

# A COMPARATIVE STUDY OF PRINCIPALS' LEADERSHIP BEHAVIORS AND SCHOOL CLIMATES OF TWO INTERNATIONAL ELEMENTARY SCHOOLS IN YANGON, MYANMAR

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**Abstract:** The purpose of this study was to: (1) identify the teachers' perceptions of their principals' leadership behaviors from two international elementary schools in Yangon, Myanmar, (2) identify the teachers' perceptions of their school climates, and (3) compare the principals' leadership behaviors and school climates perceived by teachers. Theories that were supportive in this study are (1) Path-Goal Theory of Leadership which was developed by House and his colleagues in the early 1970s, (2) Organizational Climate theories such as "The Mechanistic, Bureaucratic Model" and "The Organic, Humanistic Model" which were conducted by Owens and (3) The School Climate Model by Hoy et.al (1996). The revised Organizational Climate Description Questionnaires (OCDQ- RE) were used as instrumental tool to meet the research objectives in this investigation and they were distributed to 59 teachers from two international elementary schools in Yangon in May, 2013. The rating scale for level of practice was a four-point Likert Scale and frequencies, percentages, means, and two-tailed independent sample t-test were the statistical techniques applied in data analysis. Regarding to the results from the data analysis, it was found out that most teachers perceived their principals' leadership behavior as supportive as high in both schools. Teachers also perceived their leadership behavior by themselves as collegial as high in both schools. Hence principals' leadership behaviors were surveyed as supportive as high and teachers' leadership behaviors were surveyed as collegial, principals-teachers and teachers-teachers relationships could be interpreted as open and teachers perceived their school climates as open climates. There is no difference between school climates perceived by teachers between School A and School B in Yangon, Myanmar.

**Keywords:** Principals' Leadership Behaviors, School Climates, International Elementary Schools

## Introduction

Education is one of the cores for nation's development and prosperity. When we think about education, we cannot neglect schooling because schooling is one of the first important and essential stages in our lives to help us acquire the skills that we will

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need to face the challenges. When we discuss about schooling, the principal becomes an important person and his/her leadership should be considered as one of the essential keys for student achievement and school improvement in school society. According to a well-known statement “As the principal goes so goes the school”, there has been many research findings about the principalship (Kimbrough and Burkett, 1990). The research by Chamberlin and Cole (1972, as cited in Kimbrough and Burkett, 1990) stated that the most important person in a school society for student achievement is not the principal except the student himself. However the person who tries to create a better school learning environment for that student by the support of staff, teachers, resources, teaching materials and methods the most is the principal because s/he determines how the school should run, facilitates teachers and promotes a positive and open organizational climate through his/her leadership behavior (Kimbrough and Burkett, 1990).

Another key factor for student achievement and school success is a human-relation factor. The principal-teacher relation, the teacher-teacher relation, teacher-student relation, student-student relation and teacher-parent relation are important human-relationship for student achievement and the development of educational excellence. Therefore the social system is important for every school climate. Rebore (as cited in Green, 2010) stated that it is very important for school leaders to understand that the behavior of faculty and staff can be influenced by school climate and can affect the school climate positively or negatively because if there is a positive climate in school, the relationship between school leaders and staff will be good and high as teachers, staff and faculty members are satisfied with their working conditions and put the efforts in teaching and learning process to meet the objectives of the school. Unlikely, when the school has the climate of hostile and disengaged, the faculty and staff will be disconnected from the school and they will be uncooperative and aloof and the goals of the school and students’ achievement will not be met. Therefore, it is very critical for school leaders to understand and analyze the school climate to enhance school success (Green, 2010).

### **Objectives:**

The research objectives were as follows:

1. To identify the teachers’ perceptions of their principals’ leadership behaviors of School A and School B in Yangon, Myanmar.
2. To identify the teachers’ perceptions of their school climates of School A and School B in Yangon, Myanmar.
3. To compare the principals’ leadership behaviors perceived by teachers between School A and School B in Yangon, Myanmar.
4. To compare the school climates perceived by teachers between School A and School B in Yangon, Myanmar.

### **Literature Review**

#### *Leadership*

As James MacGregor Burns (1978, as cited in Gill, 2011) defined “Leadership is one of the most observed and least understood phenomena on earth,” the term “leadership”

has been discussed through researches and defined from different perspectives for more than half a century. Hoy and Miskel (2001) defined the leadership as the art of transforming people and organization with the purpose of organizational development because leaders develop a relationship between followers and themselves by aligning, motivating, and inspiring the subordinates to foster productivity. Lt-Gen. Edward Flanagan of the US Army (as cited in Gill, 2011) stated that leadership is a timeless subject because management experts have described, discussed, dissected and analyzed for centuries. Bennis (as cited in Gill, 2011) observed the leadership that leadership is a portmanteau field in French which means a field with variety of variables.

#### *Path-Goal Leadership Theory*

Northhouse (2010) mentioned that House reformulated Fielder's Contingency Theory and there are four main types of leadership behaviors have been researched among other leadership behaviors. The leadership behaviors of a leader in Path-Goal Theory are directive, supportive, participative and achievement-oriented leadership behaviors.

*Directive Leadership Behavior.* In directive leadership behavior, a leader supervises the followers and gives them instructions about their task whether the task is important or daily routine by controlling with his/her authoritative power (Northhouse, 2010).

*Supportive Leadership Behavior.* Supportive leadership behavior is characterized by a leader who has friendly relationships with subordinates, respects and cares for them by supporting to their human needs. A supportive leader focuses on taking a role of an equal instead of a boss. The supportive behavior is similar to consideration leadership which was conducted in the study of Ohio State University.

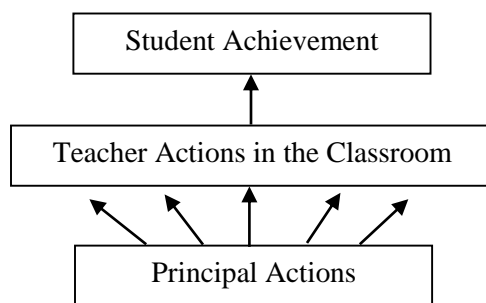
*Participative Leadership.* The characteristic of participative leadership behavior is that a leader discusses with subordinates, listens to their ideas and allows them to involve in decision making about the task (Northhouse, 2010).

*Achievement-oriented Leadership.* Achievement-oriented leadership emphasizes on a leader who sets the challenging goals and expect the excellence of subordinates' performance by believing their capabilities (Northhouse, 2010).

#### *Principalship*

In the meta-analysis of sixty-nine studies conducted from 1978 to 2001, Marzano & his colleagues identified that principal leadership has a significant and positive relationship with student achievement in K-12 education in the United States. The principal's actions and behaviors do not directly affect student learning. Principal instructs teachers first and then teachers interact with students in the class. The principal's influence on student achievement passing through teachers is shown in Figure 1 (Dufour and Marzano, 2012).

(See Figure 1 on the next page)



**Figure 1: Relationship between Principal Behavior and Student Achievement (Taken From *Leaders of Learning: How District, School, and Classroom Leaders Improve Student Achievement* by Richard Dufour & Robert J. Marzano, 2012)**

*Roles and Responsibilities Conceptions of a Principal*

The roles and responsibilities of a principal have been changed over time. Traditional roles and responsibilities of a principal are focused on administrative processes and functions. Sergiovanni (1995) stated that in 1986, the National Association of Elementary School Principals (NAESP) contributed the document “Elementary and Middle School Proficiencies for Principals” which consisted of a list of 74 proficiencies under 10 categories: leadership behavior, communication skills, group processes, curriculum, instruction, performance, evaluation, organization, fiscal and political. Leithwood and Montgomery (1986) (as cited in Holmes & Wynne, 1991) developed a typology of a principal based on five categories such as managerial tasks, personnel development, program development, implementation and problem-solving. MacBeath & Myers (1999) mentioned about head teacher competencies from a point of view of Industrial Society. The Industrial Society produced its own 20 lists of head teacher competencies. The first five items on the lists were conferenced with the importance of support and encouragement to the followers such as: supporting other people, recognizing individual effort, promoting other people’s self-esteem, developing other people, minimizing anxiety. Cordeiro and Cunningham (2013) stated that the National Center for School Leadership (NCSL) contributed the five key aspects of the role of principal such as (1) defining and communicating a school’s educational mission, (2) coordinating curriculum, (3) supervising and supporting teachers, (4) monitoring student progress, and (5) nurturing a positive learning climate

Matthew and Crow (2003) mentioned that there are seven principalship role conceptions. Principal needs to play in the roles of learner, mentor, supervisor, leader, manager, politician and advocate. In order to facilitate and nurture students, teachers and other staff to understand basic assumptions about teaching and learning and to reform the learning organization of school, principals should be active learners themselves and leaders of learning in their schools first. To be an active learner, a principal should have self-awareness, be a good inquirer to define problem correctly and to collect information to solve the problem and should apply practice of reflectivity to administrative learning. Otherwise principals might not be able to teach

others how to be learners unless they push themselves for teach (Matthew & Crow, 2003).

### *21<sup>st</sup> Century Principalship*

To lead 21<sup>st</sup> century schools, Green (2010) pointed that there are four dimensions of principals such as

Dimension 1: Understanding Self and Others

Dimension 2: Understanding the Complexity of Organizational Life

Dimension 3: Building Bridges through Relationships

Dimension 4: Engaging in Leadership Best Practices

As Goleman (as cited in Green, 2010) stated that “Self-understanding is a life-long process essential of effective human relations,” it is not easy to lead any group or organization if a leader does not have a clear understanding of himself/herself – values, beliefs and strengths. So firstly principals should understand their values well because their behaviors are influenced by their personal hierarchy of values. Green (2010) described that schools are multifaceted and complex open social systems because they have various structures and contributing factors, components and situations are different from one school to another. Due to the difference between schools’ organizations, principals need to establish a deep understanding of complexities and apply different strategies through their leadership. And principals should also understand and discover the elements of external culture – school community, community stakeholders, program implement so that a positive environment can be established (Green, 2010). The diverse needs of students, the motivation level of faculty and staff and school leaders’ leadership styles has become the complexity of organizational life in schools. Principals should develop a deep understanding of how and why the students’ differences are associated with academic achievement so that they can design the better curriculum and apply appropriate instruction with the cooperation with teachers. Principals need to understand that the motivation level of faculty and staff is connected with the completion of the assigned tasks. Moreover principals should be mindful that how their leadership styles may affect the interaction among faculty members (Green, 2010). Green (2010) wrote that to foster goal attainment, principals need to build the bridges to connect the relationships between school and faculty, the school and community, principal and teacher, teacher and teacher, teacher and student because a relationship is a catalyst to bond people’s emotions and feelings by deriving energies and motivation for completion of tasks. Principals should be aware of the importance of building positive relationships in schools.

### *Leadership Platforms needed in 21<sup>st</sup> Century Principalship*

Green (2010) mentioned that principals must be able to examine ideas, concepts and practices that best fit the culture, climate and readiness of their school organization. To perform these tasks, principals should have visionary leadership first so that they share the visions or mental picture of what they want the school organization to become. Trethowan (as cited in Bell & Harrison, 1996) believed that “No good school has ever been created without such a vision, and no school continues to be good once the vision of those who lead it has been lost”. Educational leaders should set the

targets in long terms and short terms and must think about the best ways to develop their organizations.

In 21<sup>st</sup> Century, instructional leadership is considered as the essential leadership for academic – achievement and principals became instructional leaders to plan, develop, supervise and assess instructional capacity and curriculum programs. Many researches revealed that the instructional leadership supported by principal is a major factor for higher student achievement (Cordeiro and Cunningham, 2013). The characteristics of principal's instructional leadership are setting mission and high expectations for teaching and learning, understanding the values and sharing commitments with school colleagues, classroom visits, supervising teachers and students.

Fullan (2002) stated that the role of the principal as instructional leader is just the beginning for the student learning and being an instructional leader for a principal is not enough for deeper learning, teachers' empowerment and school reform. It is not easy for a principal to keep sustained improvement in student achievement. For sustained improvement of schools, principal should have the understanding the change and reforming process in education. Fullan (2002) stated that "to accomplish lasting reform, we need leaders who can create a fundamental transformation in the learning cultures of schools and of the teaching profession itself." According to Fullan (2002), the principal of the future should be transformational leader who can change the cultures of organization through people and team. Sagor (1992) mentioned that shared decision making and teacher empowerment have been important particularly in school effectiveness however these features cannot be centralized without principal's transformational leadership. From Collaboration Action Research with the faculties at more than 50 schools, he found out that teachers and students reported principal as a transformative leader for a culture conducive to school success. He gave the examples of three transformative principals who came in different shapes, sizes and behaviors but they had one common thing; transforming exemplary schools (Sagor, 1992).

#### *Organizational Climate Theories*

According to Owens (1998), there were two major organizational perspectives. They are the classical traditional theory which is known as "The Mechanistic, Bureaucratic Model" and the human resources development theory which is called as "The Organic, Humanistic Model". The bureaucratic model focused upon principles of scientific management and was characterized by top- down authority, "going by the book" (Owens, 1998). The human resources development theory was based on principles of social system theory where the leader emphasized the skills and interests of the followers and their working relationships by fostering open communication, making participatory decisions and establishing collaborative teaming.

#### *School Climate*

School climate has been defined in many ways. Norton (1984) described school climate as having a collective personality, characteristics that distinguish one school from another. Hoy, Tarter, and Kottkamp (1991) stated that school climate is the feel and personality of a school. In the 21<sup>st</sup> century, Ubben, Hughes, and Norris (2011)

believed that a positive school climate exists when there are shared values, norms, and tacit assumptions that characterized a school as being distinct. School climate provided the framework within which principal, teachers, staff and students functioned. School climate is the main crucial factor to distinguish the difference between effective and ineffective schools. As schools, offices and classes are employed with people, school climate represents a human condition. When the school has a positive climate, it can develop an atmosphere where people's best efforts, cooperative tasks, high level of trust and respect among faculty, school improvement, students achievement can be generated (Norton, 2008.)

### *The Measurement of School Climate*

School climate researches developed from organizational climate researches. Halpin and Croft (1962, 1963) (as cited in Hoy, Tarter & Kottkamp, 1991) firstly started the study of organizational climates in schools and designed the Organizational Climate Descriptive Questionnaire (OCDQ) to identify interactions between principal and teacher and between teacher and teacher in schools. OCDQ instrument consists of 64 Likert-type questions.

OCDQ was revised and developed into OCDQ-RE by Hoy, Tarter and Kottkamp (1991) to be able to measure the climate of elementary schools. The OCDQ-RE instrument consists of 42-item questions with six subtests to identify the behavior of elementary teachers and the school principal. Hoy et al. (1991) identified three categories of principal behaviors: supportive, directive, and restrictive. In principal's supportive behavior, the principal pays attention to the teachers and listens to teacher suggestions. Principal often gives true praise for teacher's performance. Teachers and faculty pay respect to principal in both personal and professional. In directive principal behavior, principal supervises and monitors teachers and school activities even smallest detail. In restrictive principal behavior the principal stresses teachers with paperwork, committee requirements, meetings, routine duties, and their teaching responsibilities.

Hoy et al (1991) identified three subsets of teachers' behaviors: collegial, intimate and disengaged. In collegial teacher behavior, teachers support and and respect each other professionally. Teachers enjoy working together with their colleagues at school. In intimate teacher behavior, there are strong social relations among themselves. Teachers know each other very well not only at school but also in their personal lives. They are close friends and they give strong social support for each other. In disengaged teacher behavior, teachers are not friendly each other and they do not like to work together with their colleagues and they are not supportive each other (Hoy et al, 1991). From the measurement of six subscales of principal and teachers' behavior, Hoy et al. (1991) suggested four types of climate: open, engaged, disengaged, and closed.

*Open Climate.* The open climate means a school environment where the principal treats teachers and faculty equally as a good supporter and facilitator. Moreover the principal shows great interest and listens to teachers' ideas, appreciate and compliment teachers' performances, and supports the teachers' needs (high supportive leadership behavior). Teachers not only respect their principal but also know each other and corporate openly and professionally. Teachers feel proud of their

schools and like each other as friends (high collegial and high intimate leadership behaviors) (Hoy et. al, 1991).

*Engaged Climate.* The engaged climate means a school environment where teacher-teacher relationship are highly performed although teacher-principal relationship is timid and weak. Mostly the principal supervises teachers by instructions and burdens the teachers with unnecessary paperwork (high directive leadership behavior. Teachers like each other as friends as well as respect each other as colleagues. Thus teachers work together, support each other, enjoy their work and engage their performance highly and professionally (high collegial and high intimate leadership behaviors) (Hoy et. al, 1991).

*Disengaged Climate.* The disengaged climate is the contrast to the engaged climate. In disengage climate, the principal is supportive and attentive to the teachers (high supportive leadership behavior) however teachers are not willing to take responsibilities and work together productively. And teachers do not like each other as friends and respect each other as colleagues (high disengaged leadership behavior) (Hoy et. al, 1991).

*Closed Climate.* The closed climate is on the opposite spectrum to the open climate. In closed climate, the principal's behaviors are non-supportive, directive and demanding and teachers' behaviors are unhelpful, unproductive, intolerant and not respectful. The principal mostly commands the teachers with instructions and burden the teachers with unnecessary paper work over the limitation of teachers' responsibilities (high restrictive leadership behavior). Teachers never pay respect either principal or their colleagues and they only produce low performance of their work (high disengaged leadership behavior). Neither the principal nor teachers cooperate together to create a collegial school environment (Hoy et. al, 1991).

**Table 1: Prototypic Profiles of Climate Types (Taken from Open Schools/ Healthy Schools: Measuring Organizational Climate by Hoy, Tarter & Kottkamp, 1991)**

Climate	Climate Type			
Dimension	Open	Engaged	Disengaged	Closed
Supportive	High	Low	High	Low
Directive	Low	High	Low	High
Restrictive	Low	High	Low	High
Collegial	High	High	Low	Low
Intimate	High	High	Low	Low
Disengaged	Low	Low	High	High

		Principal Behavior	
		Open	Closed
Teacher Behavior	Open	Open Climate	Engage Climate
	Closed	Disengaged Climate	Closed Climate

**Figure 2: Typology of School Climates (Taken from Open Schools/Healthy Schools: Measuring Organizational Climate by Hoy, Tarter & Kottkamp, 1991)**



*Organizational Climate Description Questionnaire for elementary schools (OCDQ-RE) Survey* Shaw (2009) conducted a descriptive and quantitative research on the relationship between leadership styles and school climate and to determine a specific leadership style promotes positive school climate in selected elementary and middle schools in South Carolina. In his research, he applied Leader Behavior Description Questionnaire (LBDQ) Form XII Self, the Organizational Climate Description Questionnaire for elementary schools (OCDQ-RE), and Organizational Climate Description Questionnaire for middle schools (OCDQ-RM). In his research, it was found that teachers provided highest mean rating for supportive behavior for principals and lowest mean rating for disengaged behaviors for teachers.

Mooney (2003) conducted the study of relationship between transformational leadership and organizational climate. He used same survey for elementary and Leader Behavior Description Questionnaire (LBDQ) Form XII Self. Data indicated that there was a significant relationship between teachers' perceptions of principal's transformational leadership style and open school climate.

Gaines (2011) utilized a descriptive and quantitative research on the relationship between elementary school principals' leadership styles and school climate in an urban district within the southeastern region of the United States. In her research, participants were elementary school principals and teachers and as survey instruments, she applied Leader Behavior Description Questionnaire (LBDQ) Form XII Self to investigate principals' leadership styles and the Organizational Climate Description Questionnaire for elementary schools (OCDQ-RE) to identify how teachers described their school principal leadership behavior and school climate. Gaines (2011) found that there was a positive linear relationship between elementary school principals' leadership styles and school climate.

Black (2010) studied the correlation analysis of servant leadership and school climate. This study was a mixed-method study to determine in which extent servant leadership was correlated with school climate. In his research, he used Organization Leadership Assessment (OLA) and the Organizational Climate Description Questionnaire for elementary schools (OCDQ-RE) and the instruments were distributed to selected sample of 231 full-time teachers and 15 principals from a Catholic School Board in Ontario. The study showed that there was a significant positive correlation with servant leadership and school climate.

Jankens (2011) conducted the study of relationship between school climate and student growth in Michigan Charter Schools. In his study, he applied same survey for school climate and for student growth, he calculated the reading and math results from Performance Series Test by Scantron and MAP Test by NWEA. The finding indicated that there were significant relationships between both principal openness and student growth, and teacher openness and student growth. There was a significant relationship between school climate and student growth.

Nichols (2007) conducted the study of relationship between school leadership, school climate and student performance from two elementary schools in Missouri. In her study, she applied same survey for school climate and for student performance, she calculated the communication arts and maths results from The Missouri Assessment Program (MAP) Test. The result showed that when School A was surveyed high restrictive scores, it received MAP that was increased from 2003-2005

and when School B was surveyed high supportive scores, it was shown that MAP decreased. Based on the result, there was a statistically significant relationship between school climate and student performance.

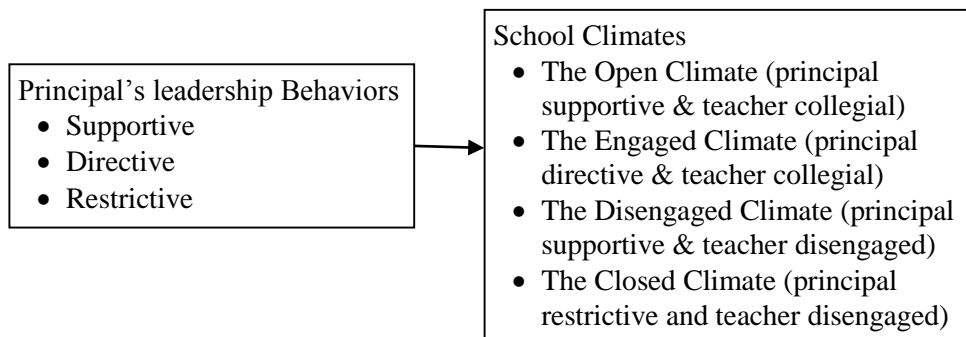
#### *Historical Background of School A and School B*

School A was founded in 1998 by a group of concerned educators and business leaders who felt there was a need for an affordable, high-quality international education option for Myanmar and expatriate students living in Yangon. From its humble beginnings as an "International Child Zone" with 48 students, the school has grown rapidly to over 1000 students and became elementary school, middle school and high school located in three separated campuses with its own principals in a residential neighborhood in the Hlaing Township of Yangon. In an elementary school, there are 35 teachers who have come from the United States, Canada, Great Britain, Wales, France, Pakistan, China, Taiwan, and Zambia with many holding advanced degrees. Additionally, over 60 Myanmar assistant teachers work to help ensure that all students are engaged in personalized learning. School A is accredited by Western Association of Schools and Colleges (WASC) and is a member of the East Asia Regional Council of Schools (EARCOS).

School B is an independent, coeducational day school, Nursery-Year 13 (ages 3-18 years). The school was purposefully built and opened in 2009 to provide the best possible learning environment for its students. Staff at School B come from varied international backgrounds including Austria, England, India, New Zealand, Philippines, Russia, South Africa, and USA. Most classes have an assistant teacher who works closely with the classroom teacher, especially in the area of ESL support. School B has 10 different nationalities represented on the student body. Currently a majority of students are Myanmar. It has a strong representation of students with Chinese nationality. The following are also represented: Japan, USA, Australia, Malaysia, Korea, Russia, India, South Africa and Thailand.

#### **Conceptual Framework**

Drawing from Path-Goal Leadership Theory, Organizational Climate Theory and School Climate Model, a conceptual framework was formulated as follows:



**Figure 3: Conceptual Framework of the Study**

## Procedure

### *Instrument*

To collect empirical data, a survey questionnaire was administered to teachers from selected School A and School B. The questionnaire was divided into two parts as follows:

**Part one:** concerned with teachers' demographic data such as age, gender, nationality, educational background, teaching experience and number of years of working in selected School A and School B.

**Part two:** Organizational Climate Description Questionnaire (OCDQ-RE) was utilized to determine teachers' perception of school climates of selected School A and School B.

The OCDQ – RE is a four point Linkert scale questionnaire. The teachers from both School A and School B answered the questions based upon their perception toward school climates by choosing four rating scales mentioned as following: (1) Rarely Occurs, (2) Sometimes Occurs, (3) Often Occurs and (4) Very Frequently Occurs.

To investigate four different kinds of school climates such as open climate, engaged climate, disengaged climate and closed climate, we can draw the conclusion based on principal leadership behaviors and teacher leadership behaviors referring to the Table 2 of prototypic school climate profile. Open Climate: High Supportiveness of Principal and High Collegiality of teachers. Engaged Climate: High Directiveness of Principal and High Collegiality of teachers. Disengaged Climate: High Supportiveness of Principal and Low Collegiality of teachers. Closed Climate: High Restrictive of Principal and High Disengagement of teachers

### *Population*

The population was the teachers from selected School A and School B during the academic year 2012-2013. The population of the teachers will be 35 teachers from School A and 26 teachers from School B in total.

## Findings

Based on the research objectives and analyzed data from instrument, this study had the following findings:

### *Part one: Demographic data from School A and School B*

In this study, demographic background data of teachers from two selected international elementary schools from Yangon were surveyed as following. There were more female respondents than male respondents in both schools. The respondents whose ages from 31 to 40 were the most and the respondents who were more than 61 years old were the least in both schools. Most respondents were Americans in School A but other nationalities were the most respondents in School B. Master degree holders were more than bachelor degree holders in School A however bachelor degree holders were more than master degree holders in School B. The respondents who had experience of 2 to 5 years teaching were the most in School A while respondents who had 10 years of teaching experiences were the most in School B. In School A, most respondents had taught for 1 to 2 years while respondents who had taught in School B for three to four years were the most.

**Table 2: Frequency and Percent Distribution of Demographics Data from School A and School B**

Demographic Factors	Variables	Frequency		Percent	
		School A	School B	School A	School B
Gender	1). Male	10	8	34.5	36.4
	2). Female	19	14	65.5	63.6
Age	2). 22-25	2	3	6.9	13.6
	3). 26-30	6	4	20.7	18.2
	4). 31-40	10	7	34.5	31.8
	5). 41-50	4	5	13.8	22.7
	6). 51-60	6	2	20.7	9.1
	7). 61+	1	1	3.4	4.5
Nationality	1). American	18	5	62.1	22.7
	2). Canadian	3	2	10.3	9.1
	3). Australian	2	0	6.9	0
	4). British	0	1	0	4.5
	5). Asian	4	6	13.8	27.3
	6). Others	2	8	6.9	36.4
Highest Level of Education	1). Bachelor Degree	14	14	48.3	63.6
	2). Master Degree	15	8	51.7	36.4
Teaching Experiences	1). 1 year	0	1	0	4.5
	2). 2-5 years	14	7	48.3	31.8
	3). 6-9 years	7	5	24.1	22.7
	4). 10 years	8	9	27.6	40.9
Number of Years Teaching at School A or School B	1). Under 1 year	6	4	20.7	18.2
	2). 1-2 years	17	7	58.6	31.8
	3). 3-4 years	5	9	17.2	40.9
	4). 5-9 years	1	2	3.4	9.1
	5). 10 years +				

*Part two: The analysis of principal leadership behaviors perceived by teachers from School A and School B*

**Table 3: Breakdown of OCDQ-RE**

Teachers' Perception of School Climate concerned with Principal and Teachers' Behaviors	Question Numbers
Principal's Behaviors:	
Supportive Behavior	4, 9, 15, 22, 28, 16, 23, 29 and 42
Directive Behavior	5, 10, 17, 24, 30, 34, 35, 39 and 41
Restrictive Behavior	11, 18, 25, 31 and 36
Teachers' Behaviors:	
Collegial Behavior	1, 6, 12, 19, 26, 32, 37 and 40
Intimate Behavior	2, 7, 13, 20, 27, 33 and 38
Disengaged Behavior	3, 8, 14 and 21

As OCDQ-RE Questionnaire is a four-point Likert scales questionnaires, the researcher interpreted total mean scores of leadership behaviors of principal and teachers according to the matrix formula (four level of perception from 1-4):

Low in behavior = number of question items x 2 points

High in behavior= number of question items x 4 points

In Principal's Supportive Behavior, there are 9 question items.

– Low = 9 items x 2 points = 18, High= 9 items x 4 points = 36

So we can interpret the mean scores from 1 to 18 as low and from 19 to 36 as high in principal's supportive behavior.

In Principal's Directive Behavior, there are 9 question items.

– Low = 9 items x 2 points = 18, High= 9 items x 4 points = 36

So we can interpret the mean scores from 1 to 18 as low and from 19 to 36 as high in principal's supportive behavior.

In Principal's Restrictive Behavior, there are 5 question items.

– Low = 5 items x 2 points = 10, High= 5 items x 4 points = 20

So we can interpret the mean scores from 1 to 10 as low and from 11 to 20 as high in principal's supportive behavior.

In Teachers' Collegial Behavior, there are 8 question items.

– Low = 8 items x 2 points = 16, High= 8 items x 4 points = 32

So we can interpret the mean scores from 1 to 16 as low and from 17 to 32 as high in teachers' collegial behavior.

In Teachers' Intimate Behavior, there are 7 question items.

– Low = 7 items x 2 points = 14, High= 7 items x 4 points = 28

So we can interpret the mean scores from 1 to 14 as low and from 15 to 28 as high in teachers' Intimate behavior.

In Teachers' Disengaged Behavior, there are 4 question items.

– Low = 4 items x 2 points = 8, High= 4 items x 4 points = 16

So we can interpret the mean scores from 1 to 8 as low and from 9 to 16 as high in teachers' collegial behavior.

**Table 4: Interpretation of the Total Mean Scores of Leadership Behaviors of Principal and Teachers**

Principal's Leadership Behaviors	Mean Scores	Interpretation
Supportive Behavior (9 items)	1-18	Low
	19-36	High
Directive Behavior (9 items)	1-18	Low
	19-36	High
Restrictive Behavior (5 items)	1-10	Low
	11-20	High
Teachers' Leadership Behaviors	Scores	Interpretation
Collegial Behavior	1-16	Low
	17-32	High
Intimate Behavior	1-14	Low
	15-28	High
Disengage Behavior	1-8	Low
	9-16	High

According to the standardized mean scores interpretation Table 4, we can analyze the principals' leadership behaviors perceived by teachers from School A and School B as shown in Table 5 and 6 below:

**Table 5: Means and Standard Deviations of Leadership Behaviors of Principals from School A**

	N	Mean	Std. Deviation	Interpretation
Supportive Behavior of Principal	29	26.14	6.86983	High
Directive Behavior of Principal	29	18.79	5.09467	High
Restrictive Behavior of Principal	29	11.59	2.82232	High
Valid N (listwise)	29			

Referring to the Table 4 of interpretation of total mean scores, principal's leadership behaviors from School A that were shown in table 7 were interpreted as below:

- Supportive Behavior is considered as high in the mean score of 26.14 (rounded to two decimal points).
- Directive Behavior is considered as high in the mean score of 18.79 (rounded to two decimal points).
- Restrictive Behavior is considered as high in the mean score of 11.59.

Teachers from School A perceived their principal as supportive by the mean score of 26.14 as highest in the comparison mean scores of 26.14, 18.79, and 11.59 respectively. So we can interpret that principal leadership behavior of School A is supportive in the mean score of 26.14.

**Table 6: Means and Standard Deviations of Leadership Behaviors of Principal from School B**

	N	Mean	Std. Deviation	Interpretation
Supportive Behavior of Principal	22	27.09	5.96744	High
Directive Behavior of Principal	22	21.73	4.62068	High
Restrictive Behavior of Principal	22	9.50	2.26253	Low
Valid N (listwise)	22			

Referring to the Table 4 of interpretation of total mean scores, principal's leadership behaviors from School B that were shown in Table 8 were interpreted as below:

- Supportive Behavior and Directive Behavior are considered as high (the mean scores of 27.09 and 21.73 respectively) (rounded to two decimal points).
- Restrictive Behavior is considered as low in the mean score of 9.50 (rounded to two decimal points).

Most teachers from School B perceived their principal as supportive by the mean score of 27.09 as highest the comparison of mean scores of 27.09, 21.73 and 9.50. So we can interpret that principal leadership behavior of School B is supportive in the mean score of 27.09.

In summary, the researcher can interpret and conclude that teachers perceived their principals' leadership behaviors as supportive behavior in both School A and School B regarding to the highest mean scores.

*Part Three. The comparison of the teachers' perceptions of principal leadership behaviors between School A and School B*

To meet the requirement of research objective three, the researcher applied independent sample t-test which can be used to identify the differences and to highlight the answer of research objective three and hypothesis. The hypothesis was tested with .05 level of significant value.

**Table 7: Comparing Teachers' Perceptions of Principal Leadership Behaviors between School A and School B**

Principals' Leadership Behaviors	F	t	df	Sig (2-tailed)	Mean Difference
Supportive Behavior	.996	-.519	49	.606	-.953
Directive Behavior	.382	-2.11	49	.039	-.953
Restrictive Behavior	.871	2.90	49	.006	-.953

\*p< .05

Table 7 described that the significant of .606 was greater than .05 in teachers' perception of Principals' Supportive Leadership Behavior which indicated that there was no significant difference in Principals' Supportive Leadership Behavior perceived by teachers between School A and School B. In Teachers' Perceptions of Directive Behavior of Principals, the significant of .039 is less than .05 level of significant value. Therefore, there is a difference in principals' Directive Leadership Behavior perceived by teachers between School A and School B. In Teachers' Perceptions of Restrictive Behavior of Principals, the significant of .006 is less than .05 level of significant value. Therefore, there is a difference in principals' Restrictive Leadership Behavior perceived by teachers between School A and School B.

*Part Four. The analysis and comparison of school climates perceived by teachers from School A and School B*

To investigate four different kinds of school climates such as open climate, engaged climate, disengaged climate and closed climate, the criteria of four types of school climates were interpreted as below:

(See Table 8 and Table 9 on the next page)

**Table 8: Criteria of Four Types of School Climates (Prototypic Profiles of Climate Types by Hoy, Tarter & Kottkamp, 1999)**

Types of Climates	Principal's Behavior	Teachers' Behavior
Open Climate	High Supportive	High Collegial
Engaged Climate	High Directive	High Collegial
Disengaged Climate	High Supportive	High Disengaged
Closed Climate	High Restrictive	High Disengaged

**Table 9: Means and Standard Deviations of Leadership Behaviors of Principal and Teachers from School A**

	N	Mean	Std. Deviation	Interpretation
Supportive Behavior of Principal	29	26.14	6.86983	High
Directive Behavior of Principal	29	18.79	5.09467	High
Restrictive Behavior of Principal	29	11.59	2.82232	High
Collegial Behavior of Teachers	29	22.76	3.63176	High
Intimate Behavior of Teachers	29	18.62	4.27128	High
Disengage Behavior of Teachers	29	7.52	2.04626	Low
Valid N (listwise)	29			

Referring to the Table 4 of interpretation of total mean scores, most teachers from School A perceived principal's leadership behaviors as supportive as highest and most teachers perceived teachers' leadership as collegial as highest by comparing mean scores.

**Table 10: Interpretation of School Climates of School A**

School Climates	Behaviors of Principal and Teachers	Mean Score Interpretation	Mean Scores of School A
Open Climate	Principal Supportive (High)	Low=1-18 High=19-36	26.14 (High)
	Teacher Collegial (High)	Low=1-16 High=17-32	22.76 (High)
Engaged Climate	Principal Directive (High)	Low=1-18 High=19-36	18.79 (High)
	Teacher Collegial (High)	Low=1-16 High=17-32	22.76 (High)
Disengaged Climate	Principal Supportive (High)	Low=1-18 High=18-36	26.14 (High)
	Teachers Disengaged (High)	Low=1-8 High= 9-16	7.52 (Low)
Closed Climate	Principal's Restrictive (High)	Low=1-10 High=11-30	11.59 (High)
	Teachers' Disengaged (High)	Low=1-8 High=9-18	7.52 (Low)



By the mean scores of leadership behaviors of principal and teachers in the school climate criteria in table 10, school climate of School A could be interpreted as below:

- According to the criteria of school climate, open climate was interpreted as high principal supportive behavior and high teachers collegial behavior. School A got high principal supportive behavior and high teacher's collegial behavior. Thus School A was considered as open climate.
- According to the criteria of school climate, engaged climate was interpreted as high principal directive behavior and high teacher collegial behavior. School A got high principal directive behavior and high teacher's collegial behavior. Thus School A was considered as engaged climate.
- According to the criteria of school climate, disengaged climate was interpreted as high principal supportive behavior and high teacher disengaged behavior. School A got high principal supportive behavior and low teachers disengaged behavior. Thus School A was not considered disengaged climate.
- According to the criteria of school climate, closed climate was interpreted as high principal restrictive behavior and high teacher disengaged behavior. School A got high principal restrictive behavior and low teachers disengaged behavior. Thus School A was not considered as closed climate.

To conclude the analysis of School A's school climates, it was found out that School A was considered as open climate and engaged climate. However most teacher perceived principal's behavior as supportive as highest by the comparison of mean scores. Hence School A was considered as open climate by the comparison of mean scores of principal and teachers.

**Table 11: Means and Standard Deviations of Leadership Behaviors of Principal and Teachers from School B**

	N	Mean	Std. Deviation	Interpretation
Supportive Behavior of Principal	22	27.09	5.96744	High
Directive Behavior of Principal	22	21.73	4.62068	High
Restrictive Behavior of Principal	22	9.50	2.26253	Low
Collegial Behavior of Teachers	22	22.36	2.90395	High
Intimate Behavior of Teachers	22	14.55	3.00361	High
Disengaged Behavior of Teachers	22	5.86	1.88466	Low
Valid N (listwise)	22			

Referring to the Table 4 of interpretation of total mean scores, most teachers from School B perceived principal's leadership behaviors as supportive as highest and most teachers perceived teachers' leadership as collegial as highest by comparing mean scores.

**Table 12: Interpretation of School Climates of School B**

School Climates	Behaviors of Principal and Teachers	Mean Score Interpretation	Mean Scores of School B
Open Climate	Principal's Supportive (High)	Low=1-18 High=19-36	27.09 (High)
	Teachers' Collegial (High)	Low=1-16 High=17-32	22.36 (High)
Engaged Climate	Principal's Directive (High)	Low=1-18 High=19-36	21.73 (High)
	Teachers' Collegial (High)	Low=1-16 High=17-32	22.36 (High)
Disengaged Climate	Principal's Supportive (High)	Low=1-18 High=18-36	27.09 (High)
	Teachers' Disengaged (High)	Low=1-8 High=9-16	5.86 (Low)
Closed Climate	Principal's Restrictive (High)	Low=1-10 High=11-30	9.50 (Low)
	Teachers' Disengaged (High)	Low=1-8 High=9-18	5.86 (Low)

By the mean scores of leadership behaviors of principal and teachers in the school climate criteria in Table 12, school climate of School B could be interpreted as below:

- According to the criteria of school climate, open climate was interpreted as high principal supportive behavior and high teachers collegial behavior. School B got high principal supportive behavior and high teacher's collegial behavior. Thus School B was considered as open climate.
- According to the criteria of school climate, engaged climate was interpreted as high principal directive behavior and high teacher collegial behavior. School B got high principal directive behavior and high teacher's collegial behavior. Thus School B was considered as engaged climate.
- According to the criteria of school climate, disengaged climate was interpreted as high principal supportive behavior and high teacher disengaged behavior. School B got high principal supportive behavior and low teachers disengaged behavior. Thus School B was not considered as disengaged climate.
- According to the criteria of school climate, closed climate was interpreted as high principal restrictive behavior and high teacher disengaged behavior. School B got low principal restrictive behavior and low teachers disengaged behavior so school A was not considered closed climate.

To conclude the analysis of School B's school climates, it was found out that School B was considered as open climate and engaged climate. However most teacher perceived principal's behavior as supportive as highest by the comparison of mean scores. Hence School B was considered as open climate by the comparison of mean scores of principal and teachers.

In summary, both School A and School B were considered as open climates by the comparison of mean scores of principals and teachers.

*Part 5. The comparison of school climates perceived by teachers from School A and School B*

This part shows the answer of Research Objectives 4: To compare the school climates perceived by teachers between School A and School B in Yangon, Myanmar

**Table 13: Comparison Table of School Climates of School A & B**

Types of School Climates	Behaviors of Principal and Teachers	Mean Score Interpretation	Mean Scores of School A	Mean Scores of School B
Open Climate	Principal's Supportive (High)	Low=1-18 High=19-36	26.14 (High)	27.09 (High)
	Teachers' Collegial (High)	Low=1-16 High=17-32	22.76 (High)	22.36 (High)
Engaged Climate	Principal's Directive (High)	Low=1-18 High=19-36	18.79 (High)	21.73 (High)
	Teachers' Collegial (High)	Low=1-16 High=17-32	22.76 (High)	22.36 (High)
Disengaged Climate	Principal's Supportive (High)	Low=1-18 High=18-36	26.14 (High)	27.09 (High)
	Teachers' Disengaged (High)	Low=1-8 High=9-16	7.52 (Low)	5.86 (Low)
Closed Climate	Principal's Restrictive (High)	Low=1-10 High=11-30	11.59 (High)	9.50 (Low)
	Teachers' Disengaged (High)	Low=1-8 High=9-18	7.52 (Low)	5.86 (Low)

Based on the criteria and interpretation of school climates in table 13, it was found out that school A and school B were considered open climates (high principal supportive and high teacher collegial) and engaged climates (high principal directive and high teacher collegial). However by the comparison of mean scores of principal supportive and directive perceived by teachers, School A and School B were considered as open climates. Hence the researcher rejected hypothesis 2.

Hypothesis 2: There is a difference in school climates between School A and School B in Yangon, Myanmar.

## Discussion

The discussion of findings revealed according to the research objectives as following:

Objective 1: To identify the teachers' perceptions of their principals' leadership behaviors of School A and School B in Yangon, Myanmar.

Objective 3: To compare the principals' leadership behaviors perceived by teachers between School A and School B in Yangon, Myanmar.

To analyze principals' leadership behaviors perceived by teachers from two international elementary schools in Yangon, the revised instrument Organizational Climate Description Questionnaire (OCDQ – RE) was applied to survey which principal's leadership behaviors could be found: supportive, directive and restrictive. Based on the data analysis perceived by teachers, most teachers perceived their principal as supportive leaders in both School A and School B.

MacBeath & Myers (1999) mentioned about head teacher competencies from a point of view of Industrial Society. The Industrial Society produced its own 20 lists of head teacher competencies. The first five items on the lists were concerned with the importance of support and encouragement to the followers such as: supporting other people, recognizing individual effort, promoting other people's self-esteem, developing other people, minimizing anxiety. Cordeiro and Cunningham (2013) stated that the National Center for School Leadership (NCSL) contributed the five key aspects of the role of principal as below:

1. Defining and communicating a school's educational mission
2. Coordinating curriculum
3. Supervising and supporting teachers
4. Monitoring student progress
5. Nurturing a positive learning climate

Crum and Sherman (2008) conducted the research of facilitating high achievement high school principals' reflections on their successful leadership practice. In their research, 12 principals were interviewed and asked to describe their daily practices and state their roles as leaders. The principals pictured their roles as supportive for the staff instead of leading them in an authoritarian manner.

Objective 2: To identify the teachers' perceptions of their school climates of School A and School B in Yangon, Myanmar.

Objective 4: To compare the school climates perceived by teachers between School A and School B in Yangon, Myanmar.

School climate is the main crucial factor to distinguish the difference between effective and ineffective schools. As schools, offices and classes are employed with people, school climate represents a human condition. When the school has a positive climate, it can develop an atmosphere where people's best efforts, cooperative tasks, high level of trust and respect among faculty, school improvement, students achievement can be generated (Norton, 2008.) Levin and Lockhead (1993) described that during the 1970s, a group of British researchers studied the features of effective elementary schools and they found out 12 characteristics: purposeful leadership of the staff by the headteacher, involvement of deputy head, involvement of teachers, consistency amongst teachers, structured sessions, intellectually challenging teaching, a work-centered environment, limited focus with sessions, maximum communication between teachers and pupils, record keeping, parental involvement and positive climate. Hence positive climate is one of the characteristic of effective schools.

A variety of climate studies have been conducted on these areas: the characteristic of effective schools with positive climates and the impact of climate on

student achievement. In Mooney's study of relationship between transformational leadership and organizational climate (2013), there was a significant relationship between teachers' perceptions of principal's transformational leadership style and open school climate. Gaines (2011) utilized a descriptive and quantitative research on the relationship between elementary school principals' leadership styles and school climate in an urban district within the southeastern region of the United States and she found that there was a positive linear relationship between elementary school principals' leadership styles and school climate. In Shaw's research (2009) it was found that teachers provided highest mean rating for supportive behavior for principals and lowest mean rating for disengaged behaviors for teachers. Williamson (2007) utilized the study of relationship between principal's leadership style and school climate and the result showed that there was a significant relationship between principal's leadership style and school climate. In Jankens' findings (2011) there were significant relationships between both principal openness and student growth, and teacher openness and student growth.

Regarding to the previous studies about the relationship between principals' leadership styles and school climates, the researcher noticed that the principals' leadership behavior impacts on school climate. Principals' supportive or principals' openness can create positive school climate. Moreover, when a school reveals an open climate, it can generate better principal-teacher relationships, teachers-teachers relationship, teachers-students relationships to develop better student performance and growth. In this study, the researcher discovered that both School A and School B received their principals' supportive behaviors and open climates. The previous findings supported this finding of study that principals' leadership behaviors impacted on school climate.

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