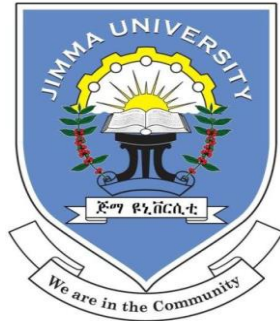


**THE IMPACT OF SCHOOL CLIMATE ON STUDENTS' ACADEMIC  
ACHIEVEMENT OF GOVERNMENT SECONDARY SCHOOLS OF WEST  
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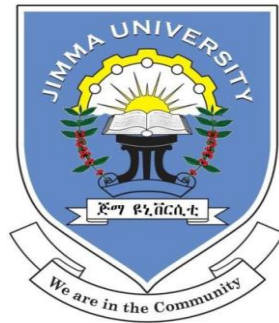


**JIMMA UNIVERSITY  
COLLEGE OF EDUCATION AND BEHAVIORAL SCIENCE  
DEPARTMENT OF EDUCATIONAL PLANNING AND MANAGEMENT**

**BY  
TESFAYE ETANA**

**SEPTEMBER, 2020  
JIMMA, ETHIOPIA**

**THE IMPACT OF SCHOOL CLIMATE ON STUDENTS' ACADEMIC ACHIEVEMENT  
OF GOVERNMENT SECONDARY SCHOOLS OF WEST WOLLEGA ZONE**



**JIMMA UNIVERSITY**

**COLLEGE OF EDUCATION AND BEHAVIORAL SCIENCE**

**DEPARTMENT OF EDUCATIONAL PLANNING AND MANAGEMENT**

**A RESEARCH SUBMITTED TO DEPARTEMENT OF EDUCATIONAL PLANNING AND  
MANAGEMENT FOR PARTIAL FULFILLEMENT AND REQUIREMENTS OF MASTER  
OF ART DEGREE IN SCHOOL LEADERSHIP**

**BY**

**TESFAYE ETANA**

**ADVISOR: TADESSE ABERA (ASST. PROFESSOR)**

**CO ADVISOR: GETACHEW HELUF**

**SEPTEMBER, 2020**

**JIMMA, ETHIOPIA**

## APPROVAL SHEET FOR SUBMITTING FINAL THESIS

As members of the board of examining of the final MA thesis open defense, we certify that we have read and evaluated the thesis prepared by Tesfaye Etana Tolesa under the title ‘the Impact of School Climate On Students’ Academic Achievement of Government Secondary Schools of West Wollega Zone and recommended that the thesis is accepted as fulfilling the thesis requirement for the degree of Master of Art in educational leadership.

Approved by Examining Board

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Department Head

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Signature

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Date

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External Examiner

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Signature

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Date

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Internal Examiner

\_\_\_\_\_

Signature

\_\_\_\_\_

Date

\_\_\_\_\_

Advisor

\_\_\_\_\_

Signature

\_\_\_\_\_

Date

## **DECLARATION**

I the under signed graduate student hereby declare that this thesis on the Impact of School Climate On Students' Academic Achievement of Government Secondary Schools of West Wollega Zone is my original work, and that all sources of the materials used for this have been duly acknowledged.

Name: Tesfaye Etana

Signature\_\_\_\_\_

Date\_\_\_\_\_

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

Advisor-Name: \_\_\_\_\_

Signature\_\_\_\_\_

Date\_\_\_\_\_

Co-advisor Name\_\_\_\_\_

Sign. \_\_\_\_\_

Date\_\_\_\_\_

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## **Abbreviations/Acronyms**

AP= Academic Press

CE= Community Engagement

CL= Collegial Leadership

MOE= Ministry of Education

NSCC= National School Climate Council

OCDQ= Organizational Climate Descriptive Questionnaires

OECD= organization for economic co. operation and development

SCI= School Climate Index

TP= Teachers Professionalism

UNESCO=United Nation Economic, Scientific and Cultural Organization

## ***Abstract***

*This study examined the impact of school climate on student academic achievement based on teachers' perceptions of school climate in seven secondary school. A correlational research design was employed to examine the impact of school climate on student academic achievement in West Wollega secondary schools and to investigate whether the various elements of school climate had impact on student achievement. school climate was measured using the School Climate Index (SCI) developed by Tschannen-Moran, Parish and Dipaola and student achievement was measured by students' exam scores at the grade 12 national Certificate Examination in the year 2009-2011. A total of 7 schools, 148 teachers and 21 school leaders totally 169 respondents were involved in the study. Descriptive statistics such as percentage, 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 West Wollega secondary schools. The four factors used both for the SCI as predictor variables in the regression model were shown to have a significant impact on student academic achievement when viewed as a whole and examined individually. This study, all school climate index (community engagement, teacher professionalism, academic press and collegial leadership) had significant impact on student achievement as measured by grade 12 national exam score. It was recommended that School leaders need to find ways of including the community in the life of the school and foster positive relationships with the community; Teachers involve in decision making and exercise leadership; school leaders and teachers should set high standards for academic performance, set an orderly and serious learning environment and maintain definite standards of performance and Principals in particular need to be mindful that the climate of a school affect achievement and the former can be enhanced to improve results.*

# Chapter One

## Introduction

This chapter of the study deals with background of the study, statement of the problem, objectives of the study, significance of the study, delimitation of the study, definition of key terms and the organization of the study.

### 1.1. Background of the study

Characteristics of school such as the physical structure of a school building and the interaction between students and teachers are two diverse factors that both affect and help to define the broad concept of school climate. Adeogun and Olisaemeka (2011) defines school climate as an aggregate measure of school characteristics such as relationship between parents, teachers, administrators as well as physical facilities on the ground.

According to National School Climate Council (2007) quality of school in regard to school climate is based on patterns of school life, experiences, norms goals values, interpersonal relationships, teaching, learning, leadership practices and organizational structure. The definition developed by the National School Climate Council focuses on three key areas: interpersonal relationships, teaching and learning practices, and organizational structures.

Johnson, R. B., Christensen, (2007) states that there are four major areas that need attention, when we speak about school climate: safety, relationships, teaching and learning and the environment. Alexandra Loukas (2007) states that although it has been difficult to determine a comprehensive definition of school climate, researchers agree that climate is a multidimensional construct that includes physical, social and academic dimensions.

**Physical dimension** includes Presentation of the school building and classrooms, the size of the school and the students /teachers ratio in the classroom, the organization of classes in the school, the effectiveness of the tools and teaching resources and Security and safety.

**Social dimension includes** the quality of interpersonal relationships of all members of staff (teacher-leader; teacher-teacher; teacher-student; student-student; teacher-parents), fair and equal treatment of students by teachers and other staff members, degree of competition and social comparison among students, extent of the contribution of students, teachers and school staff in decision making process.

**Academic dimension includes** quality of teaching, teachers' expectations for students' achievement, monitoring of the students' progress and immediate reporting of results to students and parents.

The concept of school climate has been defined in a wide variety of ways in the education that associated with the ecology of the school, safe and healthy school setting, classroom participation structure, a caring school environment, and the culture of the school (NSCC, 2007). School climate is a general term that refers to the feel, atmosphere, tone, ideology or milieu of a school. Just as individuals have personalities, so too do schools; a school climate may be the personality of school” (Education Encyclopedia in school climate, 2002).

According to Thapa et al (2012) There are five types of school climate. These are an open school climate, an autonomous school climate, paternal school climate, familiar and closed school climate.

Academic achievement represents the performance outcomes that indicate the extent to which a person has accomplished specific goals that were the focus of activities in instructional environments, specifically in school. Lassiter (2005) looks at student academic achievement as referring to a student’s strong performance in a given academic area. Students’ academic achievement therefore is largely identified by a range of statistical indicators, which can be said to be the level of attainment of a student in an examination that is, how a student is able to demonstrate his or her abilities in an examination and in real practical life situations or work environment.

Students’ academic achievement was dependent variable considered in this study. There are numerous mechanisms used to measure students’ academic achievement in the schools. From these, few of them are school based assessment and national examination. Some researchers realized that there are factors associated with academic achievement which include socioeconomic status (Barton, 2004; Klinger, 2000, Willie, 2001), Parental involvement (Barnard, 2004; Evans, Shawe & Bell, 2000; Fan & Chem, 2001; Okpala & Smith, 2001; Strayhorn, 2010, Principal leadership style (Blasé & Blasé, 2000; Goleman. D, 2006) teacher and student engagement (Cawelit. G, 2000) and method of instruction (Miller & Calfee, 2004).

School climate has got considerable attention in the school improvement program (SIP) of Ethiopia. For the provision of quality education, positive school climate works significant role. Thus, the policy document comprises some elements that are important for school climate. This are making the schools safe and comfortable for student; making available the physical environment (class room, library, supplementary books, laboratory equipment and chemicals, sport materials and playing ground, and etc.); making available information technology services to both students and teachers; and providing opportunities on decision- making (MoE,2007).

Secondary schools in Ethiopia play the crucial role of educating the young people in the country. Students who attend secondary schools (Grade 9-12) are given the opportunity to sit for national exams. These standardized examinations are given yearly to twelfth grade high school students and focus on a variety of subjects that the students take while attending secondary school.

As with any educational system, some secondary schools in Ethiopia perform better on these examinations than others. A closer look at this situation quickly reveals that in the secondary schools there are disparities in academic achievement. Differences in academic achievement may exist for varying reasons, one of which is differences in cognitive ability. However, the cognitive ability only accounts for a portion of the disparity in academic achievement.

According to MoE (2014), to provide effective teaching and learning it is important to have safe and healthy school environment. In this regard, schools are expected to be a place where students could learn without any frustration and the prevalence of cooperative relationship among teachers; provide the necessary learning materials. This includes: enough and conducive class room, text books, reference materials, equipped laboratories; chemicals, and convenient staff rooms for teachers etc.

## **1.2. Statement of the problem**

If students do not feel safe at school, do not feel welcomed at school, are not treated with respect, and are not given opportunities to learn, mature and grow, they will not meet their academic potential or learn positive social lessons (Dennis A Kramer II; Marilym Watson and Jeff Hodges, 2013). If the school climate is not positive, students will underperform, student attendance and student discipline are not likely to improve, school safety could be compromised, and teacher retention may be negatively affected.

Some studies found that a positive school climate is associated with positive student learning and academic achievement, increased student graduation rates, and teacher retention, decreased student absenteeism in high school and with lower rates of student suspension in high school (Lee, Cornell, Gregory & Fan, 2011).

Other studies also indicated that quality of the school climate is responsible for academic outcomes as well as the personal development and well-being of pupils (OECD, 2009). Thus, school climate is directly related to academic achievement. Schools are social environments, and educators must attend to the levels of satisfaction and to the levels of productivity which are believed as important for academic achievement of students. School climate can make differences in the learning environment of schools and in the academic achievement of students. Thus, it is crucial that principals and teachers

should strive to establish an inviting orderly and positive climate of their schools so as to enhance the teaching learning processes and facilitate the achievement of the schools' objectives.

The relationship between school climate and students' academic achievement was studied by educational researchers for example, a favorable school climate has been linked with higher student academic motivation and engagement as well as elevated psychological well-being (Russ, et al, 2007; Shochet et al, 2006). There is a positive relationship between organizational school climate and student academic achievement (Goddard, Sweetland & Hoy, 2000; Heck, 2000; Smith, 2002; Uline & Tschannen-Moran, 2008). In an attempt to realize the goals and aspirations of academic excellence in school, the relationship between teachers and students should be friendly (Fakunle, 2010).

For many years in Ethiopia, examinations have been accepted as an important aspect of the educational system. Examinations have always been used as the main basis for judging a student's ability and also as a means of selection for educational advancement and employment. Every year, thousands of Ethiopian students sit for the Ethiopia Certificate of Secondary Education examination. This examination is done at the end of the fourth year of secondary education. Over the years, differences have been observed in the achievement of students in examinations. Although students learn in the same environment and follow the same syllabus, their academic achievement still differ.

On other hand Ethiopian government has invested highly in education, and huge improvements have taken place in terms of access to education at primary, secondary and tertiary levels (MOE, 2014). However, the academic achievement of the students in the secondary School has been decreasing from time to time. But school climate could be one of the factors which may affect students' academic achievement. As much as the Government has put much effort in the matter, it appears factors affecting student academic performance is not well studied in West Wollega Zone. Study of School climate provide useful information for school administrators who are interested in building healthy relations in their schools, innovative ways of improving their school environment and academic success of their students.

This study, in particular, provides further views on the impact school climate on academic achievement in secondary schools. It also investigates how factor organizational school climate affects student academic achievement in west Wollega zone secondary schools.

In addressing this problem, the study was guided by the following basic research questions.

1. What is the level of school climate as perceived by teachers and school leaders in terms of collegial leadership, teachers' professionalism, community engagement and academic press?
2. What is the relationship between school climate, as measured by the SCI, and student academic achievement as measured by Grade 12 national examination?
3. What is the relative impact of each dimension of school climate on student academic achievement measured by Grade 12 national examination?

### **1.3. Objectives of the study**

#### **1.3.1. General objective**

The general objective of this study is to assess the impacts of school climate on students' academic achievement in West Wollega zone secondary schools.

#### **1.3.2. Specific objectives**

- i. To assess the level of school climate as perceived by teachers and school leaders in terms of collegial leadership, teachers' professionalism, community engagement and academic press in West Wollega Zone governments secondary schools.
- ii. To examine the relationship between school climate, as measured by the SCI, and student academic achievement measured by grade 12 national examination in West Wollega zone governments secondary schools.
- iii. To identify the relative impact of each dimension of school climate on student academic achievement measured by Grade 12 national examination.

### **1.4. Significance of the study**

This study would have great importance for all stake holders by providing insight and understanding about the impacts of school climate on students' academic achievement in West Wollega Zone secondary schools. Therefore, the researcher believes that this study has the following significances.

- i. All parents, teachers, students; principals, Educational experts under the study will benefit from the findings.
- ii. It may also be hoped to provide some insight that can generate other researchers to extend the study into a wider scope to make similar studies at other level.



- iii. It provides important information to school leaders and educators as it gives them an additional opportunity to consider when looking at factors that can possibly influence student achievement.
- iv. This information becomes very helpful in the planning process particularly in school improvement plans.

### **1.5. Delimitation of the Study**

This study was delimited to focus on impact of school climate on academic achievement in Secondary school of West Wollega Zone. However, due to time and finance constraints the study was delimited to 7 selected secondary schools of West Wollega Zone. It was important to include all the governmental secondary schools in West Wollega Zone in the study area to obtain relevant information.

### **1.6. Limitations of the study**

The study involved the perceptions of teachers and leaders only. The supportive staff, parents and students were not included in the study. The responses of these groups might have provided a valuable response. The climate of school can be examined from different perspectives using several different tools. This study focused fully on the use of the school climate index; thus, its findings are limited to the factors measured by this scales. For the purposes of this study, achievement was measured grade 12 national exam scores from a standardized exam. The latter might not fully reflect the achievement of a school as achievement.

### **1.7. Organization of the Study**

This research was organized in five chapters. The first chapter is dedicated to the introduction, which in bodied background of the study, statement of the problem, significance of the study, delimitation of the study, conceptual framework of the study, as well as operational definition of terms.

The second chapter, deals with review of the related literature. The methodology and design of the study employed are discussed in the third chapter. The fourth chapter presents data analysis and interpretation of data and finally, the fifth chapter the summary, conclusion and recommendation of the study.

## 1.8. Operational Definition of key terms

1. **School climate** is a set of internal characteristics that distinguishes one school from another as perceived by teachers which includes the four school climate factors (collegial leadership, teacher professionalism, academic press and community engagement). This variable is measured by school climate index.
2. **Teacher professionalism** is one of the four school climate factors that describe teacher 's behavior which is characterized by commitment, engagement, respect the professional expertise of colleagues, professional interactions, and their support with one another and help each other.
3. **Collegial leadership** is the behavior of the leader, director or principal that creates conducive school environment for the teaching learning activities.
4. **Community/parent/engagement** is the extent to which the school has nurtured a useful relationship with its community and the degree to which the community members play important roles to the school so as to facilitate the teaching learning process and support school 's effectiveness.
5. **Academic press:** Academic press is the extent to which the school is driven by a quest for excellence.
6. **Academic achievement:** is the score of students on grade 12 national examination.

## Chapter 2

### Review of Related Literature

#### 2.1. The concept of school Climate

As School climate is defined by many scholars and institutions which perceived as norms, values, and expectations that support people feeling socially, emotionally and physically safe (National School Climate Council, 2007). In another way school climate is a product of the interpersonal relationships among students, families, teachers, support staff, and administrators for the target of achieving educational goals. The goal justify that positive school climate is fostered through a shared vision, respect and engagement across the educational system. For more than a hundred years, educators and researchers have been attempting to understand the dynamics associated with schools and how they impact student outcomes (NSCC, 2007).

Many researchers suggested that variables associated with school climate such as social support, caring classroom, teacher commitment, and student-teacher relations not be only desirable but prerequisites for positive behavioral change (Zullig, Huebner & Patton, 2010). School climate is the quality and character of school life as it relates to norms and values, interpersonal relation and social interactions, and organizational processes and structures (NSCC, 2007).

It means that if students do not feel safe at school, do not feel welcomed at school, do not receive respect and are not given opportunities to be creative, and seldom feel safe and secure, they will not meet their social and academic potential, and they will not develop emotionally, mentally, physically or learn positive social lessons that are essential to their overall well-being and full intellectual and social development (Alexandra Loukas, 2007).

The school influences student achievement through students' attachment, commitment, involvement and most importantly, through the schools' resources and climate (Freiberg, 2009). School climate is a relatively stable aspect of the school environment (Brown, Anfara, & Rooney, 2006) defined as a set of internal characteristics that distinguish one school from another and influences the behavior of school members. These internal characteristics are most commonly referred to as the quality of interpersonal relations between students and teachers, the extent to which a school is perceived as safe and caring place, the degree to which students, parents and staff are involved in collaborative decision making and the degree to which there are high expectations for student learning (Freiberg, 2009)

Franco (2010) reported that, school climate refers to the intangibles that can affect the feelings and attitude of the students, teachers, staff and parents and it comprises the physical and psychological aspect of a school that provides the environment necessary for teaching and learning to take place

Alexandra Loukas (2007) states that although it has been difficult to determine a comprehensive definition of school climate, researchers agree that climate is a multidimensional construct that includes physical, social and academic dimensions as follows:

**Physical dimension includes** Presentation of the school building and classrooms; The size of the school and the students' /teachers ratio in the classroom; The organization of classes in the school; The effectiveness of the tools and teaching resources; - Security and safety.

**Social dimension includes:** The quality of interpersonal relationships of all members of staff (teacher-leader; teacher-teacher; teacher-student; student-student; teacher-parents); A fair and equal treatment of students by teachers and other staff members; The degree of competition and social comparison among students; The extent of the contribution of students, teachers and school staff in decision making process.

**Academic dimension includes:** The quality of teaching; Teachers' expectations for students' achievement; Monitoring of the students' progress and immediate reporting of results to students and parents.

In fact, the climate of the school is the subject of staff and students' perceptions and is measurable. From the above definitions, we can conclude that the climate of the school has to do with the atmosphere or feeling that prevails in a particular school. It appears from the relationship between leaders and teachers, teachers and students and between leaders and students. The school as a social interaction system forces the leaders, teachers and students to interact in the planning, decision-making and problem solving fields in an administrative level. They also interact on personal issues that are part of the normal school routine.

## **2.2. School climate as a factor of academic achievement**

The school influences student achievement through students' attachment, commitment, involvement and most importantly, through the schools' resources and climate (Freiberg, 2009). School climate is a relatively stable aspect of the school environment (Brown, Anfara, & Rooney, 2006) defined as a set of internal characteristics that distinguish one school from another and influences the behavior of school members. These internal characteristics are most commonly referred to as the quality of interpersonal relations between students and teachers, the extent to which a school is perceived as safe and caring

place, the degree to which students, parents and staff are involved in collaborative decision making and the degree to which there are high expectations for student learning (Freiberg, 2009)

Hoy and Miskel (2009) mentioned that each school has its own unique climate. This is because schools operate in different ways. The type of climate that prevails in a school is the blend of the behavior of the principal, teachers, pupils and parents in that school. Therefore, climate differs from school to school.

Freiberg (2009) suggests that climate is an ever-changing factor in schools. This is because the principal may choose on specific occasions to adapt different leadership style, which may have a huge impact on the climate that will lead to a change. Again, a new principal may bring some unfamiliar ideas that may change the existing climate.

School climate is value, attitude of stake holders, style of leadership and job satisfaction. Positive school climate play significant value for schools' effectiveness and closed school climate (schools with uncommitted leaders', leads unproductive, unsafe, and unhealthy schools) has negative impact on school effectiveness.

Franco (2010) reported that, school climate refers to the intangibles that can affect the feelings and attitude of the students, teachers, staff and parents and it comprises the physical and psychological aspect of a school that proved the environment necessary for teaching and learning to take place.

Student achievement is often an area great concern to stakeholders in education because it is the hallmark of what the educational system is all about. A brief look at the educational literature quickly reveals the many factors that affect positive school climate including personal, social, and contextual factors. Scholars have long been interested in factors that affect school climate and student achievement. There is general acceptance that disparity in achievement is not necessarily due only to difference in cognitive abilities, but also to a number of personal and school factors. One perspective held by scholars is that differences in academic achievement are largely due to home and personal characteristics (Bandura and Barton, 2004).

In contrast to the perspective that families and personal factors affect academic achievement, a growing body of literature reveals many school factors that influence achievement. Proponents of this view believe factors such as teachers- student engagement, (Bryson and Hand, 2007; Cawelti, 2000), principal leadership style (Blasé and Blasé,2000; Goleman, 2006, Hallinger, 2003; Hoy and Hoy, 2009), method of instruction (Miller and Calfe, 2004), faculty trust in students and parent ( Hoy,2001), Collective efficacy ( Hoy & Woolfolk, 2000) and academic emphasis of schools (Goddard, Sweetland,

& Hoy, 2000) with the latter three being collective properties of a fairly new concept called academic optimism (Smith and Hoy, 2007; Hoy & Hoy, 2009), all have significant impact on student achievement. These factors affect student in various ways; thus school leaders show continuous interest in these factors and their effects on student achievement.

## **2.3. Theories of school climate**

### **2.3.1. Authoritative School Climate Theory**

Authoritative school climate theory provides a conceptual framework for school climate that can help to identify key features of school climate and their association with positive student outcomes. The authoritative school climate theory posits a model for school climate that centers around two key domains of school climate that promote a safe and supportive environment conducive to learning (Gregory and Cornell, 2010).

The first domain concerns high disciplinary and academic expectation for students, which has been referred as the demandingness or structure of the school climate. This domain deals that teachers and other school staff members enforce discipline in a strict but fair manner and they have academic expectations for all student to learn and achieve.

The second domain concerns the responsiveness or supportiveness of teacher-student relationships. The idea of this domain is that teachers and other school staff members interact with student in a respectful, caring, and helpful manner.

Although these two domains do not include all aspects of school climate, there is considerable evidence that they deserve a central role in research on school climate and can provide an assessment of school conditions that is related to student engagement, academic achievement, and positive behavior.

Many studies support the idea that school structure and support deserve a central role in research on school climate. Schools with less violence tend to have students who are aware of school rules and believe they are fair and have positive relationships with their teachers (Johnson's, 2009).

### **2.3.2. Social Cognitive Theory**

This theory was developed in 1960s, by Alberta Bandura but, after further research and study, in 1986, his theory changed in to what is today known as the Social Cognitive Theory. Through the social cognitive theory, Bandura emphasized that the mutual interaction of a behavior, person, and environment is where learning occurs in a social setting (Boston University School of public health,

2013). Therefore, there is a strong influence on social factors and the role of internal and external reinforcements that may affect those factors. What makes the social cognitive theory unique comparing to many social theories is the way that it looks at how individuals acquire a behavior and their ability to maintain it joined with determining the social environment in which one exhibits the behavior (Bandura, 1986).

Specifically, Banduras constructs of behavioral capacity, observational learning, and reinforcements are characteristics that can affect a school's climate. "Climate shapes the quality of the interaction of all students, teachers, parents, and school personnel, and reflects the norms, values, and goals that represent the broader educational and social missions of the school", Wang and Degol, 2015 p.1). Thus, school climate focuses on the environment as a whole and how the behaviors of individuals affect the overall environment.

### **2.3.3. Locus of Control Theory**

This theory was developed by Julian Rotter in 1966. He defined his theory in terms of one's general cross-sectional belief about feelings of internal and external controls that determine outcomes and action. According to him individuals are classified based on a continuum from extremely internal to extremely external based on their beliefs (Mearns, 2014). The theory states that people who have an internal locus will conclude that their self –efficacy is measured by factors they personally of control. These people believe that they can control their own lives because responsibility lies within them.

As a result, any success or failure that they encounter is solely due to their own efforts. In contrast, individuals possessing an external locus of control feel that outside factors for which they have no control determine outcomes and actions. External factors include luck, chance, or powerful beings (Mearns, 2014). Therefore, these individuals do not believe their knowledge and skills control outcome and action. It is imperative to note that not all individuals who have strong internal locus of control will always have strong self –efficacy. In fact, Bandura found that individuals who typically have an internal locus of control but, believe that they are in competent at performing a certain task may possess an external locus of control and a weak self-efficacy (Mearns, 2014).

## **2.4. Improving the school climate**

Researchers have suggested that, 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 days.

Tschannen-Moran, 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 & involvement. The finding showed that a significant improvement was shown.

They further indicated that, ‘Having designed strategies for moving forward, it is time to innovate those strategies into being. Destiny in an appreciative inquiry organization is not about implementing designs as though they were mandates from the design process; destiny is about empowering people to experiment with and improve on their designs by trying them out and making situation-specific, real-time adjustments that reinforce what works. Such experiment progressively generates new solutions and expands the realm of the possible, like ripples in a pond. 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 bureau in their respective regions so as to improve the learning outcomes. However, the required change or improvement has not yet been achieved.

Student perception of school climate may be affected by various factors. Such as: the age, sex and even the area where that particular student is coming from. Milam (2014) found that, students view or perception of school climate strongly relate to student behavior or vary extensively based on student characteristics. Specifically, gender, achievement levels ...etc. relate to the sub-scales of school climate. And therefore, understanding these differences have a paramount importance to target improvement.



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 does 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 yes [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?

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.

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.

#### **2.4. The purpose of school climate**

A positive school climate is predictable as an important aim for school reform and improving behavioral, academic, and mental health outcomes for student (Thapa et al, 2012). Specifically, school with positive climate tends to have less student discipline problems (Thapa et al, 2013) and aggressive and violent behavior (Gregory et al, 2010), and fewer high school suspensions (Lee et al, 2011).

Research has also shown associations between school climate and lower levels of alcohol and drug use (LaRusso et al, 2008), bullying (Meyer-Adams & Conner, 2008; Bradshaw et al, 2009), and harassment (Attar-Schwartz, 2009). In addition to reduce students' contacts to risk factors, school climate can promote positive childhood development. For example, a favorable school climate has been linked with higher student academic motivation and engagement as well as elevated psychological well-being (Eccel et al, 1993; Russ, et al, 2007; Shochet et al, 2006).

Not surprisingly, schools promoting engaging learning environments tend to have fewer student absences and improvement in academic achievement across grade levels (Brand et al, 2003); Sterwart, 2008), Gottfredson et al, 2005). A positive school climate also has benefit for teachers and education support professional (Bradshaw, Waasdorp et al, 2010). Research also shows that when educators feel supported by their administration, they report higher levels of commitment and more collegiality (Singh & Billingsley, 1998).

The fundamental rationale focusing on positive school climate is that when students feel safe, supported, and engaged, they are better able to learn and are more fully equipped with the skills they need to succeed in school and beyond. In addition to this a positive school climate means having a powerful influence on the motivation to learner, mitigating the negative the negative impact of the socioeconomic context on academic success, contributing to less aggression and violence, less harassment, and less sexual harassment and acting as protective factor for the learning and positive life development of young people (NSCC, 2013).

Most review of the effective school literature point to the consensus that school climate central to academic achievement (Mackenzie, 1983). The literature indicated that a student's chance for success in learning cognitive skills is heavily influenced by the climate of the school. A school-level climate press in the direction of academic achievement helps shape the environment in which the student learns. An academically effective school would be likely to have clear goals related to student achievement, teachers and parents with high expectations, and a structure designed to maximize opportunities for students to learn (Purkey and Smith, 1983). Likewise, schools where educators openly communicated with one another, feel supported by their peers and administration, and establish strong student-educators' relationships tend to have better student academic behavioral outcomes (Brown & Medway, 2007). School climate efforts also have the presentation, community discussions will help gain buy-in for school climate initiative and future planning.

## **2.5. School climate and the principal**

Perhaps one of the biggest influential people in providing positive school climate is the principal or educational leader. Thus, creating a supportive school climate is the responsibility of the school leader. They must foster a community by sharing ideas and feel comfortable sharing experiences that positively influence the atmosphere of the school (Meristo and Eiscenshmid, 2014). The everyday interaction that principals have with their followers can affect trust and the stakeholders' ability to influence decisions. Moreover, when such relationship exists, they impact student achievement and performance, as stakeholders feel supported and mutually respected (Edgeron et al, 2006). They also work together to solve problems and achieves common goals.

## **2.6. School climate and Teachers**

There is research conducted concerning the relationship between teacher' perceptions of their social-emotional learning and the climate within their schools (Collie, Shapka, and Perry, 2012). They measured three variables to determine the type level of relationship that exists between the three: teachers' sense of stress, teaching efficacy, and job satisfaction. Of the factors' reviewed, teachers' perceptions of student motivation and behavior had the most significant impact on school climate. It was also named as a variable that meaningfully predicted one's sense of teaching efficacy.

## **2.7. School climate and students**

School climate is linked to academic achievement, learning, and development (The American Psychological Association, 2013). Researchers have documented a link among positive school climate and academic motivation, self-esteem, conflict resolution, and social motivation (Plalnk et al, 2009). More specifically, school climate plays a factor in dropout rates, absenteeism, truancy, and suspension. Moreover, the climate can also create an increase in student drug use. A lack of discipline leads to more aggressive and violent behavior in school (Welsch, 2000). In schools without supportive norms, structures, and relationships, students are more likely to experience violence, peer victimization, and punitive disciplinary actions, often accompanied by high level of absenteeism and reduced academic achievement" (Thapa, Cohen, Guffey, and Higgins-Dl' Alessandro, 2013 p.360)

## **2.8. How countries measure student achievement**

### **2.8.1. School-based assessment**

Many schools assess the progress of their pupils on continuous basis by regularly measuring their performance against curricular goals and making the results available to classroom teacher. The result

of such assessments can be used as a basis for part of the scoring of public examinations. Alternatively, they could become the sole basis for certification or selection. School-based assessments are appealing because they offer immediate feedback to teachers on what pupils are learning and not learning, and thus become a basis for planning subsequent instruction. They are also more likely than standardized national tests to provide a full and accurate picture of what teachers are actually presenting to pupils. For example, assessments can reflect practical topics that would not be anticipated centralized examinations. They can also evaluate skills such as oral facility or the ability to organize a hands-on project that might not be captured by standardized test.

Some developing countries, including Ethiopia and Lesotho have built elements of school- based assessment into their public examination systems. Very few other countries, however, have followed their lead, and relatively little use is made of school- based assessment, which can impose considerable burdens on teachers and administrators (Education Fall All: Status and Trends, 2000).

### **2.8.2. Public examinations**

Most countries, including many developing ones, have some sort of public examinations that individual pupils take at the end of primary school and other transition points in schooling. These examinations serve the purpose of selecting pupils to go on to secondary school, certifying graduate for entry into the job market, and fostering accountability for schools and school systems. Of these, selection is usually the most important.

### **2.8.3. National assessments**

In addition to public examinations established for purposes of selection and certification, many countries carryout regular and systematic measurement exercises designed to determine what students have learned as a result of their educational experiences. These are called national assessments. Assessments differ from public examinations in that their goal is to inform policy for the education system as a whole rather than to certify and select individuals.

They can be used for the purposes as varied as allocating scarce resources, monitoring standards, informing teaching, promoting accountability increasing public awareness of the importance of education and political debate. National assessments typically involve the administration of achievement tests of a systematic sample of pupil, but many employ other measurements as well as questionnaires for students, teachers and parents aimed at describing the context in which learning takes place. Information on topics such as parental education, teacher preparation and levels of

homework assigned can provide valuable guidance in making decisions on national education policy. Continuous monitoring of student performance over time offers a means of identifying and monitoring educational trends.

## **2.9. Conceptual Framework**

Research on organizational climate reveals that there are many ways in which climate is defined and operationalized. Over the years, 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.

Over the years, researchers have realized that many of the subscales that exist in both frameworks overlap and can be combined to form consolidated frameworks. The conceptual underpinning of this study lies in a consolidated school climate framework developed by Tschannen-Moran, Parish and Dipaola (2006). These researchers combined elements of the open schools' framework (work of Halpin and Croft, 1963) and elements of the healthy schools' framework (work of Hoy and his colleagues, Hoy & Clover, 1986; Hoy & Forsyth, 1986; Hoy & Miskel, 1991; Hoy, Tarter & Kottkamp, 1991) to develop a consolidated framework called the School Climate Index (SCI). This framework presented by Tschannen-Moran, Parish and Dipaola (2006) looks at the interactions in a school in terms of collegial leadership, teacher professionalism, academic press, and community engagement. These subscales provide the basis for this current study which focused on the relationship between school climate, as measured by this framework, and student achievement in a school. This framework, and in effect this study, can be very useful to educators because the interactions that occur in a school do affect the operation of a school.

### **Operationalization of the Variables in the Conceptual Framework**

**Collegial leadership:** principal behaviors perceived as supportive and collegial and not overly directive or restrictive (Uline & Tschannen Moran, 2008). Behaviors of such a principal include being friendly, approachable, willing to make changes, sets clear expectations for faculty, and treats all faculty members as his or her equal.

**Teacher professionalism:** Behaviors that show that teachers are committed to their work and are willing to work cooperatively with one another<sup>l</sup> (Tschannen-Moran, Parish & Dipaola, 2006, p. 397). Such behaviors include respecting the professional competence of their colleagues, accomplishing their jobs with enthusiasm, providing strong social support for their colleagues, and displaying a high level of commitment to helping students.

**Academic press:** A school-wide tone that is serious, orderly, and focused on academics. Schools with a high level of academic press are driven by a quest for excellence<sup>ll</sup> (Tschannen-Moran, Parish, & Dipaola, 2006). In such an environment, the school sets high standards for academic performance and students respect each other who get good grades; academic achievement is recognized and acknowledged by the school, and students seek extra work so that they can get good grades.

**Community engagement:** This construct describes the degree to which the school can count on involvement and support from parents and community members, and the extent to which the school provides the community with information about its accomplishments (Uline & Tschannen-Moran, 2008).

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## Chapter 3

### Research Methodology

This part of study deals with the research design and methodology, study area, the source of data, the sample size and sample techniques, instruments of data gathering and procedures of data gathering will be considered of this study.

#### 3.1. Research design

In this study, there was an interest in the variables of school climate and student achievement. Correlational design was employed to determine if any relationship exists between the two variables.

Grade 12 Students 'national result and the school climate index including the sub-scales are the dependent and independent variables respectively. Therefore, the study was to show the relationship between the dependent and independent variables. In doing so, the performance of students in the two sample schools may be compared to explore the effect of school climate on students' academic achievement therefore, it is important to note that the intention of the comparison was not actually to compare and contrast the performance of students in the two schools; rather, it is to further confirm how the school climate index and its sub-scales affect student's academic achievement. In this research design, the researcher used different statistical tests to describe and measure the degree of relationship between the dependent and independent variables. Moreover, correlational research allows for the analysis of multiple variables in one study (Creswell, 2012).

In this study, there was an interest in the variables of school climate and student achievement. Thus, a correlational study was 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.

#### 3.2. Research Method

The study would be applied quantitative methods of data gathering with the assumption that the data was collected through questionnaire and grade 12<sup>th</sup> national examination result document in order to have full information about the impact of school climate on student's academic achievement in West Wollega Zone.

### **3.3. Source of Data**

In order to gather data, primary data sources were used. The primary data sources were supervisors, teachers and principals of the sample schools.

### **3.4. Population, Sample and Sampling Techniques**

#### **3.4.1. Population**

The population of the study consisted twenty-one (21) secondary schools in West Wollega Zone. The grade 12 national exam result of the students in examination was used to establish the schools' academic achievement.

#### **3.4.2. Sample and Sampling Techniques**

For this study different sampling techniques were used. West Wollega Zone was selected as study area because the researcher has been working in this Zone, deepest knowledge of the problem in the zone. West Wollega consists 21 secondary schools (grade 9-12). Out of 21 secondary schools found in Western Wollega, seven schools were selected using simple random sampling technique. The participants for this study were seven supervisors, seven principals, seven vice principals, 148 teachers who teach in these seven secondary schools and 5432 students result.



**Table 1: Total sampled population of the study**

S.No	Sample schools	Teachers			vice principals			Principals			supervisor			Total		
		Total	Sample	%	Total	Sample	%	Total	Sample	%	Total	Sample	%	Total	Sample	%
1.	Babo Gambel	33	17	51.5	1	1	100	1	1	100	1	1	100	36	20	55.6
2.	Begi	40	21	52.5	1	1	100	1	1	100	1	1	100	43	24	55.8
3.	Jarso	37	20	52.7	1	1	100	1	1	100	1	1	100	40	23	56.3
4.	Ware Jiru	46	24	52.2	1	1	100	1	1	100	1	1	100	49	27	55.1
5.	Menesibu	60	31	50.8	1	1	100	1	1	100	1	1	100	63	34	53.2
6.	Kiltu Kara	38	21	53.9	1	1	100	1	1	100	1	1	100	41	24	57.3
7.	Kondaala	27	15	55.6	1	1	100	1	1	100	1	1	100	30	18	60
8.	Total	281	148	52.5	7	7	100	7	7	100	7	7	100	302	169	55.8

### **3.5. Instrument of data collection**

In order to acquire the necessary information from participants, two types of data collection instruments were used. These are questionnaire and grade 12<sup>th</sup> national examination document.

#### **3.5.1. Questionnaire**

School Climate Index (SCI) questionnaire developed by Tschannen Moran, Parish and Dipaola (2006) was used as data gathering tool in this study. Accordingly, the SCI was used as the primary instrument to gather information on the perceptions of the teachers in the sample of secondary schools and contains 28 Likert-type items with a 5-point scale in which the response choices include strongly agree, agree, undecided, disagree and strongly disagree.

The questionnaire was developed using Likert types of five scales; strongly agree (5), agree (4), undecided (3), disagree (2) and strongly disagree (1). In this study, two sets of questionnaire items were used. The first part of the items deals with the general background of the respondents. The second part of questionnaire contains a set of questions that were administered to respondents.

#### **3.5.2. Document analysis**

The document used in this study were grade 12 national examination result document of 2009-2011 in order to have full information about the impact of school climate on student's academic achievement in West Wollega zone.

### **3.6. Issue of validity and Reliability**

Validity is defined as the appropriateness, meaningfulness, and usefulness of specific inferences made from the instrument or procedure results (Creswell, 2013). Validity in this sense is the degree to which the research tool empirically measures the concept accurately (Creswell, 2013). The data gathered for this study was acquired from primary and secondary sources.

The data gathered from primary source was questionnaires distributed to teachers, vice principals, principals and supervisors concerning school climate index (SCI). With regarding to students' academic achievement source of data were the document of grade 12 national exam score of 2009-2011.

Additionally, the reliability of the instrument was measured by using Cronbach alpha test. A reliability test was performed to check the consistency and accuracy of the measurement scales. The four sub set of SCI which were community engagement 7 items, teacher professionalism 8 items, collegial

leadership 7 items and academic press 6 items, totally 28 items questions were distributed to 169 respondents respectively.

**Table 2: - Reliability tests**

Variables	N	Items	Cronbach Alpha
Community engagement	169	7	.985
Teacher professionalism	169	8	.991
Collegial leadership	169	7	.989
Academic press	169	6	.988
School climate Index	169	28	.997

### **3.7. Procedure of data collection**

The researcher was take permission from zone education office and contact seven secondary schools to distribute recommendation papers given from zone to each secondary school. Seven secondary schools were contacted by researcher to get their consent for participating in the study. Then school climate index survey questionnaire was administered to the participants by the researcher and his colleagues during the regularly work time.

### **3.8. Method of Data Analysis**

Descriptive statistics such as mean and standard deviation were first calculated for collegial leadership, teacher professionalism, academic press, community engagement, and student test scores to ensure that there was variability in the data collected. Pearson *r* correlation coefficient was then computed using the two sets of data gathered from the schools. the school climate element scores and student achievement on 12<sup>th</sup> grade examination scores.

Multiple regression analysis was then conducted to find out the independent effects of each subscale of school climate on student achievement. These analyses assisted the researcher in examining the inter

correlations of the four dimensions of school climate being utilized in this study, as well as the relationship of each to student examination achievement.

Multiple regression technique gave 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.

### **3.9. Ethical Consideration**

Ethical considerations are very important when research is conducted. Accordingly, the researcher was started gathering data in accordance with the informed consent and interest of the respondents. The information gathered from respondents were never be used for other purpose rather than the serving for only this study. To keep confidentiality of the information and security of the respondents that data have been collected without asking their names.

As the researcher was introducing its purpose in the introduction part of the questionnaire guide to the respondents, he will confirm that subjects' confidentiality will be protected. Besides, the study will be based on the consents. The researcher will also not personalize any of the response of the respondents during data presentations, analysis, and interpretation. Besides, all the materials used for this research will be duly acknowledge

## **CHAPTER 4**

### **Data Presentation, Analysis and Interpretation**

This chapter presents the findings of this study. The purpose of the study was to assess the impact of school climate on student academic achievement in West Wollega Secondary Schools, and to identify relationship between school climate, as measured by the SCI, and student academic achievement as measured by grade 12 national examination. This study was guided by the following research questions:

1. What is the level of school climate as perceived by teachers and school leaders in terms of collegial leadership, teachers' professionalism, community engagement and academic press?
2. What is the relationship between school climate, as measured by the SCI, and student academic achievement as measured by grade 12 national examination?
3. What is the relative impact of each dimension of school climate on student academic achievement measured by Grade 12 national examination?

As mentioned above, among various data collection instruments questionnaire and document analysis were used to collect necessary information for this study. Questionnaire was distributed to a total 169 respondents of secondary school teachers and leaders so all respondents fill and return the Questionnaire properly. The independent variable (school climate) was measured using the SCI and the dependent variable (students' academic achievement) was measured using the 2009-2011 Grade 12 national examination.

#### **4.1 Demographic Data of the Respondents**

The overall results of the matter under investigation as well as respondent's personal background information were presented here under.

**Table 3: Respondents' Background Information**

Categories		Position					
		Teachers		leaders		Total	
		N	%	N	%	N	%
Sex	Male	134	90.5	21	100	155	91.7
	Female	14	9.5	0	0	14	8.3
	Total	148	100	21	100	169	100
Age	20-25	17	11.5	0	0.0	17	10.1
	26-30	41	27.7	7	33.3	48	28.4
	31-35	46	31.1	8	38.1	54	32
	36-40	19	12.8	2	9.5	21	12.4
	41-45	15	10.1	2	9.5	17	10.1
	46-50	10	6.8	1	4.8	11	6.5
	above 51	0	0.0	1	4.8	1	0.6
	Total	148	100	21	100	169	100
Educational Background	Diploma	10	6.8	0	0	10	5.9
	BA	123	83.1	12	57.1	135	79.9
	MA	15	10.1	9	42.9	24	14.2
	Total	148	100	21	100	169	100
Service Year	0-5	41	27.7	0	0.0	41	24.3
	6-10	30	20.3	6	28.6	36	21.3
	11-15	36	24.3	13	61.9	49	29
	16-20	28	18.9	1	4.8	29	17.8
	Above 21	13	8.8	1	4.8	14	8.3
	Total	148	100	21	100	169	100

As indicated on table 3, there were two groups who participated in this study. These were teachers and school leaders. The two groups of respondents were asked to indicate their background information. The details of the responses were given in table 3 and discussed as follows:

In table 3 above, the data of the study revealed that 90.5% of teacher respondents and 100% school leader respondents were males while the remaining 9.5% of teacher respondents were females. This implies that, the participation of females either in the secondary school teaching or involvement in the leadership is too much less than males. This male-female disproportion might be low amount of females in the teaching staffs. It showed that majority of teachers in secondary schools of West Wollega Zone were males.

Regarding their age, 11.5% of teacher respondents were between 21-25 years. Others 27.7% of teacher respondents and 33.3% of school leader respondents were between 25-30 years. 31.1% of teacher respondents and 38.1% school leader respondents fall between 31-35 years. 12.8% of teacher respondents and 9.5% school leader respondents fall between 36-40 years. 10.1% of teacher respondents and 9.5% of leader respondents were between 41-45 years. 6.8% of school teacher respondents and 4.8% of leader respondents were between 46-50 years. The remaining 4.8% of school leader respondents were above 51 years.

As far as educational qualification was concerned, 6.8% teachers were diploma holders which is below the standard for secondary schools. Whereas about 83.1% of teacher respondents and 57.1% of school leader respondents had a first degree. 10.1% of teacher respondents and 42.9% of leader respondents were with master degree background. From this, one can easily understand that, most of the respondents were first degree. This was not proportional to the guideline drawn by Ministry of Education indicated that at least master degree teaches in secondary schools of Ethiopia (MoE, 2014). Hence, it may have an impact on the students' academic achievements.

Regards to their experiences 27.7% of teacher respondents were below 5 years. While 20.3% of teachers and 28.6% of leader respondents were between 6-10 years. On the other hand, 24.3% of teachers and 61.9% of leaders' respondents were between 11 to 15 years. 18.9% of teachers and 4.4% of leaders' respondents were between 16-20 years. Finally, 8.8% of teachers and 4.8% of leaders' respondents were above 21-years. This shows that majority of the respondents were below 15 years.

## 4.2 Level of school climate

The level of school climate in secondary schools of west wollega zone was analyzed in this section. To determine the degree of implementation of each school climate measure the following mean ranges were used as a cut point. Mean value  $\geq 4.50$  indicates very high, 3.50-4.49 indicates high, 2.50-3.49 indicates moderate, 1.50-2.49 indicates low and  $\leq 1.49$  indicates very low implementation of the item.

### 4.2.1 The analysis of community engagement

**Table 4: Descriptive Analysis of community engagement.**

		Test Value = 3				
		Mean	Stan dev	t	df	Sig. (2-tailed)
1.	Our school makes an effort to inform the community about our goals and achievement	3.37	1.078	4.424	168	.000
2.	Our school is able marshal community support when needed	3.14	1.160	1.526	168	.129
3.	Parents and other community included on planning committee	2.93	1.126	-.820	168	.414
4.	Community members are responsive to request for participation	3.25	1.479	2.184	168	.030
5.	Community members attend meetings to stay informed about our school	2.76	1.373	-2.242	168	.026
6.	Organized community group meet regularly to discuss school issues	2.75	1.243	-2.599	168	.010
7.	School people are responsive to the needs and concern expressed by community members.	3.10	1.183	-1.655	168	.100



As shown in item 1 of table 4, respondents were asked Our school makes an effort to inform the community about our goals and achievement. Accordingly, respondents with the ( $X=3.36$ ,  $SD=1.05$ ) As shown the effort to inform the community about school goals and achievement was moderate in secondary schools of West Wollega Zone. It was also found that there is statistically significant difference among teachers,  $df(168)$ ,  $t = 4.424$ ,  $p = 0.00$ ) that the effort to inform the community about school goals and achievement. It implies that effort to inform the community about school goals and achievement in secondary schools of West Wollega Zone.

Regard to item 2 of Table 4, respondents were asked about their school is able to marshal community support when needed. Accordingly, respondents with the ( $X=3.34$ ) As shown the is able to marshal community support when needed was moderate in secondary schools of West Wollega Zone. It was also found that there is statistically significant difference among teachers,  $df(168)$ ,  $t 1.5$ ,  $p = 0.129$ ) that the is able to marshal community support when needed. It implies that is able to marshal community support when needed. in secondary schools of West Wollega Zone.

Regard to item 3 of Table 4, respondents were asked about parents and other community included on planning committees. Accordingly, respondents with the ( $X=2.93$ ) parents and other community is not included on planning committees in secondary schools of West Wollega Zone. It was also found that there is statistically insignificant difference among teachers,  $df(168)$ ,  $t -0.82$ ,  $p = 0.4$ ) that parents and other community included on planning committees It implies that is parents and other community is not included on planning committees in secondary schools of West Wollega Zone.

Regard to item 4 of Table 4, respondents were asked about community members are responsive to request for participation. Accordingly, respondents with the ( $X=3.25$ ) were asked about community members are responsive to request for participation in secondary schools of West Wollega Zone. It was also found that there is statistically insignificant difference among teachers,  $df(168)$ ,  $t =1.4$ ,  $p = 0.4$ ) that were asked about community members are responsive to request for participation. It implies that is were asked about community members are responsive to request for participation in secondary schools of West Wollega Zone.

Regard to item 5 of Table 4, respondents were asked about community members attend meetings to stay informed about their school. Accordingly, respondents with the ( $X=2.76$ ) were asked about community members attend meetings to stay informed about their school.in secondary schools of West Wollega Zone. It was also found that there is statistically insignificant difference among teachers,  $df(168)$ ,  $t =-2.2$ ,  $p = 0.0026$ ) that were asked about community members are responsive to request for

participation. It implies that is were asked about community members are not responsive to request for participation in secondary schools of West Wollega Zone.

Regard to item 6 of Table 4, respondents were asked about Organized community group meet regularly to discuss school issues. Accordingly, respondents with the ( $X=2.76$ ) were asked about community members attend meetings to stay informed about their school.in secondary schools of West Wollega Zone. It was also found that there is statistically insignificant difference among teachers,  $df (168)$ ,  $t = -2.2$ ,  $p = 0.026$ ) that were asked about community members are responsive to request for participation. It implies that is were asked about community members are not responsive to request for participation in secondary schools of West Wollega Zone.

Regard to item 7 of Table 4, respondents were asked about School people are responsive to the needs and Concern expressed by community members. Accordingly, respondents with the ( $X=3.1$ ) were asked about School people are responsive to the needs and Concern expressed by community members in secondary schools of West Wollega Zone. It was also found that there is statistically insignificant difference among teachers,  $df (168)$ ,  $t = -1.6$ ,  $p = 0.026$ ) . It implies that School people are responsive to the needs and Concern expressed by community members in secondary schools of West Wollega Zone.

#### 4.2.2. Level of teacher professionalism.

**Table 5: Descriptive analysis of teachers' professionalism.**

		Test Value = 3				
		Mean	Stan dev	T	df	Sig. (2-tailed)
1.	The interaction between faculty members are cooperative	3.01	1.139	1.105	168	.271
2.	Teachers respect the professional competence of their colleagues	3.30	1.209	.135	168	.893
3.	Teachers help and support each other	2.97	1.071	3.245	168	.001
4.	Teachers in this school exercise professional judgment	3.18	1.158	-.359	168	.720
5.	Teachers are committed to help students	3.31	1.155	2.059	168	.041
6.	Teachers accomplish their work with enthusiasm	3.23	1.170	3.464	168	.001
7.	Teachers “go the extra mile” with their students	3.32	1.071	2.564	168	.011
8.	Teachers provide strong social support for colleague	3.50	1.206	3.878	168	.000

As shown in item 1 of table 5, respondents were asked interactions between faculty members are cooperative. Accordingly,  $X=3.1$ ,  $SD=1.18$  thus, it would be argued that the interactions between faculty members was moderate level. It was also found that there is statistically significant difference among teachers,  $df (168)$ ,  $t = 1.1$ ,  $p = 0.02$ ). It implies that interactions between faculty members are cooperative in secondary schools of West Wollega Zone.

Regard to item 2 of Table 5, respondents were asked about teachers respect the professional competence of their colleagues. Accordingly,  $X=3.01$ ,  $SD=1.15$  thus, it would be argued that the teachers respect the professional competence of their colleagues were moderate level. It was also found that there is statistically significant difference among teachers,  $df(168)$ ,  $t=0.13$ ,  $p=0.8$ ). It implies that there is professional competence between colleagues in secondary schools of West Wollega Zone.

Regard to item 3 of Table 5, respondents were asked about teachers in this school exercise professional judgment. Accordingly,  $X=3.3$ ,  $SD=1.2$  thus, it would be argued that the teachers in this school exercise professional judgment were moderate level. It was also found that there is statistically significant difference among teachers,  $df(168)$ ,  $t=3.2$ ,  $p=0.01$ ). It implies that teachers in this school exercise professional judgment in secondary schools of West Wollega Zone.

Regard to item 4 of Table 5, respondents were asked about teachers help and support each other. Accordingly,  $X=2.97$ ,  $SD=1.07$  thus, it would be argued that the teachers help and support each other were low level. Hence it may be deduced that this role was not performed as expected. It was also found that there is statistically insignificant difference among teachers,  $df(168)$ ,  $t=-0.6$ ,  $p=0.7$ ). It implies that teachers help and support each other in secondary schools of West Wollega Zone.

Regard to item 5 of Table 5, respondents were asked about teachers are committed to helping students in their school. Accordingly,  $X=3.18$ ,  $SD=1.15$  thus, it would be argued that teachers are committed to helping students in their school was moderate level. It was also found that there is statistically significant difference among teachers,  $df(168)$ ,  $t=2$ ,  $p=0.04$ . It implies that teachers are committed to helping students in their school in secondary schools of West Wollega Zone.

Regard to item 6 of Table 5, respondents were asked about teachers accomplish their jobs with enthusiasm. Accordingly,  $X=3.31$ ,  $SD=1.26$  thus, it would be argued that the teachers accomplish their jobs with enthusiasm was moderate level. It was also found that there is statistically significant difference among teachers,  $df(168)$ ,  $t=3.4$ ,  $p=0.01$ ). It implies that teachers accomplish their jobs with enthusiasm in secondary schools of West Wollega Zone.

Regard to item 7 of Table 5, respondents were asked about teachers “go the extra mile” with their students. Accordingly,  $X=3.23$ ,  $SD=1.17$  thus, it would be argued that the about teachers “go the extra mile” with their students were moderate level. It was also found that there is statistically significant difference among teachers,  $df(168)$ ,  $t=2.5$ ,  $p=0.01$ . It implies that teachers “go the extra mile” with their students in secondary schools of West Wollega Zone.

Regard to item 8 of Table 5, respondents were asked about teachers provide strong social support for colleague. Accordingly,  $X=3.32$ ,  $SD=1.07$  thus, it would be argued that the teachers respect the professional competence of their colleagues ware moderate level. It was also found that there is statistically significant difference among teachers,  $df (168)$ ,  $t =3.8$ ,  $p = 0.01$ ). It implies that teachers respect the professional competence of their colleagues in secondary schools of West Wollega Zone.

#### 4.2.3. The analysis of collegial leadership

**Table 6: Descriptive analysis of collegial leadership**

		Test Value = 3				
		Mean	Stan dev	T	df	Sig. (2-tailed)
1.	The principal is friendly and approachable	3.50	1.206	.454	168	.651
2.	The principal puts suggestion made by the faculty in to operation	3.04	1.187	1.153	168	.250
3.	The principals explore all sides of topics and admit that other opinion exists.	3.11	1.200	3.352	168	.001
4.	The principal threat all faculty members as his or her equal.	3.30	1.147	-1.542	168	.125
5.	The principal is willing to make changes.	2.88	1.048	.470	168	.639
6.	The principals let faculty know what is expected of them	3.04	1.146	1.961	168	.052
7.	The principal maintain definite standards of performance.	3.18	1.177	.847	168	.398

As shown in item 1 of table 6, respondents were asked principal is friendly and approachable. Accordingly,  $X=3.01$ ,  $SD=1.15$  thus, it would be argued that the principal is friendly and approachable was moderate level. It was also found that there is statistically significant difference among teachers,  $df$

(168),  $t = 0.4$ ,  $p = 0.6$ ). It implies that principal is friendly and approachable in secondary schools of West Wollega Zone.

Regard to item 2 of Table 6, respondents were asked about principals puts suggestions made by the faculty in to operation. Accordingly,  $X=3.01$ ,  $SD=1.15$  thus, it would be argued that the principals puts suggestions made by the faculty in to operation was moderate level. It was also found that there is statistically significant difference among teachers,  $df (168)$ ,  $t = 1.15$ ,  $p = 0.02$ ). It implies principals puts suggestions made by the faculty in to operation in secondary schools of West Wollega Zone.

Regard to item 3 of Table 6, respondents were asked about the principals explores all sides of topics and admits that other opinions exist. Accordingly,  $X=3.01$ ,  $SD=1.15$  thus, it would be argued that the principals explores all sides of topics and admits that other opinions exist was moderate level. It was also found that there is statistically significant difference among teachers,  $df (168)$ ,  $t = 3.3$ ,  $p = 0.01$  . It implies that principals explore all sides of topics and admits that other opinions exist in secondary schools of West Wollega Zone.

Regard to item 4 of Table 6, respondents were asked about principals threat all faculty members as his or her equal. Accordingly,  $X=3.01$ ,  $SD=1.15$  thus, it would be argued that principals threat all faculty members as his or her equal was moderate level. It was also found that there is statistically insignificant difference among teachers,  $df (168)$ ,  $t = -1.6$ ,  $p = 0.02$ .) . It implies that principals threat all faculty members as his or her equal in secondary schools of West Wollega Zone.

Regard to item 5 of Table 6, respondents were asked about principals is willing to make changes. Accordingly,  $X=3.01$ ,  $SD=1.15$  thus, it would be argued that the principals is willing to make changes was moderate level. It was also found that there is statistically significant difference among teachers,  $df (168)$ ,  $t = 0.4$ ,  $p = 0.6$ ). It implies that principals is willing to make changes in secondary schools of West Wollega Zone.

Regard to item 6 of Table 6, respondents were asked about the principals let faculty know what is expected of them. Accordingly,  $X=3.01$ ,  $SD=1.15$  thus, it would be argued that the principals let faculty know what is expected of them was moderate level. It was also found that there is statistically insignificant difference among teachers,  $df (168)$ ,  $t = 1.9$ ,  $p = 0.05$  . It implies that principals let faculty know what is expected of them in secondary schools of West Wollega Zone.

Regard to item 7 of Table 6, respondents were asked about principals maintains definite standards of performance. Accordingly,  $X=3.01$ ,  $SD=1.15$  thus, it would be argued that the principals maintains definite standards of performance was moderate level. It was also found that there is statistically

significant difference among teachers,  $df (168)$ ,  $t = 0.8$ ,  $p = 0.3$ ). It implies that principals maintain definite standards of performance in secondary schools of West Wollega Zone.

#### 4.2.4. Level of Academic press.

**Table 7: Descriptive analysis of academic press.**

		Test Value = 3				
		Mean	Stan dev	T	df	Sig. (2-tailed)
1.	The school sets high standards for academic performance	3.08	1.180	2.42	168	.016
2.	Students respects others who gets good grades	3.22	1.204	4.11	168	.000
3.	Academic achievement is recognized and acknowledged by the school	3.36	1.142	-1.43	168	.154
4.	Students try hard to improve on previous work	2.88	1.074	1.00	168	.319
5.	The learning environment is orderly and serious	3.09	1.154	1.14	168	.254
6.	Students seek extra work so they can get good grades	3.11	1.210	2.42	168	.016

As shown in item 1 of table 7, respondents were asked the school sets high standards for academic performance. Accordingly,  $X=3.08$ ,  $SD=1.18$  thus, it would be argued that the school sets high standards for academic performance ware moderate level. It was also found that there is statistically significant difference among teachers,  $df (168)$ ,  $t = 2.4$ ,  $p = 0.01$ ). It implies that school sets high standards for academic performance in secondary schools of West Wollega Zone.

Regard to item 2 of Table 7, respondents were asked about Students respects others who gets good grades. Accordingly,  $X=3.22$ ,  $SD=1.12$  thus, it would be argued that Students respects others who gets good grades ware moderate level. It was also found that there is statistically significant difference

among teachers,  $df (168)$ ,  $t =4.1$ ,  $p = 0.00$ ). It implies that Students respects others who gets good grades in secondary schools of West Wollega Zone.

Regard to item 3 of Table 7, respondents were asked about Academic achievement is recognized and acknowledged by the school. Accordingly,  $X=3.36$ ,  $SD=1.2$  thus, it would be argued that Academic achievement is recognized and acknowledged by the school ware moderate level. It was also found that there is statistically insignificant difference among teachers,  $df (168)$ ,  $t =-1.6$ ,  $p = 0.15$ ). It implies that Academic achievement is recognized and acknowledged by the school in secondary schools of West Wollega Zone.

Regard to item 4 of Table 7, respondents were asked about students try hard to improve on previous work. Accordingly,  $X=2.88$   $SD=1.02$  thus, it would be argued that the students try hard to improve on previous work ware low level. It was also found that there is statistically significant difference among teachers,  $df (168)$ ,  $t =1.6$ ,  $p = 0.3$ ). It implies that students try hard to improve on previous work ware low level in secondary schools of West Wollega Zone.

Regard to item 5 of Table 7, respondents were asked about learning environment is orderly and serious. Accordingly,  $X=3.12$ ,  $SD=1.12$  thus, it would be argued that the learning environment is orderly and serious ware moderate level. It was also found that there is statistically significant difference among teachers,  $df (168)$ ,  $t =1.1$ ,  $p = 0.2$ ). It implies that learning environment is orderly and serious in secondary schools of West Wollega Zone.

Regard to item 6 of Table 7, respondents were asked about students seek extra work so they can get good grade. Accordingly,  $X=3.11$ ,  $SD=1.2$  thus, it would be argued that students seek extra work so they can get good grade ware moderate level. It was also found that there is statistically insignificant difference among teachers,  $df (168)$ ,  $t =2.4$ ,  $p = 0.16$ ). It implies that students seek extra work so they can get good grade in secondary schools of West Wollega Zone.



## 4.2 Level of school climate

**Table 8: Descriptive Analysis of school climate.**

S no	School climate variables	Test Value = 3				
		Mean	Stan dev	T	df	Sig. (2-tailed)
1.	Community engagement	3.04	1.286	.359	168	.720
2.	Teacher professionalism	3.16	1.141	1.820	168	.070
3.	Collegial leadership	3.16	1.182	1.757	168	.081
4.	Academic press	3.12	1.179	1.305	168	.194
5.	School climate Index	3.05	1.114	.621	168	.535

Table 8 above shows that the Level of school climate, relating to Community engagement the mean and SD value were 3.37 and 1.07 respectively. It was also found that there is statistically significant difference among teachers,  $df(168)$ ,  $t=0.35$ ,  $p=0.7$ . It implies that level of Community engagement in moderate secondary schools of West Wollega Zone

In the case of Teacher professionalism, the mean and SD value were 3.16 and 1.14 respectively. It would be argued that the level of Teacher professionalism was at moderate level. It was also found that there is statistically insignificant difference among teachers,  $df(168)$ ,  $t=1.1$ ,  $p=0.18$ . On other hand mean and SD of Collegial leadership were 3.16 and 1.14 respectively. It was also found that there is statistically insignificant difference among teachers,  $df(168)$ ,  $t=1.1$ ,  $p=0.16$ . Finally mean and SD of academic press were 3.12 and 1.17 respectively. It would be argued that the level of school climate was at moderate level. It was also found that there is statistically significant difference among teachers,  $df(168)$ ,  $t=1.3$ ,  $p=0.19$ .

### 4.3. Students' academic achievement

The dependent variables for this study was Students' academic achievement as measured by grade 12<sup>th</sup> national examination. The mean scores for grade 12<sup>th</sup> national examination of the schools were obtained by averaging 7 subjects the students took on grade 12 national examination. The mean score was computed for each subjects to the sample schools separately, and then, the total mean score of the schools in total. According to the Ethiopia education and training policy, the score of 50 percent and above is considered as a pass mark. Accordingly, in this study 350 (50%) out of 700 (100%) score is considered as a pass mark (mean or average score).

The sum scores for grade 12 national exam score of schools were obtained by adding 7 subjects that students took on the grade 12 national examination. The sum was first computed for an individual student on all subjects then calculated for each school and across all sample schools. to explore whether there is a statistically significant difference between the three years in students 'academic achievements and whether there exists a relationship between overall school climates and climate factors as measured by the SCI, and overall student academic achievement on the university entrance examination. t-test was done to compare the mean between the two schools and relate the school climate of the sample schools to students' university entrance examination mean score.

**Table 9: Mean students score of university entrance examination of West Wollega Secondary schools 2009—2011**

Years	Number of students	Mean	Std. Deviation	Std. Error Mean	T	df	Sig.(2-tailed)	Mean Difference	95% Confidence Interval of the Difference	
									Lower	Upper
2009	1461	309.8	34.4	2.8	124.0	207.7	0.000	306.8	301.3	312.3
2010	2008	320.7	48.0	3.1	114.0	285.9	0.000	317.7	311.7	323.7
2011	1963	308.2	39.8	2.6	126.4	279.4	0.000	305.2	300.2	310.3
Total	5432	312.9	40.7	2.8	121.4	257.6	0.000	309.9	304.4	315.4

Table 9 shows the mean score of the three years (2009-2011) of the sample schools. the mean scores of the three years were below the pass mark (which is 350). Moreover, the mean scores of 2010 were greater than 2011 and 2009. Table presents the year 2009-2011 grade 12 students' academic achievement in 7 sampled Secondary schools in West Wollega Zone. Data gathered from these 12 secondary schools through document analysis indicates that the students' academic performance in 2009-2011 E.C. was ( $M=312$  and  $SD= 40.7$ ). The mean value of the total result indicates that the students perform to the low level and SD result indicates that the students' results were distributed in all levels. These indicate that majority of the students score less than 300 points and imply that the students' performance was low in West Wollega Zone.

Furthermore, the total university entrance examination mean score between the three years' schools is statistically significant. It means that, the overall students 'academic achievement of the three years have a significant difference.

Therefore, it is possible to conclude that the result of the inferential statistics showed that, there exists a relationship between school climate and student achievement which is in line with Vasquez, 2012; and Abeya, 2017; findings that school climate has a significant and positive relationship with student achievement.

#### 4.5. Correlation between school climate and academic achievement

Correlation between school climate (measured by Community engagement, Teacher professionalism, Collegial leadership, Academic press) and academic achievement.

**Table 10: Correlation between school climate and academic achievement**

School climate	Score
CE	Pearson Correlation
	Sig. (2-tailed)
	N
TP	Pearson Correlation
	Sig. (2-tailed)
	N
CL	Pearson Correlation
	Sig. (2-tailed)
	N
AP	Pearson Correlation
	Sig. (2-tailed)
	N
SCI	Pearson Correlation
	Sig. (2-tailed)
	N

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

Note. SCI=school climate index; CL= collegial leadership; TP = teacher professionalism;

AP= academic press; CE= community engagement; score=grade 12 national exam score.

Based on the table 10 the results indicate that there is a significant and positive correlation between overall school climate and student achievement ( $r = .545$ ,  $r^2 = .297$ ,  $p < .01$ ). It is important to note that although there is a significant relationship between the two variables, the correlation coefficient is weak. The  $r^2$  value indicates that organizational climate explains 29.7% of the variance in student achievement scores in grade 12 national exam score.

The relationship between community engagement and student academic achievement was positive relationship ( $r = .549$ ,  $r^2 = .301$ ,  $p < .01$ ). It is important to note that although there is a significant relationship between the two variables, but the correlation coefficient is weak. The  $r^2$  value indicates

that organizational climate explains 30.1% of the variance in student achievement scores in grade 12 national exam score.

Next to this relationship between teachers' professionalism and academic achievement ( $r = .533$ ,  $r^2 = .284$ ,  $p < .01$ ). It is important to note that although there is a significant relationship between the two variables, the correlation coefficient is weak. The  $r^2$  value indicates that organizational climate explains 28.4% of the variance in student achievement scores in grade 12 national exam score.

The relationship between collegial leadership and academic achievement ( $r = .545$ ,  $r^2 = .297$ ,  $p < .01$ ). It is important to note that although there is a significant relationship between the two variables, the correlation coefficient is weak. The  $r^2$  value indicates that organizational climate explains 29.7% of the variance in student achievement scores in grade 12 national exam score.

Lastly, academic press has positive relationship with academic achievement because the correlation ( $r = .577$ ,  $r^2 = .332$ ,  $p < .01$ ). It is important to note that although there is a significant relationship between the two variables, the correlation coefficient is weak. The  $r^2$  value indicates that organizational climate explains 33.2% of the variance in student achievement scores in grade 12 national exam score.

#### **4.6. Regression Analysis for School Climate Variables**

The third objective of this study is examining the impact of each of the sub scales of the school climate as predictors of student academic achievement on in grade 12 national exam score. Multiple linear regression analysis was used to determine the impact of each of the school climate variables on student academic achievement.

**Table 11: Impact of School Climate on student academic achievement**

Model Summary							
Model	Change Statistics						
	R	R Square	Adjusted R Square	F Change	df1	df2	Sig. F Change
1	.596 <sup>a</sup>	.356	.336	17.985	5	163	.000

Predictors: (Constant), school climate index, Community engagement, Teachers’ professionalism, Academic Press, Collegial leadership

Coefficients <sup>a</sup>						
Model		Unstandardized Coefficients		Standardized Coefficients	T	Sig.
		B	Std. Error	Beta		
1	(Constant)	1.393	0.129		10.770	0.000
	Community engagement	0.085	0.117	0.168	0.724	0.470
	Teachers’ professionalism	0.145	0.178	0.253	0.811	0.419
	Collegial leadership	0.225	0.239	0.409	0.942	0.347
	Academic Press	0.815	0.237	1.474	3.440	0.001
	school climate index	0.246	0.180	0.421	1.366	0.174

a. Dependent Variable: score

The results displayed in Table 11 indicate that the combined effect of the independent variables (school climate) contributed about 35.6% in students’ academic achievement ( $R^2=0.356$ ). the school climate

variables had an overall positive impact on explaining the variance in grade 12 national exam scores in the West Wollega participating secondary schools. The analysis further indicated that Community engagement, ( $\beta=.168$ ,  $p=.04$ ) which indicates that Community engagement, have significantly predict the students' academic achievement increases by 16.8%. In addition, Teachers' professionalism ( $\beta=.0.253$ ,  $p=.040$ ) which indicates that Teachers' professionalism significantly predict the students' academic achievement. Collegial leadership also significantly predict the students' academic achievement ( $\beta=.41$ ,  $p=0.3$ ) in secondary schools of West Wollega Zone. Academic Press significantly predict the students' academic performance ( $\beta=.173$ ,  $p=0.001$ ).

## CHAPTER 5

### Summary, conclusion, and Recommendations

The purpose of Chapter 5 is to provide a comprehensive review of the research data and results presented in Chapter 4. It further provides a discussion of the findings and its connection to prior research, in addition to providing a conclusion and recommendations for future research.

#### 5.1. Summary of the study

This study examined the impact of school climate on student achievement as measured by the grade 12 national exam scores. The relative effect of the subscale measures of school climate (collegial leadership, teacher professionalism, academic press and community engagement) as they related to student achievement was also studied. Although climate had been defined in a variety of ways throughout the research, for the purposes of this study, based on the review of the literature and the theoretical framework developed by Tschannen-Moran, Parish & Dipaola, (2006) school climate is described by factors including collegial leadership, teachers' professionalism, academic press and community engagement. The relationship between school climate and student achievement was examined by the using Pearson Correlation and impact of school climate on student achievement was examined by the using linear regression.

The first major finding of this study is that school climate has a significant and positive relationship with student achievement in West Wollega Zone secondary schools. This finding is similar to the results of the previous studies conducted in different countries which revealed relationships between school climate and student achievement (Tschannen-Moran, Parish & Dipaola, 2006). Here, it is important to note that the relationship found in this study is a moderate positive relationship.

The second major finding was with regard to the relationship between the subscales of school climate and student achievement. The study shows that all of the subscales of school climate i.e. the community engagement, collegial leadership, teacher professionalism and academic press were significantly and moderately correlated with student achievement.

Studies conducted by Abeya Geleta (2017) using similar instrument revealed that collegial leadership, teacher professionalism and academic press were significantly and moderately correlated with student achievement. Other studies conducted by Dian Vasquez (2011) and Tschannen-Moran, Parish & Dipaola (2006) using similar instrument revealed that teacher professionalism, academic press, and community engagement were significantly correlated with student achievement.



The third major finding of this study was with regard to the impact of school climate on student academic achievement. The school climate index in the regression model were shown to have a significant impact on student academic achievement.

When examined individually academic press is the most positive predictor of student achievement in this study. Similarly, community engagement, collegial leadership, teachers' and professionalism are also found to be positive significant predictor of academic achievement. Previous studies conducted in the area supports this finding in that Teachers' professionalism is the most positive predictor of student achievement in Ethiopia secondary schools Abeya Geleta (2017). Other Previous studies conducted in the area supports this finding in that academic press is a significant predictor of academic achievement (Goddard, Sweetland, & Hoy 2000; Smith, 2002).

The four subscales of school climate that revealed significant correlations with academic achievement (community engagement, collegial leadership, teacher professionalism and academic press) indicate that these factors are worth assessing if there is an interest in improving academic achievement of students. In this study, all subscales have a significant relationship with student achievement. If schools foster positive relations with the community such as involving them in planning of school activities and in regular discussion of school issues, there could be a positive effect on student achievement. It appears that schools that exercise collegial leadership, give due emphasis for teachers' professionalism and acknowledge the academic achievements of students tend to be more successful than schools that do not. From this study it can be concluded that a type of leadership that is friendly and open are more effective for school setting.

If teachers work together, respect each other, and accomplish their job with enthusiasm, this could add to a better school environment which could then lead to improved student success. the teacher professionalism serves as a crucial area for school administrators and policy-makers to consider when focusing on academic success of secondary school students. With regard to academic press it can be concluded that 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.

## 5.2. Conclusion

It was important to study the impact of school climate on student achievement as well as to identify the factors that make up a school's climate 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. Several conclusions can be drawn based on the findings of this study and these are now presented.

First the climate in a school affects the academic achievement of the students attending that school. School climate includes several different factors but, as presented in this study, the major interactions occurring in an organization such as a school involve the principal-teacher, teacher-teacher, teacher student, and school-community relationship.

This study indicates that overall school climate that covers these horizontal and vertical linkages has a significant positive effect on academic achievement. If students are to excel in school, they need to be in an environment that provides positive interactions among the different individuals in the school environment and at all levels of the school organization. This serves as a crucial starting point for stakeholders in education system as they seek ways of improving success among students.

The four subscales of school climate that shown significant correlations with academic achievement. collegial leadership teacher professionalism, academic press and community engagement indicate that these attributes are value assessing if there is an interest in improving academic achievement of students. It appears that schools that emphasize and acknowledge the academic achievements of students tend to be more successful than schools that do not.

Similarly, if schools foster positive relations with the community such as involving them in planning of school activities and in regular discussion of school issues, there could be a positive effect on student achievement. Teacher interactions make up an integral part of a schools' climate, and as mentioned earlier, there is an overall significant relationship between school climate and student achievement.

In general, teachers and students may function better in a structured environment where routines are set, there is constant monitoring, and there is a top-down approach to decision-making. One example of a type of leadership characterized by these beliefs is instructional leadership. The instructional leadership model is somewhat more top-down with an emphasis on coordinating and controlling others to move toward goals that may have been set at the top of the organization (Hallinger, 2003).

The final conclusion that can be drawn from this study is that the best predictor of academic achievement is academic press. 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. Since this study reveals that this subscale of school climate has such a significant effect on academic achievement, the academic press subscale serves as a crucial area for school administrators and policy-makers to consider when focusing on academic success of secondary school.

### **5.3. Recommendations**

Based on the findings of this study, the following recommendations are presented:

1. Educators should be aware of the climate that exists in a school because it does affect academic achievement. Principals in particular need to be mindful that the climate of a school affect achievement and the former can be enhanced to improve results.
2. School leaders need to find ways of including the community in the life of the school and foster positive relationships with the community. It is important that schools involve the community in the planning of different school activities. Improved school-community relations can also have a positive effect on school climate which in turn has a positive effect on achievement
3. It is argued that schools that exercise collegial leadership, give due emphasis for teachers' professionalism and acknowledge the academic achievements of students tend to be more successful than schools that do not. Thus, it suggested that school principals should involve teachers in decision making, exercise leadership that is friendly and open and being supportive while not being directive or restrictive.
4. In order to enhance academic engagement of students, it is important that school leaders and teachers should set high standards for academic performance, set an orderly and serious learning environment and maintain definite standards of performance.

### **Recommendations for Further Research**

The following are suggestions for further research in the same area of study:

1. The perceptions of administrators, students and parents were not included in this study; a study that involves the perceptions of these individuals would be informative to understanding climate considering that they comprise a large portion of a schools' population and contribute greatly to the schools' climate.

2. This study focused only on the grade 12 national exam score; a study of the effects of school climate on achievement in other exam add to the understanding of the impact of climate on student achievement
3. This study was limited to high schools, so similar studies conducted at different levels may be helpful to expand the understanding the impact of climate on student achievement

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# APPENDIX A

JIMMA UNIVERSITY

COLLEGE OF EDUCATION AND BEHAVIORAL SCIENCE

DEPARTMENT OF EDUCATIONAL PLANNING AND MANAGEMENT

Questionnaire to be filled by **Teachers and school leaders**

The main objective of the questionnaire is to collect data on the impacts of School climate on Students Academic Achievement in government secondary schools of West wolega Zone. Thus, your direct participation in filling the questionnaire is essential. So, you are kindly requested to provide information needed objectively and honestly. It is assured that the collected data will be kept confidential and used for research purpose only.

*Thank you in advance for your cooperation!*

Directions:

1. Don't writes your name.
2. After reading the questionnaire, tick [√] the appropriate item/s corresponding to your answer.
3. For one question give only one answer.

Part One: Respondents Background Information

1. **Sex:** a ) Male  b) Female
2. **Age.** a) 20-25 years  b) 26-30 years  c) 31-35 years  d) 35-40 years  e) 41-45 years  f) 46-50 years  g) 51 years and above
3. The level professional qualifications a) Diploma  b) BSc / B. A  c) M.A/MSc
4. **Position** a) teacher  b) principal  c) supervisor
5. **Teaching/ leading/ supervising experience.**  
a) 0- 5 years  b) 6-10 years  C) 11-15 years  d) 16-20 years  e) above 20 years

## School climate Questionnaire

Part2: Indicate your responses for the following Likert scale items putting [ $\sqrt{\quad}$ ] mark in the box provided to indicate your answer.

5. Strongly agree 4. Agree 3. Undecided 2. Disagree 1. Strongly disagree

Items	1. Community engagement	Liker scale				
		5	4	3	2	1
1.1	Our school makes an effort to inform the community about our goals and achievement					
1.2						
1.2	Our school is able marshal community support when needed					
1.3	Parents and other community included on planning committee					
1.4	Community members are responsive to request for participation					
1.5	Community members attend meetings to stay informed about our school					
1.6	Organized community group meet regularly to discuss school issues					
1.7	School people are responsive to the needs and concern expressed by community members.					
	<b>2. Teacher's Professionalism</b>					
2.1	The interaction between faculty members are cooperative					
2.2	Teachers respect the professional competence of their colleagues					
2.3	Teachers help and support each other					
2.4	Teachers in this school exercise professional judgment					
2.5	Teachers are committed to help students					

2.6	Teachers accomplish their work with enthusiasm						
2.7	Teachers “go the extra mile” with their students						
2.8	Teachers provide strong social support for colleague						
	<b>3 Collegial leadership</b>						
3.1	The principal is friendly and approachable						
3.2	The principal puts suggestion made by the faculty in to operation						
3.3	The principals explore all sides of topics and admit that other opinion exists.						
3.4	The principal threat all faculty members as his or her equal.						
3.5	The principal is willing to make changes.						
3.6	The principals let faculty know what is expected of them						
3.7	The principal maintain definite standards of performance.						
	<b>4 Academic Press</b>						
4.1	The school sets high standards for academic performance						
4.2	Students respects others who gets good grades						
4.3	Academic achievement is recognized and acknowledged by the school						
4.4	Students try hard to improve on previous work						
4.5	The learning environment is orderly and serious						
4.6	Students seek extra work so they can get good grades						

## Appendix B Grade 12 exam result of 2011

Name of schools	Number of students	Mean	Std. Deviation	Std. Error Mean	T	df	Sig. (2-tailed)	Mean Difference	95% Confidence Interval of the Difference	
									Lower	Upper
Babo Gambel	320	270.9	34.0	1.9	141.1	319.0	0.0	267.9	264.1	271.6
Beghi	436	312.4	39.7	1.9	162.7	435.0	0.0	309.4	305.6	313.1
Jarso	153	330.3	36.8	3.0	110.1	152.0	0.0	327.3	321.4	333.2
Kiltu kare	266	272.0	36.8	2.3	119.1	265.0	0.0	269.0	264.6	273.5
Kondala	181	352.1	32.5	2.4	144.4	180.0	0.0	349.1	344.3	353.9
Mene Sibü	464	309.5	49.7	2.3	132.9	463.0	0.0	306.5	301.9	311.0
Wore Jiru	143	310.6	49.3	4.1	74.7	142.0	0.0	307.6	299.5	315.8
	1963	308.2	39.8	2.6	126.4	279.4	0.0	305.2	300.2	310.3

### Appendix C Grade 12 exam result of 2010

Name of schools	Number of students	Mean	Std. Deviation	Std. Error Mean	T	df	Sig. (2-tailed)	Mean Difference	95% Confidence Interval of the Difference	
									Lower	Upper
Babo Gambel	298	302.2	27.5	1.6	187.9	297.0	0.0	299.2	296.1	302.4
Beghi	520	326.4	57.0	2.5	129.4	519.0	0.0	323.4	318.5	328.3
Jarso	209	328.5	43.9	3.0	107.2	208.0	0.0	325.5	319.5	331.5
Kiltu Kara	165	270.9	47.6	3.7	72.3	164.0	0.0	267.9	260.6	275.2
Kondala	215	378.7	68.4	4.7	80.5	214.0	0.0	375.7	366.5	384.9
Mene Sibru	483	325.3	55.0	2.5	128.7	482.0	0.0	322.3	317.4	327.2
Wore Jiru	118	312.8	36.6	3.4	92.0	117.0	0.0	309.8	303.2	316.5
	2008	320.7	48.0	3.1	114.0	285.9	0.0	317.7	311.7	323.7

### Appendix D Grade 12 exam result of 2009

Name of schools	Number of students	Mean	Std. Deviation	Std. Error Mean	T	Df	Sig. (2-tailed)	Mean Difference	95% Confidence Interval of the Difference	
									Lower	Upper
Babo Gambel	204	341.8	30.2	2.1	160.1	203.0	0.0	338.8	334.6	343.0
Beghi	246	272.5	28.0	1.8	150.9	245.0	0.0	269.5	266.0	273.0
Kiltu kare	269	338.8	42.5	2.6	129.4	268.0	0.0	335.8	330.7	340.9
Jarso	49	250.0	26.5	3.8	65.4	48.0	0.0	247.0	239.4	254.6
Mene Sibiu	414	277.8	30.9	1.5	180.8	413.0	0.0	274.8	271.8	277.7
Qondala	205	286.6	45.0	3.1	90.3	204.0	0.0	283.6	277.4	289.8
Wore Jiru	74	401.3	37.7	4.4	90.9	73.0	0.0	398.3	389.5	407.0
	1461	309.8	34.4	2.8	124.0	207.7	0.0	306.8	301.3	312.3