mission in every day activity. Unhealthy schools lack an effective leader and the teachers become unhappy with their task and colleagues (Hoy & Tarter, 1997) cited in (Mac Neil et al, 2009). As a result, these schools have become deterred in their mission and goals by stake holders.

2.3.3. Open school climate

An open school climate is characterized by a school climate where both the teachers' and headmaster/mistresses' behavior are authentic, energetic, goal-directed, and supportive, and in which satisfaction is derived from both task accomplishment and social-need gratification (Hoy et al., 1991). In order to place each institution or a school along a continuum from open to closed, Organizational Climate Description Questionnaires (OCDQ) were used to quantify or measure the climate or personality of the school (Halpin & Croft, 1962). In this study, the questionnaire (OCDQ) for secondary school was used (Appendix 1). Open school climate characterize cooperation, respect, and openness that exist within the teachers and between the teachers and headmaster/mistress. The headmaster/mistress listens and is receptive to teacher ideas, gives genuine and frequent praise, and respects the competence of teachers. Headmaster/mistress also gives their teachers freedom to perform without close scrutiny. Likewise, the teachers support open and professional behavior (high engagedness) among teachers, they cooperate and are committed to their job and teaching. Teachers find the working environment facilitating rather than frustrating (low frustrating). In brief, the behavior of both the headmaster/mistress and teachers are genuine and open.

2.3.4. Closed school climate

A closed school climate is the reverse of the open school climate (Sweet land and Hoy, 2000). The climate is characterized by teacher's relations that are disengaged, frustrating, distant, suspicious, and not professional. The headmaster/mistress's leadership is seen as controlling and rigid (high directiveness) as well as unsympathetic and unresponsive (low supportiveness). Likewise, the teachers' support is not open and non-professional behavior (low engagedness) among them prevails. Teachers find the working environment frustrating rather than facilitating (high frustrating). These misguided tactics are accompanied not only by frustration and apathy but also by suspicion and a lack of respect of teachers for their colleagues as well as the administration (low intimacy). In brief, the behavior of both the principal and teachers is not genuine and is closed. These schools are characterized by people going through the motions, without concern for the overall purpose of the institution. Headmaster/mistress's often stress routine, busy work, rules, and regulations. Teachers in schools deemed to be on a closed climate tend to appear frustrated and apathetic.

2.4. Improving the School climate

Many researchers have suggested that school leaders or principals play important roles in creating conducive school environment (Gulşen & Gulenay, 2014). School climate can be improved focusing on four major areas. These are: safety, relationships, teaching and learning, and the external environment (Dary & Pickeral, 2013). A growing body of research has indicated that, improving school climate, and consequently school outcome is the major concern of nations in the world now a days. Tschannen-Moran (2011) conducted a research on how to improve school climate focusing on strengths through appreciative inquiry to confirm that, whether appreciative inquiry is related to measure changes in school climate and trust within a school. Through the process three areas of inquiry had been identified; namely: student achievement and success, trust and respect, and community pride and involvement. The finding showed that a significant improvement was shown. In addition 'having designed strategies for moving forward, it is time to innovate those strategies into being. When the spirit of appreciative inquiry is fully realized in a school, educators become more willing and able celebrate and build on their strengths. They become the subjects, rather than the objects of change to realize the destiny of their schools as learning organizations. That is the cultural shift and orientation made possible by appreciative inquiry. By orienting people around the positive, appreciative inquiry enables an

organization to generate positive actions and outcomes that become self-reinforcing (Watkins & Mohr, 2001)' cited in Tschannen-Moran, Tschannen-moran (2011).

In Ethiopia, for the last ten years, different reforms and programs initiative such as: SIP, TDP, BPR, BSC, ESDP I-V…etc have been implemented by Ministry of education nationwide and regional education bureaus in their respective regions so as to improve the learning outcomes. However, the required change or improvement has not yet been achieved.

Educators always need schools to show improvement; and thus, to be successful, continuous and timely information about the learner and the learning environment is indispensable. In this regard, to improving the school climate and so do student achievement; Freiberg and Stein (1998) have suggested principals or school directors to ask the following five questions.
The questions are: (i) start with your senses and ask yourself: How does the school look, smell, feel, see, and taste would I eat in the student cafeteria? (ii) What direct and indirect climate measures can be used to help document and create a base-line for change? (iii) What initial climate changes can we make that would have the highest visibility and be accomplished in the shortest period of time (e.g. a few weeks)? (iv) what groups or individuals should be involved to encourage and create an environment for sustainable school climate improvements? (v) What long-term changes are needed to create a healthy environment for all members of the learning community? Furthermore, all schools are expected to perform internal inspection by themselves, by making use of SIP questionnaire analysis which is collected from teachers, students and parents every year so as to know the level of performance of the schools (MOE, 2008). This is how stake holders will have information about the school's performance and enable them to make some corrective measure/s/ with the hope that, the schools will show improvement. However, once the school climate has been improved from unhealthy to healthy school climate, the challenge here is the question of sustainability. From the researcher experience, one of the biggest challenges faced by Buno Bedelle zone education Bureau in general and secondary school in particular is all school in the zone are not fulfilled the level 4 inspection criteria.

In this regard the Ethiopian ministry of education applies the general education inspection data collecting tools as a standard that focus on input, process and output to measure the levels of performance of the schools (MOE, 2013). According to this inspection standard, a school that scored 50% to 69.99% called level 2 which means doesn't fulfill the standard and needs to be

supported; 70% to 89.99% called level 3, almost fulfilled the standard, but still needs some support, 90% to 100%, level 4, completely fulfilled the standard and furthermore, it could be center of excellence, however a school below 50% should not be allowed to continue, regardless of the reality on the ground.

As already mentioned above, schools are evaluated either internally or externally, and it is obvious and natural that, schools with better 'standard' high level of performance (which is based on the inspections value), would have high student performance and hence high student achievement. However, what has been observed on the ground so far is not in line with this assumption. According to the researcher's observation, the instrument used to measure the levels of school's performance or the one who perform the inspection process have some gaps. Sustaining a healthy learning environment may take as much effort and care as improving an unhealthy one. Regarding this point, Freiberg and Stein, also provide advice to school leaders/principals/ to ask three important questions to confirm sustainability of school climate that leads to consistent and sustainable development of student achievement. The questions are given as follows: (i) what factors enabled us to create a healthy learning environment? (ii) Have there been any changes that would require adjustments in order to sustain the environment? (iii) What is my personal commitment to sustaining a healthy learning and working environment? Therefore, the above questions reflect the need to determine (i) how did we get here? (ii) What changes have occurred since and what adjustments are needed? And (iii) what is my role in sustaining a healthy learning environment?

Carl Rogers (known to be one of the founders of humanistic psychology) in personal Communication with Freiberg several years ago cited in H. Jerome Freiberg and T.A.Stein (1984) very much pleased the researcher, and decides it to be part of the review literature, and is given as follows:

"I work every day in my garden. The roses, flowers, and plants do well………… I am aware that weeds are always present. It is the constant caring that prevents the weeds from taking over the garden. Person-centered education is much like my rose garden it needs a caring environment to sustain its beauty. Sustaining a healthy learning environment may take as much effort and care as improving an unhealthy one. The conversation between the two guys was very important. A summarized lesson was conveyed to all educators; that is , school climate is not something

created by one shot activity or will not be remained good/healthy/ without sustained and continuous work by the stake holders in general and principals/school leaders/ in particular". Furthermore, Freiberg (1999) revealed that, for more than a century, the educational community has had a great concern for the school climate and its effect on student and learning environment. There could be additional questions to be asked for sure, nonetheless, a starting point is basic to decide where we have started', and where are we now 'and where are we going? The above questions clearly signifies that, the school community in general and the school principal/ management in particular, should recognize every members of the school community as it is equally important and should keep up their activity, consciously observe the progress or failure of the school in order to make sure that there is sustainable improvement. In Buno Bedelle zone all the government schools are supposed to have a 3 years strategic plan and an annual plan which is derived from this strategic plan. The principals need to gather every information about the schools' weakness and strengths from stake holders (teachers, students and parents) using data collecting tools to prepare these plans; then, analyze and interpret the data to identify the status of the school and act accordingly.

Here the challenge is how many of the school principals perform the analyses based on scientific procedures and act accordingly? From the researcher's experience, yet, there are principals who used direct copy of some other schools' plan whose context is totally different from the school he/she leads.

It has been suggested that, the survey needs to address the school climate and, based on that, administrators should determine the current condition and decide whether the work environment or overall school climate needs to be checked or maintained, or whether it needs intensive care (Keefe and Kelley, 1990). A growing body of empirical research indicates that, making even small changes in schools and classrooms can lead to substantial improvements in climate (Freiberg, 1998).

Generally, research shows that improving school climate need school leaders or principals contribution in improving school climate and sustaining the improvement by having strategic plan.

2.5. Factors affecting student achievement

In addition to organizational school climate student academic achievement can be affected by various factors such as peer effects (Hanushek, Kain, Markman, & Rivkin, 2003), lack of resources and low socioeconomic status (Lacour & Tissington, 2011), the effects of teachers (Sanders, Wright, & Horn, 1997), teacher professionalism, collegial leadership, community engagement and academic press (which encompasses schools that set high standards for academic performance set an orderly and serious learning environment and maintains definite standards of performance (Vasquez, 2012 & Abeya, 2017) are some among many factors.

The elements that comprise a school's climate are wide-ranging and complex. As a result, researchers support the following factors that influence school's climate, and consequently student academic achievement. These are: School vision and mission statement, school staff work relationships, lines of communication, principal's behavior, teacher's behavior and instructional leadership style, school staff's feeling of trust and respect for leadership (Christensen, Marx, & Stevenson, 2006). Furthermore, Studies have shown that, schools with poor facilities have negative influence on student achievement; higher levels of control or strict rule also affects the positive effects that student perceptions of safety and their environment had on student success (Kwong & Davis, 2002; Freeiberg, 1998). In fact the study was conducted in developed countries and it is important to do a similar research in developing countries to conclude whether strictness has the same effect or not.

Linares (2012), in his doctoral dissertation entitled effects of school climate and student achievement and discipline behavior in three urban high schools', found that, there is a negative correlation between student achievement and number of discipline infractions. As the number of major/minor infractions increases, the Math and English test scores decrease. Li & Hasan, (2010) also supported Linares' finding that School quality and child characteristics are important determinants of academic performance. Moreover, Newport-Berra (2013) had shown the link between student conduct and socio- emotional outcomes strengthen the necessity of school level efforts to promote a positive behavior and prevent bullying, particularly for children coming from low-income families.

A research conducted in secondary schools in Zone 'Senatorial District of Benue State, in Nigeria had shown that School climate, discipline and physical facilities have significant

influence on academic achievement of secondary school students (Oguche et al., 2015). It is obvious that parental involvement has significant contribution for student achievement. In this regard, Collins (2010) found that, parental engagement was most closely related to student's achievement. Furthermore, incidents of disorderly conduct and the wellbeing of the students are the best predictors of student achievement (Smith, 2005). Student interpersonal relationships affect student school attendance. It has been shown that students at the lower grade levels have a greater perception that teachers treat them fairly and as they grow older this belief drops (Roberts, 2007).

Generally, for a given school to be fruitful, its climate should be conducive for teachers and students in particular and for the community in general. School climate and teachers motivation are two inseparable things (Asrat, 2015). And moreover, school climate has a relationship with teachers' commitment, (Raman et al., 2015); and, consequently, it affects students' academic achievement.

2.5.1. The effect of school size on student academic achievement

There are numerous variables that distinguishes one school from another such as: ownership, location, number of students, teacher-student ratio, quality and availability of school facility (resources), parental involvement, disciplinary cases, dropout rates, effectiveness of schools (in terms of student academic achievement), the kind of relationship between and among principals, teachers, students and the community…etc. However, it is important to note that the magnitude of the impact of these variables either positively or negatively on students' academic achievement will not be the same. In general, if all these and other factors were constant, one would expect the same or nearly the same result from each school and that is why variation in students' achievement has been observed among schools which are a worldwide reality.

The number of students in a given school (school size) may affect students' academic performance in different ways. There are quite a lot of variations in school size (number of students) among these schools. In the secondary schools, the school size ranges from 1160_2378 students. Literature reviews have indicated that schools can be classified as small, medium or moderate and large size, depending on the number of students. There is no clear and common agreement among researchers and educators about what constitutes a small or a large (Cotton, 1996). The indications are that 300-400 students are an appropriate size for a primary school and

400-800 students for a secondary school. The Chicago Task Force on Small Schools regards small elementary schools as those with enrolments of less than 300. Another study was made on 287 schools in North America; and it has been classified for elementary schools as small fewer than 200 students, medium 400-600 students, and large over 600 students. Sergiovanni (1995) argued that for a given school to be productive, no more than 300 students should be enrolled in either elementary or secondary school. Moreover, (Jones & Ezeife, 2011) concluded that schools with enrollments of 300 to 400 students were optimal for seven reasons, namely: governance, respect, simplicity, safety, parent involvement accountability and belonging.

Lee and Smith (1997), in their study found that the school achievement increases for the enrollment levels between 600 and 900 students, in schools less than the lower limit (600) students learn less and in large high schools (more than 2100) learn considerably less. The results of the research findings in all the literature reviewed, seemed reasonable, however, the existing reality in developing countries is something different from this fact. And moreover, the school sizes are much bigger in Buno Bedelle secondary schools in particular than the schools in the literature reviewed. Therefore, further study on the relationship between school size and student achievement based on the existing context will have a paramount importance to arrive at a certain conclusion about school size. Nevertheless, with all these disparities in size, schools could have big or little or no differences in student achievement due to size differences (Lamdin, 1995; Borland & Howsen, 2003); on the other hand, the entire reality sometimes on the ground showed that large sized schools even have better students' academic achievement than the smaller ones; it means the disparity is not consistent. In this regard, Breger (2014) found that schools with large size have a significant positive effect on students' academic achievement. On the other hand, (Driscoll, Halcoussis, & Svorny, 2003), argued that not only school and class size but also school district size hinders students achievement. But, a study performed in Ontario, Canada on 541 elementary schools, the overall result showed that there was no statistically significant correlation between school size and student achievement. In fact, the study was performed at different levels (levels 1, 2, 3 and 4) within the same grade level, and as the level increases, certainly, there were significant correlations with respect to levels of performance in both Grades three and six in some curricular areas (Jones & Ezeife, 2011). However, the school size in developed countries is quite different from developing countries like Ethiopia and this may cause result disparity on the study performed in these two different situations.

Bullard (2011), in his study on the effects of large versus small school size, he found out that school size has a small, but not substantive effect on the academic achievement of students. On the other hand, Oredein and Oredein (2016) found that small school size has a statistical significant effect on student academic performance. He further explained that in a school of smaller size, teachers will get the opportunity to closely and individually mentor and can boost of quality education to each student in a small class compared to a large class in which the teacher himself will fail to find his bearing or may even be intimidated by such crowd. However, here, the concept of class size and school size was mixed and interpreted wrongly. Besides, small size couldn't be the only guarantee for boosting of quality education for the fact that there are many other factors to ensure quality education; furthermore, large school size doesn't mean large class size, since a given school with large school size, may have small or moderate class size, what matters is the availability of classrooms and the number of teachers.

Roeder (2002) insisted that poverty was the major factor in the student achievement than size relationship. The socioeconomic status and other variables may have affected the results of studies on the relationship between school size and student achievement. As to the knowledge of the researcher, in Ethiopia, there are no studies made on the relationship between school size and student performance. Therefore, further studies are required. Among a number of studies in developed countries the one which is to some extent close to the Ethiopian context is the school size between 600 to 900 students. In reviewing the literature, it has been shown that school sizes below the lower boundary (600 students) learn less, and beyond the upper boundary (900 students) also learn less and even considerably less when the school size exceeds 2100.

2.6. Dimensions of school climate

As it was explained by Loukas (2007) school climate dimensions were classified as: safety (physical safety, emotional safety, order and discipline safety); academic climate (leadership, teaching and learning, professional development); community (relationships, connectedness, and respect for diversity and community partnership); institutional environment (environmental adequacy, structural organization and availability of resources).

1. Safety; School Safety is defined as the extent to which students feel physically and emotionally secure. This includes absence of violence (e.g., fighting, bullying, and crime), as well as a mutual trust and respect among school members (Osher, Kendziora, & Chinen, 2008).

Feeling safe in school influences students learning and their general development. However many students do not feel safe in schools. Most students are not necessarily exposed to physical violence but many students are exposed to social, emotional and intellectual violence. Positive school climate therefore means feeling physically and emotionally safe and having clear and consistent rules to maintain order and discipline. A safe and secure environment is prerequisite for effective teaching and learning (www.oecd. Org /edu/ school safety).

Physical safety; Feeling safe; socially, emotionally, intellectually, and physically is a fundamental human need (Maslow, 1943). Feeling safe in school powerfully promotes student learning and healthy development (Devine & Cohen, 2007). It is protection of all stakeholders, including families, caregivers, students and community from violence, theft and exposure to weapons and threats in order to establish a secure learning environment. For students to learn, they need to feel safe.

Identity safety; Research has shown that race itself is a significant factor in explaining the variation in perceptions of school climate (Koth, Bradshaw, & Leaf, 2008; J. Wilson, Pentecoste, & Bailey, 1984). Positive school climate has been considered important for racial minority and poor students (Booker, 2006; Haynes, Emmons, & Ben-Avie, 1997). According to a study by Watkins and Aber (2009) that used quantitative survey data from 842 African American and White middle school students, African American, poor, and female students perceived the racial climate in more negative terms than did their White, non-poor, and male counterparts, respectively. A study by Schneider and Duran (2010) that used data from 2,500 randomly selected middle school students found that responses of Hispanic/Latino students varied considerably from those of White and Asian students. The study showed that Hispanic/Latino students considered personal relationships with teachers as more important than modeling of positive behaviors contrasting with the preference of White and Asian students. Slaughter-Defoe and Carlson (1996) investigated 1,000 African American and 260 Latino third graders' perceptions of school climate in an evaluation of the Chicago Comer School Development Program. Their results indicated that African American children regarded teacher-child relations as the most important dimension of school climate whereas Latino children emphasized teacher fairness, caring, praise of effort, and the importance of moral order. The contrary results of these

two studies highlight the complex interactions of both race/ethnicity and age with student perceptions of school climate.

These studies confirm that race/ethnicity is an important predictor in explaining perceptions of school climate. The findings reiterate the fact that it is important for school leaders and researchers to have the most complete understanding possible of what a positive school climate would look and feel like for students who identify as belonging to specific races, ethnicities, or cultures in order to improve school climate for all (Schneider & Duran, 2010). Research also suggests that proactive approaches are more successful in promoting positive intergroup interactions rather than passive and reactive approaches (Soukamneuth, 2004).

Emotional Safety; as it was defined by Maslow (1945), being safe emotionally means being around people you can trust, it means being able to trust your own feelings, and it means feeling safe enough emotionally to be able to speak up about your needs should that need arise. It also includes available school based mental health services (caring and supportive staff), an absence of verbal bullying, positive attitudes about individual differences. It also affected by students' attitudes about bullying and their response to it.

Order and discipline; how rules are enforced, meaning the extent to which they are consistently and fairly enforced, is another factor that shapes how safe people feel in school. It refers to how often students break the school rules and how misbehavior is handled. Positive school climate have low rates of delinquencies and clearly communicated rules that students consider to be implemented fairly and consistently. Consistent enforcement of school rules and availability of caring adults have been referred to as "structure and support" (Gregory et al., 2010). Structure and support are linked to lower suspension rates and more student willingness to seek help in bullying situations (Gregory et al., 2011).

2. Academic climate (teaching learning climate).

Refers to teaching and learning practices promoted in the school. It is composed of three factors: leadership, teaching and learning and professional development.

Leadership; refers to the role of principals and administration. It is influenced by how well they communicate vision for the school and how supportive and accessible they are. Effective school leadership offers both great opportunities and challenges for many schools. Schools have a major

impact on the growth, development and positive progress of student relationships. According to Balyer (2012), successful school leaders can set the tone to influence achievement amongst students, staff, and other school related organizations. There is evidence that shows how outside of the influences in classroom instruction, school leadership can affect student learning (Dufour & Mattos, 2013). Studies suggest that leadership is a skill that requires a specific preparation to promote school reform and new performance outcomes (Hartly & Kecskemethy, 2008).

Teaching and learning; a positive school climate promotes cooperative learning, group cohesion, respect, and mutual trust. These particular aspects have been shown to directly improve the learning environment (Finnan, Schnepel, & Anderson, 2003; Ghaith, 2003; Kerr, Ireland, Lopes, Craig, & Cleaver, 2004). These not only contributes to immediate student achievement, but its effect seems to persist for years (Hoy, Hannum, & Tschannen-Moran, 1998).

Professional Development; Almost every teacher comes across a number of challenges when taking part in the implementation of an educational reform. In order to have a successful implementation process, it is important to consider what changes teachers will experience in their teaching and learning process before introducing an educational innovation. As Fullan (2016, p.97) argues that "educational change depends on what teachers do and think", the role of teachers and particularly their continuous professional development (CPD) have become noteworthy to be considered in the implementation of any educational reform. Professional development is a continuing process in which teachers always seek new ways and methods to improve the learning of their students. They acquire new understanding and beliefs regarding the potential of new teaching methods and materials in students' learning, as well as look for developing themselves not only professionally but also socially and personally all together.

Community climate (community climate);

Refers to quality of relationship between members of the school (teachers students and administrators) has an influence on students behavior and achievement. The relationship between students and their teachers affects their engagement in the classroom, self-esteem and grades. The community aspect of school climate refers to the quality of relationship within a school's connectedness, respect for diversity and partnership with other members of community.

Relationships; refers to quality and consistency of relationship among students, staff members and between teachers and students. School climate is affected by how much students and teachers support, trust, respect and care for each other. If a teacher-student relationship is negative and conflictual in kindergarten, it is more likely that the student will have behavioral and academic problems in later grades (Hamre & Pianta, 2001). The relationships between adults in schools (example teacher and principals) is also has an important influence on school climate. The ability of students to maintain healthy interpersonal relationships with peers and adults have access to a multitude of coping strategies to manage stress and difficult situations (Osher, Kendziora, & Chinen, 2008). Several studies have demonstrated the relationship between Peer Social Climate and students' academic and behavioral performance. Interventions focused on developing students' interpersonal skills have reported better grade point average, attendance, and classroom behavior (Durlak, Weissberg, & Pachan, 2010). Students with strong interpersonal skills demonstrate an increased ability to cope with stressful situations in and out of the classroom, work collaboratively with other students, and set and achieve their goals (Osher, Kendziora, & Chinen, 2008).

Connectedness; refers to students feeling of attachment and belonging towards the school. This includes feeling that they are a part of the school that adults at school care about them personally, they are close people at school and have supportive relationship with adults, and that teacher and staffs consistently treat them with respect. Feeling accepted and included by the other members of the school will contribute to a positive school climate. School climate is related to school connectedness, because without a positive and welcoming School climate students are unlikely experience connectedness. Research has found that the most powerful predictors of school connectedness are related to school climate (Abbot et al, 1998).

Respect for diversity; one common reason people act disrespectfully is that they feel disrespected themselves. As James Comer (1999) said emotions are contagious. When we feel listened to, taken seriously, appreciated, and respected we tend to "pay it forward. Treating all members of any ethnicity, gender, sexual orientation or religious, affiliation equally and cultivating awareness and appreciation to other cultures in classroom is indicator of school climate.

Community partnerships: involvements of parents and other community members in school life. It involves good communication between parents and school staff high attendance of school events, the developments of mentoring programs and other initiatives that build the relationships between the students and the larger community. You need to ensure your partnership improves the core results for your school community, starting with academic achievement and healthy development (Murray & Weissbroud, 2003).

3. Institutional environment;

The physical layout, size and material resources of the school also affect school climate. For instance environmental variables such as classroom layout and activity schedules can influence how safe students feel and how well they perform in school. Environmental variables include the adequacy of the school setting, the maintenance and infrastructure of the building and the accessibility and allocation of educational resources.

Environmental adequacy; Miller, Davis, Tomporowski, and Naglieri (2008) asserted that school environment is the sum of both human and materials resources that the learners interact with. These include students, teachers, instructors, workshop attendants, administrators and all facilities available in the school setting which may influence learning and academic performance. In the same vein, Tope (2012) asserted that school environment is an essential aspect of that unless schools are well suited, buildings adequately constructed and equipment adequately utilized and maintained much teaching and learning may not take place. Okwelle (2016) refers to environment as the facilities available for instruction and it possesses a strong influence in teaching-learning process. He added that there is need for adequate classroom buildings with good sitting arrangements for classroom instruction.

Structural organization; is the physical layout of the school itself (size, classroom site, number of unsupervised areas). Astor et al. (2010) demonstrated that students felt unsafe in unsupervised areas of the school building. It also includes organizational aspects such as start and end times and whether students are grouped based on ability. These characteristics can influence both feeling of safety and academic performance.

Availability of resources; how much access students and teachers have to equipment, materials and supplies that improve teaching (example: technology tools and books).The quality of school

facilities has been found to affect student achievement through school climate as a mediator (Uline & Tschannen-Moran, 2008).

2.7. School climate versus principals' behavior

In Ethiopia, there is one saying, which says, a school looks like its principal and students like their teacher. This shows that teacher and principals are very important in shaping healthy school climate in school setting, their interpersonal relationship must be open and have to be a lesson for students and other school members. In this regard, Robert (2005) found that teachers' perceptions of their principals' effectiveness are related to school climate'. However, theorists in education on the other hand have reported that the impact of principals on the teaching and learning process is mediated through the school climate and culture, and doesn't have a direct effect (Hallinger & Heck, 1998).

Ziolkowiski (2015) performed a qualitative study on four elementary school climate to explore the action the principals take to create or maintain a positive school climate for teachers and teachers' perceptions of those efforts. The finding has shown that, three of the four schools indicated discrepancies between perceptions of the participating principals and teacher. Although participant teachers in the three schools acknowledged and appreciated the effort made by the principals, they do not identify or qualify the extent to which the principals' efforts contribute to the school climate. On the other hand, participants of the fourth school shared perceptions indicated that the effort of the principals had created a positive school climate. As to the researcher's opinion, if the research had encompassed student's academic achievement, it would have shown a full picture of the difference between the principals' contributions to the positive school climate.

Contrary to the above findings, Temesgen (2017) in his study on the assessment of School Climate and its implication on teachers' motivation in Secondary Schools of Akaki Kality Sub City, found that, principals are not in a position to create conducive learning environment; and it should be noted that, it is the principal who should take the lion share of the responsibility in creating favorable condition for a given school. School principals in Buno Bedele secondary schools, will be identified their responsibility in creating favorable condition in the school, do they have awareness about school improvement program (SIP)? This program has four major domains: these are teaching & learning, school administration, community participation and

conducive school environment. So, one of the main duty of principals is creating conducive school environment; nevertheless, it is not possible to make sure the extent to which these principals are working to improving the school climate and hence the student achievement; because the reality on the ground is something different. However, the duties of principals are by far beyond and are expected to create an orderly and friendly environment. Such situation will motivate teachers to provide the maximum possible support to their students. Professional teachers need to show exemplary behavior and attitude everywhere to the students and to their colleagues (Tanag & Abu, 2014).

However, teachers as professionals will perform their job efficiently and effectively, only if there exist an appropriate system and inviting working atmosphere. Therefore, it is the responsibility of the government in general and the principal in particular to create such positive working environment for teachers.

Scallion, (2010) on the other hand found that, principals had an understanding of school climate while involving in coursework, extensive professional development or reading professional literature consistently. And therefore, he/she has possessed an understanding about school climate and should strive to change it. However, many of the principals in Buno Bedele secondary schools, though, there is a system for professional development, majority of the principals do not practice it and are always busy with routine activities which do not contribute much to changing the school climate and student achievement.

Principal behaviors perceived as supportive and collegial not overly directive or restrictive (Uline & Tsachannen Moran, 2008). Researcher developed the following principal behavior practiced in schools.

   a. **Supportive Behavior:** Principal with supportive behaviors reflects a concern for teachers and opens to suggestions, respect teachers' professional competence. Praise is genuine frequent and criticism is constructive.
   b. **Directive Behavior:** Refers to close and constant control over all teachers and school activities.
   c. **Restrictive Behavior.** Hinder rather than facilitating teachers work, burdens with busy work.

2.8. School Climate and Teacher Behavior

The teachers and their heads must share a relationship based on equality and mutual respect to create a better and positive organizational climate (Ajay, 2013).

a. **Collegial Behavior:** Supports open and professional interaction among teachers. They are enthusiastic accepting and mutually respectful of professional competence

b. **Intimate Behavior:** Reflects a cohesive strong network of social support among faculty, teachers know each other well are close personal friends and socialize.

c. **Disengaged Behavior:** Lack of meaning of professional activities. Teachers are simply putting in time and going through the motions.

2.9. Teachers' and Students' View of School Climate

As principals are the main actors in creating an orderly, friendly and positive school environment, directly or indirectly, teachers too can play an important and significant role to evolve positive school climate. In this regard Krmaz (2006) found that teachers play an important role in developing a robust school vision. It has been found that there is a significant positive relationship between teachers' perceptions of organizational health and the relative robustness of their school vision. Subsequent regression analysis indicates that collegial leadership and academic emphasis and resource support were the school health themes that characterized an overall association with robust school vision. As far as teaching learning process and its effectiveness is concerned, it is imperative to consider the perceptions of teachers and students on school climate.

Numerous researches were conducted on the perceptions of teachers and students about the general school climate and educational emphasis. It has been described that the perceptions of teachers on school climate were more susceptible to classroom level factors, such as poor classroom management and proportion of students with disruptive behaviors, whereas students' perceptions were more sensitive to school level factors, such as student mobility, student-teacher relationships, and principal turnover (Mitchell, Bradshaw, & Leaf, 2010) cited in Thapa and Cohen(2013). Additionally, the perceptions of students towards teachers' support and the support among students had been associated with youngsters' self-worth (Jia et al., 2009).

A growing body of research has been conducted on different issues of school climate and its effect on student achievement; it was shown that there exists a relationship between school

climate and student achievement. Plucker (1998) had briefly explained the presence of numerous research reports on the ambition of students to various educational outcomes; such as aspirations are related to several educational outcomes, including academic performance, affective health, attrition, and leadership skills. Furthermore, he found that, students with high inspiration and ambition perceived a more supportive school climate than the students with low aspirations did. However, the challenge here is, how can the students be inspired? Among the various motivating factors, it is believed that, the school climate will take the lions share for students' inspiration; and thus, the school principals along with the stake holders should try to create a positive school climate.

2.10. Academic Achievement

Academic achievement is the result of learning prompted by teaching activity by the teacher and produced by the student. In different literature school performance and academic achievement is used as synonyms. Chen (2019) defined that academic achievement is the knowledge and skills that students have mastered in a subject or course. It measure how well students have performed in the various assessment items set for them based on some educational criteria determined by professional educators. It is an issue that deeply concerns students, parents, teachers and authorities. From a humanistic approach, Martinez (2007) states that academic performance is "the product given by the students and it is usually expressed through school grades" (p. 34). Through students' performance in the assessment items such as essay, test and examination. Student performance are determined in ranking as to educational standards that they have reached that is pass, credit, distinctions, great distinctions and so on.

There are numerous criteria for measuring and/or evaluating the performance of schools. Focusing at the school performance criteria brought out by different studies, one can see that they can divide them roughly into three categories or groups, namely, (i) Pupil's success academic performance and non-academic skills, (ii) the contribution, satisfaction and cooperation of the stakeholder of the school and (iii) The importance of school environment (Anne & Maaja, 2007). Grifft(2003) shows that different performance criteria receive different attention in schools. Some school emphasize mainly on the pupils' academic performance while other schools consider it important to maintain the satisfactions of the school personnel, good interpersonal relations, and good cooperation with parents and society in general. Grifft (2003)

further argued that all the criteria should be equally considered and if a school has paid little attention to some area, this should be changed in order to make the school's work more efficient. Therefore, in order to have the actual meaning of the school performance, the multi-faceted system was introduced (Heistad & spicuzza, 2000). According to Heistad and spicuzza (2000), the multi-faceted system incorporates the followings. First, a hybrid model of critical indicator that report on level of performance, cross cohort changes, growth or gain scores and value added measure. Secondly, Specific standards exams or test, set in a collaborative manner by key stakeholders, and standards then aligned with the curricular criteria of a specific country and real world consequences, and lastly, a cycle of continuous school improvement planning. The multi-faceted system seems to be the most effective measure of school performance (Heinstad & spicuzza, 2000). The models incorporated in the multi – faceted system are:-

i) A hybrid model

This model reports on the following: (a) level of performance, (b) cross-cohort changes, (c) growth or gain score, and (d) value-added measures:-

a. Level of performance:

Meyer (1996) identifies three critical criteria for evaluating the usefulness of performance indicators;

First, it must assess the type of skills demanded by society. For instance, the skills demanded by society in Primary School level are writing, reading and numeracy in (the 3Rs)

Second its ability to accurately measure performance with respect to outcome it purports to measure in which they cannot be "corrupted" thus, the instrument must be valid and reliable also administration of such instruments must occur following rigorous standardized procedures.

Finally, over and above the compatible concern, performance indicator selected must measure the unique contribution schools "add" for each measure outcome. Although many systems rely on average test score performance to rank order or evaluate school performance, mean score are highly flawed indices of school effectiveness (Meyer, 1993).

b. The cross–cohort indicator

This examines change across time, albeit for different groups of students. Cross cohort measures include; students enrolled at specific sites and compare across different group of students, the change in indicators such as the number of students passing examination, change in percent of students performing at certain level of high standard tests as well as changes in attendance and suspension rates. The gain indices include percent of continuously enrolment of student making nationally normed growth, comparisons among the different racial/ethnic group, accelerated fans at the top and bottom of the achievement distribution, and improvement on oral reading measures.

c. Students growth or gain score

Incomplete view of performance can results in poor decision making at best and all but ensures that schools will draw false conclusions when trying to determine the effectiveness of school policies on student's outcome (Meyer, 1996). Meyer (1996) proposed using what are now referred to as students gain score. The achievements scores for each student are compared to previous year performance. Therefore, when using this model, each child serves as his or her own control (Sanders *et al.,* 1997).

d. Value added methodology or value added measure

Meyer (1996) postulates that growth indicators are good, but an even better model is an extension of the growth model referred to as the value – added methodology. This model uses the statistical regression model that include factor that influence students achievement such as family and community characteristics (Meyer 1996). Thus, Meyer (1996) and others have argued that failure to account for external sources of student achievement could lead to biased or contaminated indicators of school performance.

ii) Standard Based Assessment Model

Selected Northwest Evaluation Associatism (NWEA) bank of multiple choice reading, math, science and English items that are pre-calibrated using Rasch – model needs to be administered to students, the researcher must choose items from the item bank that best aligned with their country curriculum standards and the level of students. These items will then subject to item bias reviews. Any items that will be modified from the original format will be piloted and

recalibrated. Students who are severely disabled and students with severe English language deficiencies are excluded from these tests, staff and students characteristics.

iii) Continuous School Improvement Plans

The model is based on detailed information reports provided to all school sites titled "School Improvement Report" these documents set the stage for important site based analysis and planning to occur. The school improvement report (SIR) includes data like: Student's performance on state high stake graduation assessments, student's performance on high standard measure, the scaled score information on the northwest achievement level test and school and grade level information on the percentage of students "on course" to pass in the content areas of math's and readings, staff and students responses to district, regional and national administrated survey.

These critical reviews are the way to report back to interested stakeholders about school performance and to examine the strengths and weaknesses of the current programming so that areas of need may be prioritized. Once areas of need are prioritized, school teams are assigned the task to develop a School Improvement Plan (SIP). The SIP has the following advantage to the school performance: the School Improvement Plans (SIPs) are used to carefully craft the short term and long term goal and objectives a school will put in place to affect change, the School Improvement Plans (SIPs) address how resources will be allocated to support the identified initiatives at each site.

School must identify a system of continuous measurement to ensure that mid–course corrections can be made if sufficient progress is not made as well as to allow definitive statement about overall school outcome. The SIP, in essence they become the school "road map" for charting an academic path and documenting how information will be gathered and used to evaluate overall school performance.

Heistad and spicuzza (2000) gives out the indicators of effective school, these include:- student achievement level to the state/national standard, change in achievement level compared to performance standard (i.e. cross cohort analysis), student achievement gain compared to national expected norm growth (i.e. continuous membership post-test pre-test), student achievement compared to predicted level of performance based on pre-test score and students' demographics,

student's attendance and graduation rates, school climate; including safety and respected based on student and staff survey responses and student's participation in advanced course work.

However, because of the following reasons the scores in national examination will be employed as performance criterion for Secondary Schools. First, previous studies used the mean national examination scores as central criterion for measuring the performance of schools (Goldstein (2001), Brown (2002)). Second, using the examination scores is rather objective and easily available method/means for comparing schools with one another. Lastly, in Ethiopia, people perceive better schools are those which perform well in Ethiopian General School Leaving Certificate Examination (EGSLCE) 10th or 12th grade.

2.11. Relationship between School Climate and School Performance

Substantial body of research indicating that the effectiveness of schools in terms of students learning and development is significantly influenced by the quality and characteristics of school climate. Owens,(1981) argues that schools that emphasize supportive, open communications, collaboration, intellectuality, and that reward achievement and success outperform (in terms of achievement, attendance, drop - out rate, frustration, alienation) those that emphasize constraint, restrictiveness, rigidity, coldness, lack of excitement and reward conformity.

Therefore, several studies have shown links between the school climate and variables associated with school effectiveness. Hoy and Hannum (1997) examined the relationships between student achievements and climate in middle school in New Jersey. The hypothesis of the study was that all aspects of school health are positively related to students' achievement. Through correlation analysis, Hoy and Hannum (1997) illustrated that general school health (climate) was positively related to student achievement in Mathematics, reading, and writing. Esposito (1999) examined the parents' perceptions of school climate and the children's academic and social development. Esposito (1999) found that the overall school climate does influence the academic and social development of the child. It is concluded that if the staff and headmaster/mistress can establish and change the climate in the school, then the level of achievement can also be changed. Climate can impact on student achievement. Positive learning environments and positive learning outcomes appear to go together (Haertel *et al.,* 1981) as cited in Sackney (1988). Schools climate cause difference in the learning environments of the school, in performance of the students and

morale (Bossert, 1988; Sackney, 1988; Hoy & Sabo, 1998). Good climates equate with good schools.

2.12. Conceptual frame work
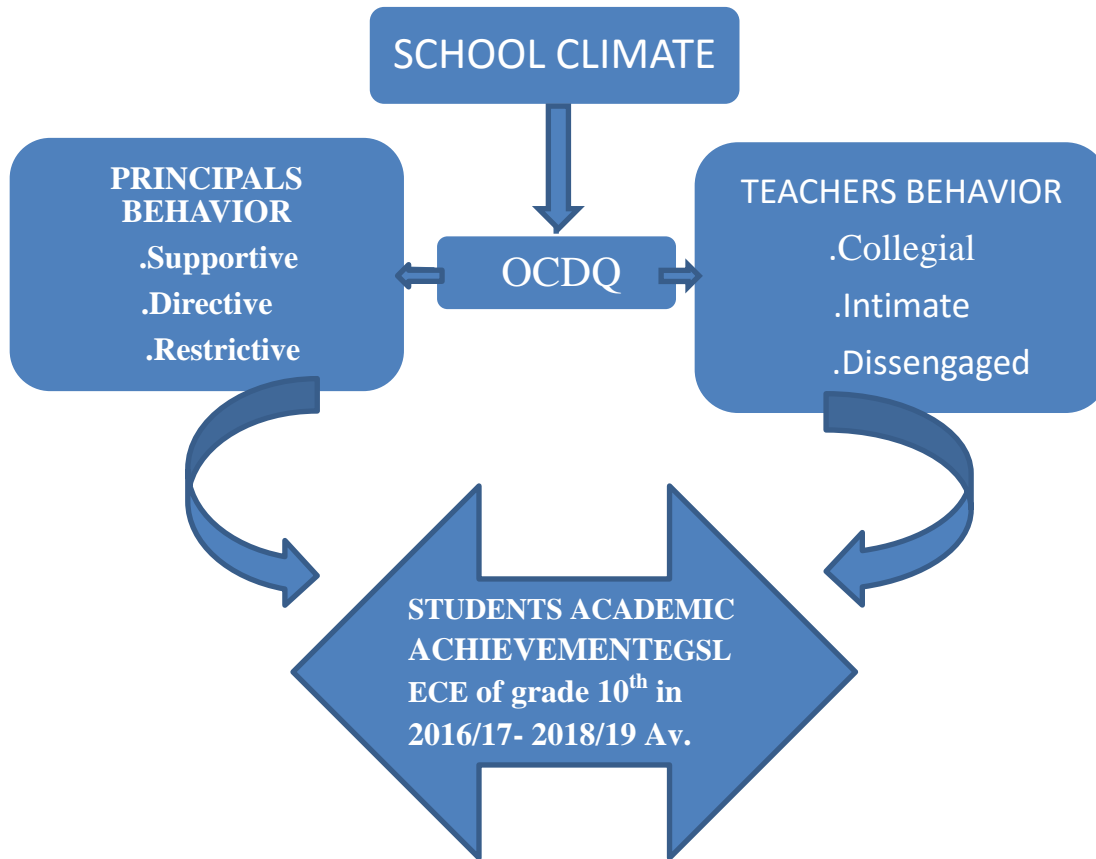
Figure 2.1: Conceptual framework diagram linking the variables of the study
Source: Adopted from Brown (2002)

This study complements those variables described in the general introductory part as it attempts to link the variables. It aims at documenting the relationship and influence of Schools' Climate (independent variable) on students' academic achievement (dependent variable). Schools' Climate will be assessed by Organizational Climate Descriptive Questionnaire (OCDQ) for Secondary Schools. However, the school performance will be assessed in terms of results measured using students' average test scores at the Ethiopia General Education Leaving Certificate Examination (GELCE) of 10th grade in the year 2016/17 up to 2018/19.

The conceptual underpinning of this study lies in organizational climatic description questionnaire (OCDQ) developed by Wayne.K.Hoy (2003, 2008, and 2011), Hoy and Tarter (1997b) and by Sing and Katoch (2017). The original OCDQ was revised to be used in schools not only at the elementary level but also at the middle and high school levels that shows openness of interpersonal relationship between teachers and principals. The authors developed an instrument to measure principal behaviors towards teachers and teachers' behavior towards their colleagues to measure school climate. Students' academic achievement is measured by using students' average test scores at the Ethiopia General Education Leaving Certificate Examination (EGSLCE) of 10th grade in the year 2016/17 up to 2018/19 for secondary school in Buno Bedelle zone.

Different researcher developed various organizational school climate measurement instrument used to measure school climate. Over the year's two main frameworks of school climate emerged. Early works of Halpin and Croft (1963) laid the foundation for the open schools framework. While the work of Hoy and his colleagues (Hoy & Clover, 1986; Hoy & Forsyth, 1986; Hoy & Miskel, 1991; Hoy, Tarter & Kottkamp, 1991) have contributed to the healthy schools framework. These two frameworks have been used to construct various school climate instruments used to measure school climate. Both frameworks focus on the interrelationships between individuals and the interactions that occur between and among individuals in a school.

Organizational climatic description questionnaire (OCDQ) developed by Wayne.K.Hoy (2003, 2008, and 2011), Hoy and Tarter (1997b) and by Sing and Katoch (2017) will be used to measure school climate variable (independent variable) principal behavior and teachers behaviors and their relations with students' academic achievement(dependent variable) will be assessed in terms of results measured using students' average test scores at the Ethiopia General School Leaving Certificate Examination (EGSLCE) of 10th grade in the year 2016/17 up to 2018/19.

Principal behaviors perceived as supportive and collegial not overly directive or restrictive (Uline & Tsachannen Moran, 2008). Principal with supportive behaviors reflects a concern for teachers and open to suggestions respect teachers' professional competence. Praise is genuine frequent and criticism is constructive. Owens (1981) argues that schools that emphasize supportive, open communications, collaboration, intellectuality, and that reward achievement

and success outperform (in terms of achievement, attendance, drop-out rate, frustration, alienation) than those that emphasize constraint, restrictiveness, rigidity, coldness, lack of excitement and reward conformity. Principal with directive behaviors make close and constant control over all teachers and school activities. Restrictive behavior hinders rather than facilitating teacher work, burdens with busy work.

The teachers and their heads must share a relationship based on equality and mutual respect to create a better and positive organizational climate (Ajay, 2013). Collegial Behavior supports open and professional interaction among teachers. They are enthusiastic accepting and mutually respectful of professional competence. Intimate behavior reflects a cohesive strong network of social support among faculty; teachers know each other well, are close personal friends and socialize. Positive learning environments and positive learning outcomes appear to go together (Haertel*et al.,* 1981) as cited in Sackney (1988). Disengaged behavior lack of meaning of professional activities, teachers are simply putting in time and going through the motions. Hoy *et al.* (1991) indicates that the climate is directly associated with the interrelationship of the buildings, headmaster/mistress and the teachers have in that school.

Table 2.1

The description of school climate descriptive questionnaire

S. No	Dimensions	Sub-dimensions	Item numbers	Total items
1	Principal's behavior	Supportive behavior	1,2,3,4,5,6,7,8,9,10,11,12	12
		Directive behavior	13, 14, 15, 16, 17, 18, 19, 20	8
		Restrictive behavior	21, 22, 23, 24, 25, 26, 27	7
2	Teachers' behavior	Collegial behavior	28,29,30,31,32,33,34,35,36,37,38,39,40,	13
		Intimate behavior	41, 42, 43, 44,45,46,47,48,49,50	10
		Disengaged behavior	51,52,53,54,55,56,57,58,59,60,61	11

CHAPTER THREE

RESEARCH DESIGN AND METHODOLOGY

This chapter includes; research design research methodology, the study population, sample and sampling techniques, instruments of data collection, data gathering method, method of data analysis and ethical consideration.

3.1. Research Design

A correlation design frequently used in quantitative research methods in accordance with the purpose of the research which is not experimental is selected for this study. Because of its quantitative nature in examining whether a relationship exists between organizational school climate and student achievement which is dependent variable the researcher is going to measure. Correlational research can provide information that allows predictability based on associations. It should be noted that correlational research does not provide for causality. McMillan (2004) stated that the most important principle in evaluating correlation research is not to infer causation. In this study, there are interests in the variables of organizational school climate and student achievement. Thus, a correlational study is employed to determine if any relationship exists between the two. Correlational research allows for the analysis of multiple variables in one study, and it also indicates the degree of relationship among variables (Cress well, 2009). This is, therefore, a very practical design for this study as various factors of school climate would be looked at and the degree of relationship is an area of interest. The current study is to identify if a relationship exists between school climate and student achievement.

3.2. Source of Data

The data for this study was collected from both primary and secondary sources. Primary data were obtained from principals, vice principals, secondary school supervisors, teachers who have direct contact with the issues. While secondary data was obtained from document analysis. The researcher contacted the Zone Education Bureau examination unit to obtain the average results of the 2016/17 up to 2018/2019 grade 10th national examinations score for the 34 participating secondary schools. The items in the questionnaire measure organizational school climate, the independent variable in the study and its relation with the average score of the 2016/17 up to 2018/2019 grade 10th national examination which is dependent variable.

3.3. Study population, Sample and Sampling Techniques

3.3. 1. The study Population

The study was conducted in Buno Bedele zone, secondary schools. The study populations were school principals and vice principals, teachers, and supervisors.

3.3. 2. Sample and Sampling Techniques

There are ten woredas in Buno Bedelle zone. The researcher used stratified random sampling for the 34 secondary schools found in Buno Bedelle zone woreda. Out of 973 total population of the study the researcher selected 283 in each schools using simple random sampling lottery method to let them have equal chance to be selected. Therefore, out of 895 total teachers, 260 teachers were the participant of the study, from 34 principals 10 were selected, from 34 vise Principals 10 were selected, from 10 supervisors 3 were selected as the respondents of the questionnaire by using sample size determination formula adopted from the Kreijcie's and Morgan's formula (1970). Thus, the formula used to determine the sample size is;-

$$n = \frac{N}{1+N(e)2}$$

Where:

n= is the sample size

N= is the total population

e= is the error term which is 5%

Z= is the confidential level

Therefore n $= \frac{975}{1+975(0.05)2}$=283

For selecting Teachers for each school we will use

n/N ➡ 283/973 = 0.29

For selecting these samples of teachers stratified random sampling was used in which the 34 schools engaged were taken as strata to give chance to each of the schools. Minimum sample in correlation research is 30 but the zone has 34 schools so the researcher used all secondary schools in the zone. From each school, respondents were selected in proportion to the number of each school in correspondence to the total number of teachers, using lottery method by taking list of respondents from the schools' office. The following table summarizes the total population and the corresponding sample taken.

Table.3.1 *Sample for Teachers, Principals, Vise Principals and Supervisors*

Woreda	schools	Population					sample				
		teacher	principal	v/princ	sup	total	teacher	principal	v/princ	sup	total
Dega	Nagaya	59	1	1	1	62	15	1	1	1	18
	Workina Amba	19	1	1		21	6				6
	Lalsa sanaga	17	1	1		19	6				6
Chora	Abba gooroo	13	1	1		15	4				4
	Abdella	14	1	1		16	5				5
	Chora	63	1	1	1	66	16	1	1	1	19
	Debeso Humbe	16	1	1		18	5				5
	Debeso Kemise	25	1	1		27	8				8
Dabo	Dabo Temo	54	1	1	1	57	15	1	1		17
	Lilo	24	1	1		26	8				8
	Tulama	10	1	1		12	3				3
Chewaka	Barkume	42	1	1	1	45	11	1	1		13
	Biftu Jagan	16	1	1		18	5				5
	Bikiltu Coqorsa	12	1	1		14	4				4
Gachi	Chara	21	1	1		23	7				7
	Gachi	56	1	1	1	59	17				17
	Sekacha	12	1	1		14	4				4
Didessa	Challo	20	1	1		22	6				6
	Dambi	47	1	1	1	50	13	1	1		15
	Damocha	9	1	1		11	3				3
	Ogo kersa	13	1	1		15	4				4
	Sineno	13	1	1		15	4				4
	Yembero	21	1	1		23	7				7
Bed/city	Ingibii	47	1	1	1	50	12	1	1	1	15
	Mexxi Shengo	33	1	1		35	10				10
	Wayessa Gota	57	1	1		59	15	1	1		17
Bedele	Chilalo Bildima	9	1	1		11	3				3
	Hana Bosoqe	11	1	1		13	4				4
	Laliso Haro Ture	25	1	1	1	28	6	1	1		8
Boracha	Boracha	48	1	1	1	51	13	1	1		15
	Guba Hora	12	1	1		14	4				4
	Sidan	14	1	1		16	5				5
Mako	Mako	33	1	1	1	36	8	1	1		10
	Sariti	12	1	1		14	4				4
	Total	895	34	34	10	973	260	10	10	3	283

Source: Buno Bedelle Educational office report 2013 E.C

3.4. Instruments of Data Collection

To collect the data for the study questionnaire and document analysis were used. Questionnaire was used to obtain information from the teachers, supervisor, principals and vise principals.

3.4.1 Questionnaire

The researcher used questionnaire as data collecting instrument since it was important to collect relevant data from a large group of subjects at the same time. In order to collect quantitative data from the sample population such as principals, vise principals and the teachers. The researcher used close ended questionnaire which is developed from mixture of organizational climate descriptive questionnaire (OCDQ), developed recently by Sing and katoch (2017) combining the elements of organizational descriptive questionnaire to measure interpersonal relation between teachers and principal in schools. The researcher translated the questionnaire item to Afan Oromo; the language that all respondents can understand. The scale consist of 61 items climate instruments with five likert scale score and are grouped under two categories that means: principal behavior consisting of supportive, directive, and restrictive behavior and teacher's behaviors: collegial, intimate and disengaged behavior (six sub variables). A profile of these dimensions were determined the types of climate dominated in secondary schools of Buno Bedelle zone. A questionnaire was distributed to the sample teachers, principals, vise principals and supervisors. Finally, all copies of questionnaires distributed were collected, analyzed and converted to percentages and presented in paragraphs.

3.4.2. Document Analysis

In addition to primary sources, relevant information was gathered from secondary sources. This technique would help the researcher to record average results of the 2016/17 up to 2018/2019 grade 10th EGSLCE examinations for the participating schools. The documents which have the list of students mark (score) each year is specific document that was analyzed. So the researcher has to meet personally to have average score of students mark for participating schools. The Zone Education Bureau examination unit that is directly responsible for the management of the national examinations data was contacted.

3.5. Procedure of Data Gathering

Thirty-four secondary schools of Buno Bedelle zone were contacted by the researcher to get their consent for participating in the study. The school principals, vice principal, supervisors and

teachers from these participating schools became the subjects. The OCDQ survey questionnaire was administered to the participants by the researcher during the regularly work time. Secondary data were obtained from document analysis. The Zone Education Bureau examination units that are directly responsible for the management of the national examinations data was contacted to obtain the students average results are analyzed by adding score of three year students results then dividing for the numbers of students in the school since unit of analysis is at school level not at students level.

3.6. Pilot Test

Testing the questionnaire using the manageable size of sample respondents is very important to check the reliability of the questions. The study pilot was conducted in 3 schools (Dega Negeya, Workina Amba and Lalisa Sanaga) on 30 sample teachers through collecting responses on 61 items before it was employed for the purpose of actual data. On these variables reliability statistics are calculated using cronbatch Alpha (α) and the coefficients of reliability of items measuring all variables are found to be within an acceptable range (α ≤ 0.8). During the modification of the instruments, the researcher tried to consult the relevant documents and changed negative questions to positive question to make it easy to measure within the same liker scale. Also the questionnaire was translated to Afan Oromo so as to minimize wrong answer because of wrong understanding of the study questionnaire.

Table 3.2 Coefficients of Reliability for the Items

No	Variable	Number of item	Cronbach Alpha
1	Supportive Principal Behavior	12	0.81
2	Directive Principal Behavior	8	0.86
3	Restrictive Principal Behavior	7	0.92
4	Collegial Teacher Behavior	13	0.81
5	Intimate Teacher Behavior	10	0.92
6	Disengaged Teacher Behavior	11	0.87

3.7. Method of Data Analysis

Hoy and Sabo (1998) argued that the unit of analysis in school climate studies should be the school and not individuals because the variables being studied reflect organizational properties. In light of this, the school was considered the unit of analysis. Organizational climate is a description of the school and not of the individuals in the school. Likewise, academic achievement was calculated at the school level and not at the individual student level.

Descriptive statistics such as mean and standard deviation first calculated for principal behavior teacher behavior and student test scores to ensure that if there is variability in the data collected. Pearson r correlation coefficient was then computed using the two sets of data gathered from the schools/organizational climate element scores and student achievement on 10th grade average examination scores. Multiple regression analysis was conducted to find out the independent effects of each subscale of schools climate on students' academic achievement. These analyses assisted the researcher in examining the inter correlations of the two dimensions of school climate being utilized in this study, as well as the relationship of each to students examination achievement. Multiple regression technique give a more detailed analysis as it enabled the examination of the influence of each climate dimension on student achievement, controlling for all other climate variables. It also allows the researcher to determine the combined effect of the variables (Gay, Mills, & Airasian, 2006).

A common problem that arises in multiple regression analysis is that of multi-collinearity. This basically means that two or more of the independent variables being used are highly correlated with each other and in effect measure the same thing. This makes it difficult to identify the unique relation between each predictor variable and the dependent variable (Urdan, 2005). To analyze the data that is collected through questionnaires and document analysis, descriptive data analysis method was employed. The reason why, preferring this method of data analysis is that it permits, explaining, summarizing and presenting the analyzed quantitative data. Based on the data collection instruments, quantitative data was analyzed and expressed by using statically package scientific for social science (SPSS) version 23, by using descriptive data analysis tools such as average mean score value and standard deviation to present the high light of the information. Standard deviation and mean score are used to determine the extent to which the teachers' behaviors and principal behavior correlate with students' academic achievement.

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Therefore, the response were collected using a likert type of scale that of (Strongly agree (5) Agree (4) partially agree (3) Dis agree (2) Strongly Disagree (1)

3.8. Ethical Considerations

In conducting this research, all ethical issues of research were considered. Accordingly, supportive letter from the department of educational planning and management was obtained. Then the research permit was given from zone Education office. After that the researcher distributed the letter to sample secondary schools and made contact with principals, teachers, to get their consent to be involved in the study. In every data gathering occasions, the researcher informed participants about the purpose of the study and the information they give is used only for educational purposes. Participants were assured of confidentiality of all data collected. Hence, the name of participants remained unidentified and all data were confidential to the researcher. In addition, all participants were informed that they have the right to withdraw from the study. The researcher also tried his best to make them feel at ease and believe that no psychological or physical harm will come to them as a result of participating in this research.

PRESENTATION, ANALYSIS AND INTERPRETATION OF DATA

4.1 Introduction

Chapter four contains the descriptions, data analysis and discussion of the results. This chapter has been further divided into four sections. Section one provides the demographic information and questionnaire returning rate, second section provides the descriptions of the school climate in Secondary school of Bunno Bedelle zone, the third one describes the relationship between school climate and students' academic achievements. The last section describes the influence of school climate on students' academic achievement in Secondary school of Bunno Bedelle zone.

4.2. The Questionnaires Returning Rate

Out of the 283 questionnaires sent (i.e. 283 for OCDQ) of secondary schools to teachers, principals, vise principals and supervisors of the thirty four selected secondary schools, all questionnaires for OCDQ questionnaires were returned. All returned questionnaires were confidentially and completely filled. The total number of returned questionnaires was 283 (100%). The researcher managed it by distributing surplus papers of questionnaires to respondents and using it at a place where respondents refused to return back the questionnaires.

4.3 Respondents Demographic Information

The following table shows the demographic information of the samples respondents in secondary schools in Bunno Bedelle zone.

Table 4.1

Demographic Information of Respondents

Demographic Variables	Options	Frequency	Percent (%)
Sex	Male	198	70.0
	Female	85	30.0
Age	20-30	126	44.5
	31-40	110	38.9

	41-50	47	16.6
Current position	Teacher	260	91.9
	principal	10	3.5
	Vice principal	10	3.5
	Supervisor	3	1.1
Service year	1-5	21	7.4
	6-10	183	64.7
	11-20	65	23.0
	21 and above	14	4.9
Educational level	Diploma	3	1.1
	BA/BSC	256	90.5
	MA	24	8.5
	Total	283	100.0

Out of 283 participants included in this study, 198 (70%) were male and 85 (30%) were female. The majority (64.7 %) of the participants in the study had 6-10 years of service, 23% had service year between 11-20 years, 7.4% had 1-5 years of service and 4.9% had 21years and above year of service. From these respondents 260 were teachers, 10 were principal, 10 were vise principal and 3 were supervisors. The majority of respondents 183 (64.7%) were aged between 6-10 years. Of the remaining respondents 65 (23.0 %) were aged between 11-20 years, 21 (7.4%) of the respondents were aged between 1-5 years and the least 14 (4.9%) were aged 21 and above years. The participants of this study included 256 graduates who had Bachelor degree (Education) which is (90.5%), 24 had MA (8.5%) and 3 had a Diploma in Secondary education (1.1%).

Table 4.2 Correlation of Demography and students' Achievement

Variables		1	2	3	4	5	6
Sex	Pearson Correlation	1.00					
Age	Pearson Correlation	0.25*	1.00				
Current position	Pearson Correlation	0.26**	0.05	1.00			
Service year	Pearson Correlation	0.64**	0.02	0.21	1.00		
Ed^{nal} level	Pearson Correlation	0.40**	0.09	-0.13	-0.14	1.00	
EGSLCE	Pearson Correlation	0.00	0.28**	0.40**	-0.14	0.24**	1.00

Note: $*p<.05$, $**p<.01$ (one tailed)

Table 4.2 presents correlations of demographic variables and EGSLCE of this study. Some demographic variables had strong correlation with dependent variables while others had either weak correlation or had no correlation at all with the dependent variables. Age had significantly correlated with students' Achievement ($r = .28$, $p<.01$). Educational level had strong correlation with students' Achievement ($r = .24$, $p<.01$). Current position had significantly correlated with students' Achievement ($r = .40$, $p<.01$) and age had no significant correlation with students' Achievement ($r = .00$, $p<.01$) and service year had negative correlation with students' Achievement ($r = -.14$)

4.4. Descriptive statistics for the variables in the study

Table 4.2 examined the mean scores of the major variables involved in the study with the sample schools. The variables that measured the school climate were rated on five point-scales (one to five) with one being the lowest score and five being the highest. Then the mean scores were compared with 3 ("partially agree'') to indicate the level of OCDQ as perceived by the teachers. If the mean score on the OCDQ was higher than the mean ("partially agree"), the researcher assumed that the school climate was positive and *vice versa*. The mean scores for EGSLCE on the schools were obtained by averaging 10 subjects the students took on the grade 10 national examination. The mean was first computed for an individual student on all subjects then calculated for each school and across all schools. According to the Ethiopia education and training policy, the score of 50% and above is considered as a pass mark in an examination. Accordingly, in this study 2 (50%) out of 4 (100%) EGSLCE score is considered as a pass mark.

The mean for each of the four factors of school climate was calculated by averaging the scores for all of the questions within each factor for the 283 teachers in the participating schools. Hence, the mean for the overall OCDQ represents an average of all the responses for all of the 61 survey items. The reports of the descriptive statistics were presented in Table 4.2 below

Table 4.3
Descriptive statistics for the variables in the study

No	Schools	SPB	DPB	RPB	CTB	ITB	DTB	SCOI	EGSLCE
1	Nagaya	3.00	2.79	3.09	3.20	3.12	3.28	3.08	1.68
2	Workina Amba	3.15	3.75	2.78	4.20	4.00	2.80	3.40	2.31
3	Lalisa sanaga	2.87	2.89	2.68	4.10	3.19	2.97	3.10	2.21
4	Abba gooroo	2.91	2.87	2.78	3.05	3.07	3.31	2.90	1.46
5	Abdella	3.15	2.93	3.07	3.25	3.20	3.34	3.15	1.67
6	Chora	2.85	2.95	3.14	3.28	3.10	3.28	3.10	1.68
7	Debeso Humbe	2.93	3.03	3.03	4.00	4.07	2.78	3.30	2.39
8	Debeso Kemise	3.84	2.75	3.19	3.29	3.10	3.10	2.70	1.92
9	Dabo Temo	4.00	2.88	2.91	3.24	3.16	3.05	3.20	1.78
10	Lilo	3.09	2.59	2.96	3.25	3.16	3.09	3.02	1.90
11	Tulama	3.50	2.59	2.96	2.98	3.00	3.08	3.01	1.69
12	Barkume chewaka	4.00	2.60	3.03	2.97	2.98	3.31	3.14	1.65
13	Biftu Jagan	4.00	2.48	3.00	3.40	3.54	3.19	3.30	1.73
14	Bikiltu Coqorsa	2.85	2.43	2.93	2.45	2.90	3.36	2.80	1.43
15	Chara	4.00	2.69	2.70	3.47	3.21	3.07	3.19	1.91
16	Gachi	3.04	2.63	2.84	3.26	3.16	3.19	3.02	1.73
17	Sekacha	3.38	2.56	2.60	4.20	3.52	2.97	3.20	2.23
18	Challo	3.33	2.77	3.07	4.30	3.42	2.80	3.01	2.30
19	Dambi	3.03	2.59	2.83	3.16	3.16	3.30	3.01	1.65
20	Damocha	3.17	3.08	2.90	3.31	3.24	3.00	3.10	1.83

21	Ogo kersa	2.67	2.88	2.78	3.19	2.78	3.31	2.90	1.65
22	Sineno	3.06	2.44	2.93	3.07	2.91	3.10	2.90	1.69
23	Yembero	3.27	2.69	2.98	3.87	3.21	3.00	3.17	2.11
24	Ingibii	3.17	2.83	2.50	3.26	3.19	3.07	2.90	2.05
25	Mexxi Shengo	3.17	2.88	3.21	3.20	3.22	3.36	3.17	2.00
26	Wayessa Gota	3.00	2.93	3.13	3.22	2.99	3.17	3.07	1.82
27	Chilalo Bildima	4.00	2.80	3.24	3.97	3.21	2.97	3.30	2.13
28	Hana Bosoqe	4.00	3.00	2.00	3.19	3.11	3.08	3.06	2.00
29	Laliso HaroTure	3.17	2.79	2.79	3.20	3.08	3.10	3.02	1.84
30	Boracha	3.03	2.59	2.83	3.10	3.05	3.28	2.90	1.72
31	Guba Hora	4.00	2.66	3.00	3.13	3.06	3.19	3.17	1.73
32	Sidan	3.12	2.55	2.91	2.98	2.97	3.30	2.90	1.68
33	Mako	3.90	2.88	3.21	3.20	3.22	3.36	3.30	1.92
34	Sariti	3.17	2.84	2.79	4.00	3.16	3.03	3.16	2.10

SPB= Supportive Principal Behavior, DPB= Directive Principal Behavior, RPB= Restrictive Principal Behavior, CTB= Collegial Teacher Behavior, ITB= Intimate Teacher Behavior, DTB= Disengaged Teacher Behavior, SCOI= School Climate Openness Index, EGSLCE= Ethiopian General School Leaving Certificate Examination.

As seen in Table above the mean score for the School openness Index showed that 26 schools (75%) had scored above the mean and 8 schools (25%) had averages below the mean value. Regarding the EGSLCE examination results, 11schools (32.35%) had averages above the mean and 23 schools (67.65%) had scores below the mean.

Table 4.4

Descriptive Statistics for the School climate Factors and EGSLCE scores

Variables	Minimum	Maximum	M	SD
SPB	2.67	4.00	3.32	0.43
DPB	2.43	3.75	2.78	0.24
RPB	2.00	3.24	2.91	0.24
CTB	2.45	4.30	3.38	0.43
ITB	2.78	4.07	3.19	0.26
DTB	2.78	3.36	3.14	0.17
EGSLCE	1.43	2.39	1.87	0.24

SPB = Supportive principal behavior, DPB = Directive principal behavior, RPB = Restrictive principal behavior, CTB = Collegial teacher behavior, ITB = Intimate teacher behavior, DTB = Disengaged teacher behavior, EGSLCE= Ethiopian General School Leaving Certificate Examination, N= 34

When we evaluate the mean for each of the six variables of school climate (Table 4.3), collegial teachers behavior was found be high (M= 3.38, SD= 0.43) followed by supportive principal behavior (M= 3.32, SD= 0.43), intimate teachers behavior (M= 3.19, SD= 0.26), disengaged teachers' behavior (M= 3.14, SD= 0.17), restrictive principal behavior (M=2.91, SD=0.24), and the directive principal behavior (M= 2.78, SD= 0.24) were rated below the average signifying that this behavior was evaluated by the respondents as weak or negative. The average EGSLCE examination scores for all schools was below the mean (M= 1.87, SD= 0.24).

One of the basic question of this study aims at identifying the school sub-climate that more predicts secondary schools of Buno Bedelle zone. From the six sub variables collegial teachers behavior more predicts the school climate, the behavior was found to be high (M=3.38, SD=0.43) followed by supportive principal behavior (M=3.32, SD=0.43) from teachers behavior the relationship between teachers and teachers are friendly and intimate that teachers' behavior is open and professional interaction among teachers. They are enthusiastic accepting and mutually

respectful of professional competence. There are cohesive strong network of social support among faculty, teachers know each other well and are close personal friends and socialize. From principal behavior (relationship between principals and teachers) restrictive principal behavior (M = 2.91, SD = 0.24), was rated high, these shows that principals hinders rather than facilitating teacher work, burdens with busy work, don't give freedom to teachers to take decision, there is a lack of communication between teachers and them, except teaching, teachers are kept busy in doing other works as well, principals mostly, try to force their orders.

The first basic question of this study aims at knowing type of school climate predominant in secondary schools of Buno Bedelle zone. As seen in Table 4.2 above the mean score for the School climate openness Index (SCOI) showed that 26 schools (75%) had scored above the mean and 8 schools (25%) had averages below the mean value. This tells us the school climate that is predominant in Buno Bedelle secondary schools is totally not open not closed but medium school climate. If the mean score on the OCDQ was higher than the mean (which is 3 or "partially agree"), the researcher assumed that the school climate was positive and open. The school climate openness index (SCOI) ranges from 2.70 up to 3.40 the average is 3.05, so the average is more than the mean but the school climate is not much open and positive but moderate school climate.

The second basic question of this study aims at investigating whether a significant relationship exists between school climate and student achievement. Accordingly, correlation analysis was computed between the mean of each of the factors of school climate and the mean of the EGSLCE scores for the schools participating in the study.

Table 4.5 *Correlation Results of Variables in the Study*

		SPB	DPB	RPB	CTB	ITB	DTB	EGSLCE
SCOI	Pearson Correlation	.364*	.435*	.134	.541**	.650**	-.349*	.494**
	Sig. (2-tailed)	.034	.010	.451	.001	.000	.043	.003
SPB	Pearson Correlation	1	-.115	.006	.023	.055	-.106	.107
	Sig. (2-tailed)		.518	.972	.895	.758	.553	.546
DPB	Pearson Correlation		1	-.104	.418*	.520**	-.388*	.453**
	Sig. (2-tailed)			.559	.014	.002	.023	.007
RPB	Pearson Correlation			1	-.052	.000	.202	-.125
	Sig. (2-tailed)				.771	.998	.252	.481
CTB	Pearson Correlation				1	.689**	-.794**	.886**
	Sig. (2-tailed)					.000	.000	.000
ITB	Pearson Correlation					1	-.651**	.708**
	Sig. (2-tailed)						.000	.000
DTB	Pearson Correlation						1	-.821**
	Sig. (2-tailed)							.000

SCOI = School climate openness index, SPB = Supportive principal behavior, DPB = Directive principal behavior, RPB = Restrictive principal behavior, CTB = Collegial teacher behavior, ITB = Intimate teacher behavior, DTB = Disengaged teacher behavior, EGSLCE= Ethiopian General School Leaving Certificate Examination, N=34

 ** Correlation is significant at the 0.01 level (2-tailed)

  * Correlation is significant at the 0.05 level (2-tailed)

The results indicate that there is a significant and positive correlation between overall school climate and student achievement (r = 0.494, r^2 = 0.24). It is important to note that although there

is a significant relationship between the two variables, the correlation coefficient is moderate. The r^2 value indicates that the school climate openness index explains 24% of the variance in student achievement scores in EGSLCE.

Further examination at the correlation analysis presented in the above table 4.4 shows important results regarding factors of school climate with student scores. The data in the table depicted that the collegial teacher behavior (r = 0.886, r^2 = 0.784996), intimate teacher behavior (r = 0.708, r^2 = 0.501264), directive principal behavior (r = 0.453, r^2 = 0.205209), supportive principal behavior (r = 0.107, r^2 = 0.011449) are moderately correlated to students achievement. On the other hand, the restrictive principal behavior (r = -0.125, r^2 = 0.015625) and disengaged teacher behavior (r = -0.821, r^2 = 0.674041) sub scale showed negative relationship with students' performance on EGSLCE.

The third objective of this study is examining the relative weight of each of the sub scales of the school climate as the strongest predictor of students' achievement on Ethiopian general school leaving certificate examination. Multiple linear regression analysis was used to determine the independent effects of each of the school climate sub variables on student achievement. The results are shown in Table 4.5 below.

Table 4.6

Multiple Regression Analysis for School Climate Variables

A summary of the R, R square and adjusted R square in multiple regression analysis

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate	Change Statistics				
					R Square Change	F. change	df1	df2	Sig. F Change
1	.916[a]	.838	.802	.10832	.838	23.345	6	27	.000

    a. Predictors: (Constant), DTB, SPB, RPB, DPB, ITB, CTB

Standard multiple regression analysis was used to determine if the school climate influence or predict students' academic achievement in secondary schools. In multiple regression analysis,

the R square indicates how much variance in the dependent variable is explained by the independent variable. However, the adjusted R square is more accurate (Cohen *et al.,* 2007), and its takes account of the number of independent variables. It is usually smaller than the unadjusted R square; also it looks at a sample rather than the whole population (Cohen *et al.,* 2007). Muijs (2004) suggests that, for a goodness of fit with an adjusted R square, the following classification should be used, an adjusted R square < 0.1 - poor fit, $0.11– 0.3$- modest fit, $0.31 – 0.5$- moderate fit and > 0.5 – strong fit. Using the enter method it was found that the six climate variables had an overall positive effect on explaining the variance in students achievement $F (6, 34) = 23.345$, $P < 0.05$, $R^2 = 0.838$, $\Delta R^2 = 0.838$). These result shows that 83.8% of the variation in student achievement at EGSLCE score can be explained by the six sub scales of the school climate openness indexes (SCOI) combined. These show that $R^2 = 0.838 > 0.5$ the goodness of fit is strongly fit. When adjusted R^2 is used the model predicts about 80.2% of variation in student achievement scores at EGSLCE (this statistic adjusts for sample size and number of independent variables in the model, (Urdan, 2005).

A regression table shows the overall amount of variance explained in a dependent variable by all independent variables, called R^2 (*R* squared). It also shows the regression weight the amount of contribution of each variable controlling for the variance of all other variables, called beta for each variable.

Table 4.7

Significance levels in multiple regression analysis **- ANOVA[a]**

Model		Sum Squares	df	Mean Square	F	Sig.
	Regression	1.644	6	.274	23.345	.000[b]
1	Residual	.317	27	.012		
	Total	1.960	33			

a. Dependent Variable: EGSLCE
b. Predictors: (Constant), DTB, SPB, RPB, DPB, ITB, CTB

Table 4.8

The beta (β) coefficients in a multiple regression analysis - **Coefficients**[a]

Model		Un standardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	1.369	.923		1.483	.150
	SPB	.039	.045	.069	.866	.394
	DPB	.061	.093	.060	.650	.521
	RPB	-.040	.083	-.039	-.482	.633
	CTB	.331	.079	.587	4.216	.000
	ITB	.100	.109	.109	.918	.367
	DTB	-.358	.202	-.245	-1.774	.087

a. Dependent Variable: EGSLCE

The Beta weight is the amount of standard deviation unit of change in the dependent variable for each standard deviation unit of change in the independent variable. When looking at the sub scales of school climate Table 4.7 shows that supportive principal behavior (B = 0.039, β = 0.069, $P < 0.05$), directive principal behavior (B = 0.061, β = 0.060, $P < 0.05$), collegial teacher behavior (B = 0.331, β = 0.587, $P < 0.05$) and intimate teacher behavior (B = 0.10, β = 0.109, $P < 0.05$) had significant independent effects on student achievement as measured by EGSLCE scores. However, restrictive principal behavior (B = -0.040, β = -0.039) and disengaged teacher behavior (B = -0.358, β = -0.245) did not significantly predict the variance in student achievement at EGSLCE score.

In interpreting the effect size, Muijs (2004) gives the following guidance: 0 – 0.1 weak effects, 0.1 – 0.3 modest effects, 0.3 – 0.5 moderate effects and > 0.5 strong effects. Accordingly supportive principal behavior (β = 0.069) and directive principal behavior (β = 0.060) have significant but weak effects, intimate teacher behavior (β = 0.109) have significant and modest effects and collegial teacher behavior (β = 0.587) have significant and is the strongest predictor.

CHAPTER FIVE

SUMMARY, CONCLUSIONS AND RECOMMENDATIONS

5.1 Introduction

This chapter deal with the presentation of summary of the study, the summary of the major findings, the chapter also describe the discussion of conclusion based on findings and in the third section, recommendations were forwarded to the concerned body.

5.2 Summary of the Study

This study aims at investigating whether a significant relationship exists between school climate and student achievement as measured by the EGSLCE scores in 34 secondary schools of Bunno Bedelle zone. It also examined the relationship and influence between school climate and students' academic achievement. The relative effect of the subscale measures of school climate (Supportive principal behavior, directive principal behavior, restrictive principal behavior, collegial teacher behavior, intimate teacher behavior and disengaged teacher behavior). The study employed quantitative approach within *correlation research design*. The population of the study consist of 975 teachers, 283 teachers were randomly sampled using a sampling strategy of 95 % confidence level and a 5 % error interval as proposed by Cohen *et al.,* (2007).

Data were collected through climate questionnaires namely Organizational Climate Descriptive Questionnaire for Secondary School (OCDQ). Finally the data were subjected to Statistical Package for Social Sciences (SPSS) for descriptive and inferential statistics and then presented in tables. The relationship between school climate and student achievement was examined through the use of two statistical methodologies: correlation and a multiple regression. The study reviled that all the secondary schools in Bunno Bedelle zone operated into climate that is not much open and positive but moderate school climate. Also the finding shows that there is significant and positive relationship between school climate and students' academic achievements and the strongest predictor of students' academic achievement is collegial teachers' behavior. Lastly, the school climate seems to influence the students' academic achievements.

5.3 Major Findings

One of the findings of this study is that school climate has a significant and positive relationship with student achievement in secondary schools of Bunno Bedelle zone. There is a substantial body of literature indicating that the students' academic achievement is significantly related with the school climate assessed by OCDQ (Hoy & Hannum, 1997). The findings of this study concurred with the study done by Sweetland and Hoy (2000). Through their study, they assessed the climate of 86 middle schools in New Jersey by using OCDQ. The finding of their study indicated a significant relationship between engaged teachers behavior, intimate teacher behavior, frustrated teachers and performance (students' academic achievement) and teacher empowerment. Students' academic achievement and teacher empowerment are the elements of effective schools (Sweetland & Hoy, 2000). The finding of this study is similar to the results of the previous studies conducted in different countries which revealed relationships between school climate and student achievement (Abeya, 2017; Hoy & Hannum, 1997; Smith, 2002; Tschannen-Moran, Parish & Dipaola, 2006). Here, it is important to note that the relationship found in this study is a moderate positive relationship, but nonetheless, a significant one.

The findings of this study showed that secondary schools in Buno Bedelle zone operate in moderate school climate and also they are characterized by having poor academic results or below the average. Schools that have non-conducive/closed / negative climate are characterized by people who are going through motions, without concern for the overall purpose of the institution (Hoy *et al.,* 1991; Brown, 2002). Headmaster/mistress's/principal often stress routine, busy work, rules, and regulations. Teachers in schools deemed to be on a closed climate tend to appear frustrated and apathetic.

The second major finding was with regard to the relationship between the subscales of school climate and student achievement. The study shows that four of the subscales of school climate i.e. collegial teacher behavior, intimate teacher behavior, directive principal behavior, supportive principal behavior were significantly and positively correlated to students' achievement. On the other hand, the restrictive principal behavior and disengaged teacher behavior sub scale showed negative relationship with students' achievement on EGSLCE scores. Other studies conducted by Dian Vasquez (2011) and Tschannen-Moran, Parish & Dipaola (2006) using different instrument revealed those school climates were significantly correlated with student achievement.

The sub variables of school climate: restrictive principal behavior and disengaged teachers' behavior were also found to be significantly negatively associated with students' academic achievements. Although this study like other studies done in different countries showed a significant positive relationship between academic achievement and school climate, it also discovered some unique findings that directive principal behavior; where principal keep too much control on teachers work, all the works are expected to be done according to their own will, their behavior always remains strict have independent effect on students' academic achievement but moderate one.

The multiple regression analysis revealed a third major finding of this study. The six sub school climate factors used both for the SCOI as predictor variables in the regression model were shown to have a significant relationship with student achievement when viewed as general, but they generated more wide-ranging results when studied individually. Collegial teacher behavior (CTB) is the most positive and stronger predictor of students' academic achievement in secondary schools of Bunno Bedelle zone. This factor of school climate depicted a significant positive correlation with academic achievement as well as appeared as the strongest and most significant predictor of academic achievement in the multiple regression analysis. Similarly intimate teacher behavior (ITB) had significant independent effects on students' academic achievement as measured by EGSLCE scores. However, restrictive principal behavior (RPB) and disengaged teacher behavior (DTB) did not significantly predict the variance in student achievement measured by EGSLCE scores.

The four subscales of school climate that revealed significant correlations with academic achievement (collegial teacher behavior, intimate teacher behavior, directive principal behavior and supportive principal behavior) indicate that these factors are worth assessing if there is an interest in improving academic achievements' of students. There is a body of evidence that demonstrates teachers work most effectively when they are supported by others teachers and work collegially (Hargreaves, 1994). It appears that the schools with collegial teacher relationship, principal with supportive behavior, teachers with intimate relationship and principal with directive behavior are more successful in achieving better students' academic achievements than schools with restrictive principal and disengaged teacher behavior. From this study it can be concluded that friendly relation between teachers and principal where distribution of works

among teachers is made on the basis of their capabilities and ability, where freedom is given to teacher to share their opinion where teacher respect each other and like to work together are more effective and are more successful in academic achievement for the secondary schools setting of Bunno Bedelle zone.

For this study, the best predictor of academic achievement in secondary schools of Bunno Bedelle zone was collegial teacher behavior. If teachers work together, respect each other, and accomplish their job with enthusiasm, this could add to open and positive school environment which could then lead to improved students' academic achievement. Sweet land and Hoy (2000) studied 86 New Jersey middle schools with different sub school climate variable teacher professionalism that have almost the same instrument with collegial teachers' behavior and found a significant correlation between teacher professionalism and its independent contributions to students' achievement. Since this study reveals that collegial teachers' behavior subscale of school climate has such a significant effect on academic achievement in secondary schools of Bunno Bedelle zone, the subscale serves as a crucial area for Bunno Bedelle zone educational administrators and secondary school principals to consider when focusing on academic success of secondary school students.

In this study, when each sub school climate was analyzed individually, restrictive principal behavior (RPB) and disengaged teacher behavior did not significantly predict the variance in student achievement. In general there is an overall significant relationship between school climate and students' academic achievement.

5.4 Conclusion

It was important to study the relationship between school climate and students' academic achievement as well as to identify the school climate sub-variables that more predicts secondary school also to enable school leaders to understand the climate of their schools and to consciously plan and implement strategies designed to improve their schools' climates. It was also timely and relevant to study school climate and its effect on student achievement because of the increasingly high stakes for underachievement. As student performance continues to have implications for both students, parents and schools, educators and educational leaders continue to look for ways to improve those scores. One of the ways to improve students' academic achievement is through improving school climate. The fact that there was a relationship between school climate and

student achievement is a reason to continue to examine school climate in greater depth in many countries.

School climate covers several different factors but, as presented in this study, the major interactions occurring in school involve the principal-teacher relations and teacher-teacher relations. These two bodies play a great role in improving school climate also students' academic achievement. This study indicates that overall school climate has a significant positive effect on students' academic achievement. A positive interaction among the different individuals in the school has a significant and positive effect on students score.

In performing this study:

The researcher found that, the overall school climate openness index and the subscales (Supportive principal behavior, directive principal behavior, restrictive principal behavior, collegial teacher behavior, intimate teacher behavior and disengaged teacher behavior) of the thirty four schools is equal to 3 (which is partially agree); that implies the schools had poor or closed school climate and the average score of students sat for 2016/17 up to 2018/2019 grade 10th national examination is below 2.00 (which is less than pass mark). The school climate is not conducive for the teaching learning process.

Schools with better school climate as measured by the school climate openness index has better average score of students' achievement. The sub-scales, also has shown that school climate has a positive relationship to students' academic achievement. Furthermore, it is important to note that this achievement difference comes due to school climate differences between the schools. This study also discovered some unique findings that directive principal behavior; where principal keep too much control on teachers' work, all the works are expected to be done according to their own will have independent effect on students' academic achievement but moderate one.

Generally in schools where the teachers perceive that all important matters are discussed with each other's, people help each other, respect each other, like to work together, give a respectful welcome to new teachers, teachers feel proud about their school and encourage each other for good work, there is a strong feeling of togetherness also the students' academic achievement is higher and vice versa.

5.5. Recommendation

Based on the conclusions and findings drawn, the following possible solutions are recommended so as to improve the schools' climate:

- This study has major practical implications for educational officers working at different levels. Secondary school principals are expected to improve student academic achievements focusing on improving school climate which is one domain of recently introduced Ethiopia school improvement programs initiative

- It is important for school principals to take into account that the personnel of schools are more satisfied with interpersonal relationships than with task and management practices in an organization (average estimation on supportive principal behavior are higher than those of directive and restrictive behavior). "If you do not manage school climate, it manages you", school leaders need to be proactive rather than reactive.

- There was a statistically significant achievement difference between the sampled schools. Moreover, it has been shown that, where there is better school climate, there is better students' academic achievement. This confirms that, there is a positive relationship between school climate and students' academic achievement. Therefore, principals need to pay attention to improve the school climate by sharing experience from those schools those with better school climate so as to improve the students' academic achievement.

- The successful function of a school depends upon the presence of a strong and positive climate (Deal & Peterson, 1999; Freiberg & Stein, 1999). This study revealed a significant relationship between positive school climate and students' academic achievement. Thus, school principals and administrators need to focus on school climate components, design school improvement plans that entail the school climate construct.

- It is argued that schools that exercise collegial teacher behavior or relationship, give due emphasis for the academic achievements of students and tend to be more successful than schools that have disengaged teacher behavior or relationship. Thus, it is suggested that school principals should strongly continue to involve teachers in decision making, exercise leadership that is friendly and open and being supportive not being over directive or restrictive.

- Teachers need to continue working together to increase students' academic achievement through social relation or when they are in school. Giving constructive feedback and criticism to newly deployed teachers and to the member of his/her department. Welcoming new comer teachers, adapting him / her to new environment and celebrating when they depart or changed to another school.

- Supervisors and educational leader at different level should monitor and evaluate how schools are running and should take measure to make school climate conducive. They have to be proactive rather than reactive in making conducive school climate which brings better students' achievement.

5.6. Recommendations for further Research

The study had some few limitations that must be taken into consideration in the future research. The first limitation is that the study mainly analyzed how school climate influences school performance, but it could also be true that performance does influences school climate. There is a need to examine if the performance of a school can influence the school climate. In this study, the national examinations results of grade 10 were used for measuring secondary schools' performance (students' academic achievement). In future research, it is important to measure by 12[th]grade entrance exam score. The school climate sub variable that is teacher academic status (teacher performance (GPA) and students' academic achievement)), teaching learning methodology (pedagogical skills) should be considered. Additionally, other aspects that might hinder the performance of schools need to be taken into account. These aspects include the social economic status (SES) of the parents, the location of schools (urban schools and rural schools) and the owner of the school (whether the school is public and private owned).

References

Abbott , R., O'Dennell, J., Hawkins , D., Hill, K., Kasterman, R., & Catalona, R. (1998). Changing teaching practices to promote achievement and bond to school. *American journal of orchopschiatry* , 542-552.

Abeya, G. (2017). Schools Climate and Student Achievement in Secondary Schools of Ethiopia. *European Scientific Journal, ESJ, 13(17).*

Ajay Babu. (2013). organizational climate as apredictor of teacher effectiveness.

Asrat, N. (2015). Teachers motivation and school climate in secondary and preparatory schools: eastern Arsi zone, Oromia.

Astor, R.-A. (2010). How can we improve school safety research? *Educational Researcher*, *39 (1),* 69- 78.

Astor, R.-A., Guerra, N., & Van Acher, R. (2010). How can we improve school safety research? *Educational Researcher, 39*, 69–78.

Babu, A. (2015). Organizational Climate as a Predictor of Teacher Effectiveness.

Barnand, W. (2004). Parent involvement in elementary school and educational attainment. *Children and Youth Services Review, 26*, 39-62.

Barton, P. (2004). Why does the gap persist? *Educational Leadership, 62(3)*, 8-13.

Bayler, A. (2012). Transformational Ledership Bahaviors of School Principals: A Qualitative Research Based on Teachers' Perceptions. *International online Journal Educational Sciences 4 (3),* 581-591. ISSN: 1309-2707.

Booker, K. (2006). School belonging and the African American adolescent: What do we know and where should we go? *The High School Journal, 89(4)*, 1–7.

Borland, M., & Howsen, R. (2003). An examination of the effect of elementary school size on student academic achievement. *International Review of Education, 49(5)*, 463-474.

Bradshaw, C., Wasdorp, T., Debnam , K., & Johnson, S. (2014). Measuring school climate in high schools: a focus on safety, engagement, and the environment. *Journal of School Health, 84(9),* 593-604.

Breger , B. (2014). Poverty Effects on Student Achievement: A Look at Chicago Public Schools.

Bullard, H. (2011). The effects of school enrollment size on student achievement.

Busch, S. (2009). The effects of school culture and climate on student achievement. *International Journal of Leadership in Education, 12(1)*, 73-84.

Chen. (2019). organizational climate descriptive questionnaire. *EducationalJournal*, 41-50.

Chiristensen, C., Marx, M., & Stevenson, H. (2006).). The tools of cooperation and change. Harvard Business Review, 84(10), 72-80, 148.

Christenson, M. (2006). the tool of cooperation and change. *Harvard Business Review* , 72-80.

Cohen, L. (6 Eds.) (2007). *Research Methods in Education.* Rout ledge publisher, 270 Madison Avenue, New York. 638pp.

Collins, F. (2010). *The relationship and differences between parent, student, and teacher responses to the Missouri school improvement program cycle three AdvancED questionnaire climate items and student ACT performance*. University of Missouri—Columbia.

Collins, K. (2010). *The relationship and differences between parent, student, and teacher responses to the Missouri school improvement program cycle three AdvancED questionnaire climate items and student ACT performance*. University of Missouri—Columbia.

Cotton, K. (1996). *School size, school climate, and student performance:* Northwest Regional Education Laboratory Portland, OR.

Creswell, J. (2009). Research Design: Quantitative, Qualitative and Mixed Research .

Dagnaw, A. (2014). Impact of School Climate on Students" Academic Achievement in Bahir Dar Secondary Schools: Ethiopia. *Education Research Journal 4(2)*, 28-36.

Dary , T., & Bikeral, T. (2013). School climate: Practices for implementation and sustainability. *A school climate practice brief(1)*.

Driscoll, D., Halcoussis, D., & Svorny, S. (2003). School district size and student performance. *Economics of Education Review, 22(2)*, 193-201.

Dufour, R., & Mattos, M. (2013). How Do Principals Really Improve Schools? *A school climate practice 70(07)*, 34-40.

Eccles, J., & Midgley, C. (1988). *Stage/environment fit: Developmentally appropriate classrooms for young adolescents.* In R. E. Ames & C. Ames (Eds.), Research on motivation in education. New York: Academic Press.

Eccles, J., Wigfield , A., Devid , R., MacIver, D., & Feldlaufer, H. (1993). Negative effects of traditional middle schools on students' motivation. *Elementary School Journal, 93*, 553–574.

Ellis, B. (2008). The effects of school climate on student achievement, parent/community/ perceptions and staff effectiveness.

Finnan , C., Schenepel, K., & Anderson, L. (2003). Powerful learning environments: The critical link between school and classroom cultures. *Journal of Education for Students Placed at Risk, 8*, 391–418.

Freiberg, J., & Stein, T. (1999). *Measuring, Improving And Sustaining Healthy Learning Environments.* School Climate: Measuring, Improving and Sustaining Healthy Learning environments, 11-29.

Freiberg, J. (1998). Measuring School Climate. Educational leadership: *Realizing a Positive School Climate, 56 (1)*, 22-26.

Fullan , M. (2016). Essential factors effective networks in education. *Journal of professional capital and community ,* 1 (1), 5-22.

Gay, L., Mills, G., & Airasian, P. (2006). *Educational research: Competencies for analysis and applications (8th Ed.).* Upper Saddle River, NJ: Pearson Education, Inc.

Ghaith, G. (2003). The relationship between forms of instruction, achievement and perceptions of classroom climate. *Educational Research, 45*, 83–93. .

Gottfredson, G., & Gottfredson, D. (1989). School Climate, Academic Performance, Attendance, and Dropout.

Gregory, A. (2010). Authoritative school discipline: High school practices associated with lower student bullying and victimization. *Journal of Educational Psychology,* 102, 483-496.

Gregory, A., Cornell, D., Fan, X., Sheras, P., Shi, T.-H., & Huang, F. (2010). Authoritative school discipline: High school practices associated with lower student bullying and victimization. *Journal of Educational Psychology, 102*, 483–496.

Gulsen, C., & Gulenay, G. (2014). The principal and healthy school climate. Social Behavior and Personality: *an international journal,* 42(1), 93S-100S.

Hallinger, P., & Ronald , H. (1998). Exploring the principal's contribution to school effectiveness: 1980-1995. *School Effectiveness and School Improvement, 9(2)*, 157-191.

Halpin , A., & Croft, D. (1963). *The organizational climate of schools*. Chicago: Midwest Administration Centre. 155.

Halpin, A. (1966). T*heory and Research in Administration.* Macmillan, New York. 250.

Halpin, A., & Croft, D. (1962). *The organizational climate of schools.* Office of Education Report. Washington DC. 150.

Hamre, B., & Pianta, R. (2001). Early teacher–child relationships and the trajectory of children's school outcomes through eighth grade. *Child development, 72(2)*, 625-638.

Hanushek , E., Kain , J., Markman, J., & Rivkin, S. (2003). Does peer ability affect student achievement? Journal of applied econometrics, 18(5), 527-544.

Hargreaves, A. (1994). *Changing Teachers, Changing Times: Teachers' Work and Culture in Postmodern Age. London:* Cassell.

Hartley, M., & Kecskemethy, T. (2008). *Cultivating Leadership for Tomorrow's Schools of Education. 89(6),* 442-448.

Haynes, N., Emmons, C., & Ben-Avie, M. (1997). School climate as a factor in student adjustment and achievement. *Journal of educational and psychological consultation, 8(3)*, 321-329.

Hoy , W., & Miskel , C. (2005). *Educational administration theory, research and practice.* Boston, MA: McGraw Hill .

Hoy , W., & Miskel, C. (2005). Educational administration theory, research and practice.

Hoy, W. & Tarter, J., (1997). Middle school climate: An empirical assessment of organizational health and student achievement. *Educational Administration Quarterly, 33(3)*, 290-311.

Hoy, W. (1990). Organizational climate, school health, and effectiveness: A comparative analysis. *Educational Administration Quarterly, 26(3)*, 260-279. .

Hoy, W., & Miskel, C. (2005). Educational administration theory, research and practice.

Hoy, W., & Sabo, D. (1998). Toward an organizational model of achievement in school. The significance of collective efficacy. *Educational administration quarterly , 38* (1), 77-93.

Hoy, W., Hannum, J., & Tschannen-Moran, M. (1998). Organizational climate and student achievement: A parsimonious and longitudinal view. *Journal of School Leadership, 8*, 336–359.

Hoy, W., Tarter, J., & Kottkamp, R. (1991). *Open schools/healthy schools:Measuring organizational climate.* Sage, Beverly Hills, CA. 173.

Jankens, B. (2011). An examination of the relationship between school climate and student growth in select Michigan charter schools.

Jia, Y., Way, N., Ling , G., Yoshikawa, H., Chen, X., Huges, D., et al. (2009). The influence of student perceptions of school climate on socioemotional and academic adjustment: A comparison of Chinese and American adolescents. *Child development, 80(5)*, 1514-1530.

Jones, K., & Ezeife, A. (2011). School size as a factor in the academic achievement of elementary school students. *Psychology, 2(08)*, 859.

Keefe, J., & Kelley, E. (1990). *Comprehensive assessment and school improvement.* Nassp bulletin, 74(530), 54-63. .

Kerr, D., Ireland, E., Lopes , J., Craig, R., & Cleaver, E. (2004). *Citizenship education longitudinal study: Second annual report: First longitudinal study.* Retrieved from https://www.education.gov.uk/publications/e Ordering Download/RB531.pdf.

Klinger, D. (2000). Hierarchical linear modeling of students and school effects on academic achievement: New Brunswick school climate study. *Canadian Journal of Education, 25(2),* 41.

Korkmaz, M. (2006). The relationship between organizational health and robust school vision in elementary schools. *Educational Research Quarterly, 30(1)*, 14-36.

Koth, C., Bradshaw, C., & Leaf, P. (2008). A multilevel study of predictors of student perceptions of school climate: The effect of classroom-level factors. *Journal of Educational Psychology, 100,* 96–104.

Kpperrud, D., Nepomuceno, M., & Pomerantz, B. (2012). California Department of Education 1430 N Street, Suite 6408 Sacramento, CA 95814–5901.

Kwong, D., & Davis, J. (2015). School Climate for Academic Success: A Multilevel Analysis of School Climate and Student Outcomes. *Journal of Research in Education, 25(2)*, 68-81.

Lacour, M., & Tissington, T. (2011). The effects of poverty on academic achievement. *Educational Research and Reviews, 6(7)*, 522-527.

Lamdin, D. (1995). Testing for the effect of school size on student achievement within a school district. *Education Economics, 3(1)*, 33-42.

Lee, R. (1997). High school size: Which works best and for whom? *Educational Evaluation and Policy Analysis, 19(3)*, 205-227.

Li , N., & Hasa, Z. (2010). Closing the Achievement Gap: Strategies for Ensuring the Success of Minority Students. *National Teacher Education Journal, 3(2)*.

Linares, D. (2012). Effects of school climate on student achievement and discipline behaviors in three urban high schools.

Makewa, L., Role, E., Role, J., & Yegoh, E. (2011). School climate and academic performance in high and low achieving schools: Nandi Central District, Kenya. *International Journal of Scientific Research in Education, 4(2)*, 93-104.

Malecki , C., & Demaray, M. (2006). Social support as a buffer in the relationship between socioeconomic status and academic performance. *School Psychology Quarterly, 21(4)*, 375-395.

Marshall, M. (2004). *Examining school climate: Defining factors and educational influences.[White paper].* Atlanta: Georgia State University Center for School Safety, School Climate, and Classroom Management.

Maslow, A. (1945). A clinically derived test for measuring psychological security. *Journal of general psychology*, 33: 21-41 .

Martínez-Otero, V. (2007). *Los adolescentes ante el Estudio. Causas y Consecuencias del Rendimiento Académico.* Madrid: Fundamentos.

McEvoy, A., & Welker, R. (2000). Antisocial behavior, academic failure, and school climate: A critical review. *Journal of Emotional and Behavioral disorders, 8(3)*, 130-140. .

Milam , L. (2014). School Climate and Student Learning: An analysis of the relationship between school climate, student achievement, and other contributing factors.

Ministry of education (2008). Eeducation sector development program IV (ESDP IV).

MOE. (2013). *School Improvement Planning.* November 2013 Addis Ababa.

Muijs, D. (2004). *Doing Quantitative Research in Education with SPSS.* London: Sage. 240pp

Murray, J., & Weissdourd, R. (2003). *Focusing on core academic outcome : Akey to successful school_community partenerships.* In M.Brabeck, M.Walsh, R.Latta (Eds) Meeting at the

hyphen: school university communities professions in collaboration for student achievement and wellbeing. 179-197.

New-port, B. (2013). Examination of the relationship between school organization climate and elementary school students" socio-emotional outcomes.

Oguche etal. (2015). Influence Of School Environment On Academic Achievement Of Students In Secondary Schools In Zone "A" Senatorial District Of Benue State, Nigeria. *International journal of recent scientific research, 6(7)*, 4914-4922.

Okwelle, C. (2016). *Instructional strategies for technology education teacher.* Unpublished Monograph. Faculty of Technical and Science Education. RSU, Port Harcourt. .

Opdenakker, M., & Damme, J. (2001). Relationship between school composition and characteristics of school process and their effects on math achievement. *British Educational Research Journal, 47(4)*, 407-432.

Oredein, O., & Oredein , O. (2016). Effects of school variables on student academic performance in Calabar municipal area of Cross River State: Retrieved from LinkedIn: https://www. linkedin. com/pulse/effect-school .

Osher, D., Kendiziora, K., & Chinen, M. (2008). *Student connection research: Final narrative report to the Spencer Foundation. (Grant No. 200700169).* Washington, DC: American Institutes for Research.

Plucker, J. (1998). The relationship between school climate conditions and student aspirations. *The Journal of Educational Research, 91(4)*, 240-246.

Robert , J. (2007). Student's perception of school climate. *American Research Journal 44*(2),252-297

Roderick, M. (1995): *Trust in Organizations.* Frontiers of Theory and Research: London and New Delhi.

Roeder, P. (2002). School District Performance in Kentucky (1993-2001): Do Teaching and Financial Resources Moderate the Negative Effects of Poverty?

Sanders, W., Horn, S. & Wright, P. (1997). Teacher and classroom context effects on student achievement: Implications for teacher evaluation. *Journal of personnel evaluation in education, 11(1)*, 57-67.

Schneider, S., & Duran, L. (2010). School climate in middle schools: A cultural perspective. *Journal of Research in Character Education, 8(2)*, 25–37.

Serviovanni, T. (1995). Small Schools, Great Expectations. *Educational Leadership, 53(3)*, 48-52.

Shindler, J. (2016). Exploring the School Climate--Student Achievement Connection: Making Sense of Why the First Precedes the Second. *Educational Leadership and Administration: Teaching and Program Development, 27,* 35-51. .

Sing, N., & Katoch, A. (2017). School Organizational Climate Description Questionnaire. *International journal for innovative research in multidisciplinary field.* ISSN – 2455-0620.

Sing, N., & Katoch, A. (2017). School Organizational Climate Description Questionnaire. *International journal for innovative research in multidisciplinary field.* ISSN – 2455-0620, *3* (7).

Slaughter-Defoe, D., & Carlson, K. (1996). Young African American and Latino children in high-poverty urban schools: How they perceive school climate. *Journal of Negro Education, 65*, 60–70.

Smith, J. (2005). *The relationship between school division climate and student achievement of school divisions in the commonwealth of Virginia.* Virginia Tech.

Sortkaer, B., & Reimer , D. (2016). Disciplinary climate and student achievement: Evidence from schools and classrooms.

Soukamneuth, S. (2004). A climate for learning. *Principal Leadership: High School Edition*, *4(5)*, 14–19. .

Sweetland, S., & Hoy, W. (2000). School characteristics and educational Outcomes: Toward and organizational model of student achievement in Middle schools. *Educational Administration Quarterly. 36 (5)*: 703-729.

Thapa, A., & Cohen, J. (2013). A review of school climate research. *Review of educational research, 83(3)*, 357-385.

Tomporowski, P., Davis, C., Miller, P., & Naglieri, J. (2008). Exercise and Children's Intelligence, Cognition and Academic Achievement. *Educational Psychology, 20* (2), 111-131. .

Tope, O. (2012). Influence of School Environment on the Academic Performance of Secondary School Students in Lagos State. *Journal of Education, Sciences, Humanities and Management,* 5 (3), 25-30.

Tschannen, B., & Tschannen, M. (2011). Taking strengths- based focus improve school climate. *Journal of school leadership*. https://doi.org/10.1177/105268461102100305.

Tschannen-moran, M., Parish , J., & Dipola, M. (2006). School climate: The interplay between interpersonal relationships and student achievement. *Journal of School Leadership,* 16(4), 386.

Uline, C., & Tschannen-moran , M. (2008). The walls speak: The interplay of quality factors, school climate and student achievement. *Journal of Educational Administration,* 46(1),55.

Urdan, T. (2005). *Statistics in Plain English* (2nd ed.) Mahwah, NJ: Lawrence Erlbaum Associates, Inc.

Vasquez, D. (2012). *Organizational climate and student achievement in Belizean secondary schools.* Oklahoma State University.

Vasquez, O. (1997). *Psychology of Learning and Motivation:* Advanced in Research and Theory.

Watkins, N., & Aber, M. (2009). Exploring the relationships among race, class, gender, and middle school students' perceptions of school racial climate. *Equity & Excellence in Education,* 42(4), 395–411.

Williams, T. (2016). *Exploring the School Climate--Student Achievement Connection: And Making Sense of Why the First Precedes the Second John Shindler, Ph. D Professor.* California State University, Los Angeles Los Angeles, CA.

Willie, C. (2001). The context effects of socioeconomic status on student achievement test scores by race. *Urban Education,* 36(4), 461. doi: 10.1177/0042085901364002.

Wilson, J., Pentecoste, J., & Bailey, D. (1984). The influence of sex, age, teacher expe¬rience and race on teacher perception of school climate. *Education,* 104, 444–445.

Woldegirma, S. (2014). Assessment on the effects of school environment on behavior and achievement of high school students in Kolfe Keranio sub city government high school.

Zander, K. (2005). Relationships between School Climate and Student Performance: School-and Student-level Analyses.

JIMMA UNIVERSITY

COLLEGE OF EDUCATIONA AND BEHAVIORAL SCIENCE DEPARTMENT OF EDUCATIONAL PLANNING AND MANAGEMENT

Questionnaires: to be filled by teachers, principals, vise principals and supervisor in secondary schools of Buno Bedele Zone, Oromia region. The main objectives of this study is to assess the extent to which school climate relate with students' academic achievement, also to identify major school climate factors that affect students' academic achievement in the secondary schools of Buno Bedelle zone and to propose the possible recommendations.

*Please note the following points before you start filling the questionnaires.

 -No need of writing your name. Read all the instructions before attempting to answer

Part 1.Demographic Questions

Section A: Requires your personal information regarding your school, age, gender and educational background.

Instructions; please give your response by circling your answer. You are also kindly requested to write out the required information where you are asked to specify.

1.1. Name of the school…………………………

1.2. Sexes   A) male   B) female

1.3. Age   A/ 20-30   B/ 31-40   C/ 41-50   D/above 50

1.4. Educational Level   A/certificate   B/Diploma   C/ BA.BSC   D/ MA

1.5. State your current position A/Teacher   B/ Principal/Director C/Vise Director D/Supervisor

1.6. Years of service in your current position   A/ 1-5   B/ 6-10   C/11-20   D/ 21 and above

Part Two: This questionnaire consists of questions related to principal behavior towards teachers and teachers' behavior towards their colleagues. Different behaviors have been presented in the question form. You are requested to put a tick mark only in one option which you want to prefer given in front of each question. Please read each item carefully and evaluate clearly. Your evaluation will be used only for research purpose. All information that is collected in this study will be treated confidentially.

Direction: Please show your response on the level to which these activities were implemented by putting '√'mark on the spaces provided. (5 = strongly agree, 4= agree, 3= partially agree, 2 = Disagree, 1 = strongly Disagree).

QUESTIONNAIRE

I	Supportive Principal's Behavior Amala hoogganaa barsiisota deeggaranii.	Strongly agree (5)	Agree(4)	Partially agree (3)	Dis agree (2)	Strongly Disagree(1)
1	Freedom to take decisions are given Barsiisonni murtii kennuuf bilisummaa qabu.					
2	Good deeds by teachers are being applauded or much admired. Hojiin gaarii hojjetame ni ajaa'ibsiifama					
3	Freedom is given to share their opinion. Bilisummaan yaada isaanii ni ibsatu.					
4	Along with pointing out their mistakes, important suggestions are also given. Hanqina isaanii akka sirreeffataniif yaadni gahaan ni kennamaaf.					
5	To start different works in school teachers are asked to give their suggestions which are respected too. Hojii tokko eegaluun dura yaadni barsiisotaa ni gaafatama ni kabajamas.					
6	Always eager to solve the commercial issues. Yeroo hunda rakkoo diinagdee furuuf yaalu.					
7	Efforts to solve the personal issues are also made. Rakkoo dhuunfaa furuuf yaaliin nigodhama.					
8	Efforts are always made to maintain the coordination among teachers. Barsiisota gidduutti tokkummaan akka jiraatu yaalii godhu					
9	Distribution of works among teachers is made on the basis of their capabilities and ability. Hojiin akka dandeettii barsiisotaatti qoodama.					
10	Keep affection towards teachers. Miidhaa barsiisota irraa ni eegu.					
11	Keep the informal relation with teachers. Barsiisota waliin hariiroo al-idilee ni qabu.					
12	Good deeds of teachers are encouraged. Hojiin gaarii barsiisotaa ni jajjabeeffama.					
II	Directive principal behavior Amala hoogganaa ajaja kallattii					
13	Keep control on all the school activities. Hojii mana barnootaa hunda ni to'atu.					
14	Order the teachers to prepare/maintain school record on fix time. Barsiisonni hojii mana barumsaa yeroo murtaa'e keessatti akka xumuran ajaja.					

		Strongly agree (5)	Agree(4)	Partially agree (3)	Dis agree (2)	Strongly Disagree(1)
15	Their behavior always remains strict. Amalli isaanii yeroo hunda goggogaa dha					
16	All the works are expected to be done according to their own will. Hojiin hundi akka fedha isaaniitti akka hojjetamu fedhu					
17	Keep too much control on teachers. Barsiisota irratti to'annaa humnaa ol godhu.					
18	Always keep distance with teachers. Barsiisotatti dhiyeenya hin qabani.					
19	Teachers' advice to solve school issues is not considered as important. Gorsi barsiisonni rakkoo mana barnootaa hiikuuf kennan hin fudhatamu.					
20	At their own level, no efforts are made to solve the complaints made by the guardians. Akka isaanitti komii maatii kan hiiku isaanuma qofa.					
III	**Restrictive principal behavior** Amala hooggana cichaa (make teacher busy).					
21	They are trustworthy or truthful. Hooggantonni kun dhugaaf quuqamu.					
22	They trust teachers. Barsiisota ni amanu.					
23	Their procedure is satisfactory. Adeemsi isaanii gammachiisaa dha.					
24	Except teaching, teachers are kept busy in doing other works as well. Barsiisuun alatti barsiisonni hojii biroon ko'ommatu.					
25	Don't give freedom to teachers to take decision regarding class issues with their own will. Barsiisonni akka fedhanitti dhimma daree akka murteessan bilisummaa hin kennaniif.					
26	There is a lack of communication between teachers and them. Isaanii fi barsiisota gidduu rakkoon walitti dhufeenyaa ni jira.					
27	Mostly, try to force their orders. Yeroo baay'ee ajaja dirqamaan kennuu yaalu.					
IV	**Collegial Teachers' Behavior** **Amala barsiisaa miira hiriyyummaa qabu (friendly).**					
28	Respect each other. Wal ni kabaju.					
29	Like to work together. Waliin hojjechuu jaalatu.					
30	Give a respectful welcome to new teachers. Barsiisota haaraaf simannaa ni godhu.					

		Strongly agree (5)	Agree(4)	Partially agree (3)	Dis agree (2)	Strongly Disagree(1)
31	Always keep the belief in cooperation for doing school works. Tokkummaan hojjechuutti amanu.					
32	For having a good environment in school, teachers feel proud about their school. Haala mana barnootaa isaanii keessa jirutti gammadoo dha.					
33	Respect the suggestions given by colleagues. Namoota waliin hojjetanirraa yaada kennamuuf ni kabaju.					
34	Spend time with their colleagues outside the school. Mana barumsaa alattis yeroo waliin dabarsu.					
35	Senior teachers encourage the junior teachers for good work. Barsiisonni buleeyyiin barsiisota haaraa hojii gaarii akka hojjetan ni gargaaru.					
36	Respect each other opinions. Yaada walii ni kabaju					
37	There is an agreement among teachers. Barsiisota gidduu waliigalteetu jira.					
38	Do not insult each other. Wal hin arrabsan.					
39	Admire the good behavior of colleagues. Amala gaarii barsiisaan biraan qabu ni jaallatu.					
40	A feel of cooperation remains there among teachers. Miirri tokkummaa barsiisota gidduu jira.					
V	**Intimate teachers' behaviors** **Amala Barsiisota walitti dhufeenya cimaa qabanii.**					
41	Keep the good relation with their colleagues. Barsiisota biroo waliin hariiroo gaarii qabu.					
42	Keep the information about each other. Odeeffannoo waa'ee isaanii waliif eegu.					
43	Mostly visit the colleagues' house. Yeroo baay'ee Mana walii isaanii ni dhaqu.					
44	To solve the commercial and personal issues take the advice from colleagues. Rakkoo diinagdee fi dhuunfaa hiikuuf waliirraa gorsa fudhatu.					
45	Help the colleagues to let their work get done. Hojii isaanii akka hojjetamu wal gargaaru					
46	All keep belief for each other. Walii isaanii ni amanu.					
47	Value each other emotions. Yaada waliif gatii kennu.					
48	Tell their tensions and weaknesses to colleagues. Dhiphina fi hanqina isaanii walitti ni himu.					
49	Bother about the needs of colleagues. Rakkoon barsiisota biroo isaan ni ni yaachisa.					

		Strongly agree (5)	Agree(4)	Partially agree (3)	Dis agree (2)	Strongly Disagree(1)
50	Teachers always have friendly relations. Yeroo hunda hariiroo hiriyyummaa qabu.					
51	Teachers of school always remain in good mood. Barsiisonni yeroo hundaa haala gaarii keessa jiru.					
VI	**Disengaged teachers' behaviors** **Amala barsiisota haalli isaanii sirrii hin taanee.**					
52	Some teachers always talk about leaving school. Barsiisonni muraasni waa'ee mana barumsaa dhiisanii ala bahu haasa'u.					
53	Some teachers always object the decision taken by the majority. Barsiisotni muraasni murtii nama baay'ee hin fudhatan.					
54	Few teachers not concerned for the staff meeting. Barsiisotni muraasni marii istaafii hin fedhan.					
55	Some teachers ask the irrelevant questions in the meetings. Barsiisonni muraasni marii irratti gaffii hintaane gaafatu.					
56	Some teachers don't show their interest in school works. Barsiisonni muraasni hojii mana barumsaaf fedhii hin agarsiisan.					
57	For some teachers remaining present in a meeting is merely a formality. Barsiisota muraasaaf marii keessatti argamuun qofti gahaa dha jedhanii yaadu.					
58	Some teachers always reach school late. Barsiisonni muraasni yeroo dabarsanii mana barumsaa dhufu.					
59	Some teachers don't show interest towards their subject. Barsiisonni muraasni gosa barnoota barsiisanirratti fedhii hin agarsiisani.					
60	Some teachers try to pressurize the non-teaching staff. Barsiisonni muraasni hojjetoota istaafiin alaa irratti dhibbaa geessisuu yaalu.					
61	Teachers consider the other works of the school as a burden. Barsiisonni hojii mana barnootaa biroo akka ba'aa (load) tti ilaalu.					

Thank you for answering the questionnaire!

Figure 5.1 Bunno Bedelle zone Administrative sub-division and boundaries

JIMMA UNIVERSITY
ጅማ ዩኒቨርሲቲ

ተ.ቁር Ref.No _EdPM 61/2013_
ቀን Date _22/09/2013_

በትምህርት ዕቅድና ስራ አመራር ትምህርት

ለ _ቡኖ በዴሌ ዞን ትምህርት ፅ/ቤት_

ጉዳዩ:- ትብብር ስለመጠየቅ

በጅማ ዩኒቨርሲቲ በትምህርትና ስነ-ባህሪ ኮሌጅ ስር በሚገኘው በትምህርት ዕቅድና ስራ አመራር ትምህርት ክፍል በ�ት ፕሮግራም School Leadership የሁለተኛ ዲግሪ ተመራ _Asefa Dufera_ በ _School Climate and Students' Academic Achievement in Secondary Schools of Buno Bedelle Zone_ በዚህ ርዕስ የመመረቂያ ጽሁፉን ለማዘጋጀት መረጃ ስለሚሰበስብ በእንጋት በኩል አስፈላጊውን ትብብር እንድታደርጉላቸው በአክብሮት እንጠይቃለን።

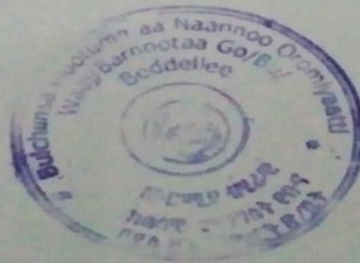ከሰላምታ ጋር
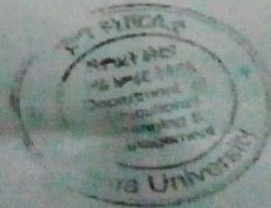
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Wajjira Barnootaa _Aanaa 10_ tiif

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Dhimmisa: Deggarsaa barbaachiisa ta'e akka gootanuuf isin beeksiisuu ta'a.

Akkuma armaan olitti ibsuuf yaalamee barsiisaa **Asaffaa Dhuferaa** kan jedhaman barnoota isaanii digrii lammaaffaa yuunvarsiitii **Jimmaatti** barataa kan jiran ta'u isaaniif yeroo ammaa qorannoo fi qo'annoo mata duree **School climate and students' academic achievement in secondary schools of Buno Beddeellee Zone** irratti akka gaggeesanuuf yuunvarsiitii Jimmaa xalayyaa **Lakk.Edpm-61/2013 guyyaa 22/07/2013** barreesseen nuu beeksiisee jira.

Kanaafuu qorannoo fi qo'annoo kana gaggeessuuf Aanaa keessan akka **"sample'** tti waan filaataniif yemmuu isaan hojii kanaaf gara Aanaa keessan dhufan deggarsaa barbaachiisaa ta'e akka gootanuuf isin beeksifna.

"Naagaa Wajjin"

Tafaayee Taaddasaa Nagawoo
Qin/A/Hojii MisoomaBar/fi
Hog/M/Barnootaa

Education is a key to Success!

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