

The mediating roles of emotional intelligence and school climate on the relationship between technological leadership of school heads and teaching effectiveness of teachers: Path analysis

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Abstract

This study attempted to determine the mediating effects of emotional intelligence and school climate on the relationship between technological leadership and teaching effectiveness using the Path Model Analysis of 407 elementary school teachers in the Davao Region, Philippines. Findings revealed that there were very high levels of technological leadership and teaching effectiveness. While emotional intelligence and school climate obtained high levels. There were significant correlations between technological leadership and teaching effectiveness; technological leadership and emotional intelligence; technological leadership and school climate; emotional intelligence and teaching effectiveness; as well as school climate and teaching effectiveness. Further, results showed significant partial mediating effects of emotional intelligence and school climate on the relationship between technological leadership and teaching effectiveness. This means that schools may consider enhancing teaching effectiveness by converting high levels of the teachers' emotional intelligence and school climate from high to very high levels through the school's faculty development program.

Keywords: educational management, technological leadership, teaching effectiveness, emotional intelligence, school climate, Philippines

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1. Introduction

Teaching effectiveness has been the national concern in Education system in many countries like Pennsylvania. Teachers may have the technical qualifications such as college degrees or even a post graduate degree. However, new teachers tend to be less effective, and this is one of the reasons why their students have poor rating skills in some subject areas. (Petrelli, 2020). With this dilemma, learners might lose confidence in their ability to learn the subject and students may simply lack interest in the topic because the teacher is less effective at demonstrating lessons. Research shows that ineffective instructors could disproportionately affect students who are already performing poorly. This lingering effect could potentially put a student off a subject for the rest of their career, and even later into life. In addition, unequal distribution of high-quality teachers as the most urgent problem facing American education (Murnane & Steele, 2017).

With this learning situation, the teacher stands as an important variable in student achievement. The influence of effective teachers tend to shape the students' cognitive development as well as their lifelong quest for personal growth and development. Since teachers can greatly affect the quality of education. Even if an academic curriculum is drafted brilliantly and learning facilities is best, the quality of education still lies on the hand of those effective teachers in the classroom (Agsalud, 2016).

Moreover, in dealing with the students, teachers must require high level of emotional intelligence. Since research have consistently shown that emotional intelligence of teachers has an impact on the effectiveness of their teaching. Research findings have revealed that teachers who are highly emotionally intelligent are better equipped to keep their students engaged in learning activities (Olson & Wyett, 2016). Also, dealing with difficult people in the work place, Andrews (2021) believed that emotional intelligence is critical in building and maintaining relationship to other people like colleague in the work place. Thus, for him it is better to encourage people to understand other behavior through social awareness.

In addition, teachers' positive attitude towards educational technologies is considered to be essential for the teaching and learning. This was the belief of Samsudin (2020) who believed that that technological leadership could affect teaching effectiveness towards students' learning outcomes. Since it could boost their teaching skills, improve the way of learning, and make a positive impact on the effectiveness of their teaching.

Many research revealed that there have been studies in the past linking teaching effectiveness with performance of individuals mostly in the global settings. However, very little research has explored the role of Emotional Intelligence, Technological leadership and school climate in teaching effectiveness. To understand the role of teaching Effectiveness in the local setting. The researcher wanted to conduct this study focusing the influence of emotional intelligence, technological leadership and school climate to the teaching effectiveness of public secondary school teachers in Davao Region. Thus, there is a need to conduct this study in the realization of achieving goals of public elementary school teachers for a genuine and willingness to share responsibility involved in the classroom.

1.1 Purpose of the Study

The purpose of this study is to determine the mediating effect of emotional intelligence and school climate on the relationship between technological leadership and teaching effectiveness. Also, it sought to answer the following questions: Further, determine tit also determine to ascertain and to determine the significance of

mediating effects of emotional intelligence and school climate on the relationship between technological leadership and teaching effectiveness.

- What is the level of technological leadership, emotional intelligence, school climate and teaching effectiveness of public elementary schools in Davao region of public elementary school teachers in Davao Region
- What is the significant relationship between technological leadership and teaching effectiveness; technological leadership and emotional intelligence; technological leadership and school climate, emotional intelligence and teaching effectiveness, school climate and teaching effectiveness
- What is the significance of mediating effects of emotional intelligence and school climate on the relationship between technological leadership and teaching effectiveness

1.2 Theoretical Lens

This research was anchored on the following credible authorities: This study is anchored on Educators Theory of Action (Brown, 2020; Reinholz & Andrews, 2020), which describes how an organization intends to work to create the outcomes it wants. Every child deserves to have a team of effective leaders throughout their career. Also, *Social cognitive theory encourages how* school climate affect students view themselves as active learners within the classroom. It is also associated to higher effectiveness in teaching. Therefore, students living in a cooperative, helpful class are more likely to feel identity safe as they develop a sense of belonging and contribute to their class community. Thus, school climate greatly affects effectiveness in teaching.

1.3 Significance of the Study

This study is significant to the DepEd authorities in executing and urging the educators to ensure teaching effectiveness to help the students in enhancing their performance. Also, the results of the study would give gauge information to the school heads especially for the elementary. This would be an approval of how the instructors have the capacity to be an effective teachers to their students. For the teachers, it serves as a reflection that would furnish them creative thoughts and ideas to be more effective in their chosen career especially so when it comes to the performance of their learners.

2. Method

2.1 Design and Procedure

This study used quantitative non-experimental research design utilizing causal effect technique. Quantitative research design is a systematic scientific investigation of data and their relationship (Sinks, 2007). Likewise, causal effect was used because the study will determine what domains best predict the teaching effectiveness of teachers. It is also correlation in nature that aimed to investigate the association of the variables involved. This study utilized the mediating effect to explore the mediating roles of emotional Intelligence and School Climate on the relationship between Technological Leadership and Teaching Effectiveness. This study used Mediating Path model.

2.2 Respondents of the Study

There were 400 respondents in this study, in which the researcher had used the stratified random sampling technique (Ullah, 2022). The eight (8) divisions are the subject of the study with a total number of 400 respondents from the total population of 25,469 or .015 percent of the total Elementary teachers in Region XI were the subject of the study with the total number of 400 respondents of which 0.011 % of the total population or 292 respondents are Female teachers while 0.004% or 108 respondents are Male teachers. Meanwhile as to the

Age of the respondents, there were 228 or 0.008 % of the respondents belong to the 25-35 age bracket; for the age of 36-45 have 106 respondents or 0.0041%. While the 38 respondents or 0.0014% were from the 46-55 age level. There were only 0.0010% or 28 respondents belongs to the bracket of 56-65.

2.3 Materials/ Instruments

A validated and modified questionnaire adapted from the web sources was used in gathering the data. This questionnaire consisted of variables such as: emotional intelligence, technological leadership, social climate and teaching effectiveness. Emotional Intelligence (EI). Based on Roqan Emotional Intelligence Test (REIT) constructed and standardized by Roqan and Ahmad (2017). This scale was designed to determine the level of teachers' emotional intelligence. The instrument consists of 35 items divided into five (5) subscale: self-awareness, managing emotions, motivating oneself, empathy and social skills.

While the second instruments used was Technological Leadership Assessment (TLA) served also as the second independent variable which was developed by Castle (2005) The instrument consists of 35 items divided into six (6) subscale: leadership and vision, learning and teaching, productivity and professional practice, support management and operation, assessment and evaluation and social, legal and ethical issues. Another instrument used was School Climate which was developed by Calstela (2016). This scale is to determine what degree that a school climate will be described. Lastly, Teaching Effectiveness Scale (TES) is the instrument used to measure the level of teaching effectiveness of public secondary school teachers in Region XI developed by Calaguas (2013). The TES consists of 67 items divided into four sub-scale: personality; relational competence, subject expertise, professional competence.

3. Results and Discussion

3.1 Level of technological leadership

Exhibited in Table 1 is the level of technological leadership, with a standard deviation of .39 and a weighted mean of 4.12 with a descriptive equivalent of high. The results show that three out of six indicators received a very high mean value, such as: leadership and vision as a teacher with a mean value of 4.27; Assessment and Evaluation with a mean value of 4.24; productivity and professional practice with a mean value of 4.21.

Table 1

Level of technological leadership

Indicators	SD	Mean	D.E.
Leadership and Vision as a Teacher	0.76	4.27	Very High
Learning and Teaching	0.66	3.92	High
Productivity and Professional Practice	0.74	4.21	Very High
Support, Management, and Operations	0.61	4.05	High
Assessment and Evaluation	0.68	4.24	Very High
Social, Legal, and Ethical Issues	0.60	4.02	High
Overall	0.39	4.12	High

3.2 Level of teaching effectiveness

In Table 2, the overall weighted means of each criterion of teaching effectiveness are presented. The overall standard deviation is 0.33 with a weighted mean of 4.17 with a descriptive interpretation of High. The results revealed that the *Management of Learning* has the highest mean score with a mean value of 4.35, which is described as Very High. This is followed by *Knowledge of Subject Matter* with a mean value of 4.25, which is also as Very High. The remaining two indicators; Commitment and Teaching for Independent gained a descriptive equivalent of high with a mean value of 4.15 and 3.93 respectively. However, among the indicators, *Teaching for Independent* has the lowest mean value.

Table 2

Level of teaching effectiveness

Indicators	SD	Mean	D.E.
Commitment	0.54	4.15	High
Knowledge of Subject Matter	0.51	4.25	Very High
Teaching for Independent	0.60	3.93	High
Management of Learning	0.50	4.35	Very High
Overall	0.33	4.17	High

3.3 Level of emotional intelligence

Shown in Table 3 is the level of emotional intelligence of school heads with an overall standard deviation of 0.37 and an overall weighted mean score of 4.16 that has a descriptive equivalent of High. The following specific items' result which gained the highest means are *Being able to tell if someone has upset or annoyed me* and *Being able to let anger 'go' quickly so that it no longer affects me* of which both has a mean value of 4.73 and a descriptive equivalent of Very High; followed by *when I feel anxious I usually being able to account for the reason(s)* and *awareness of my own emotions is very being important to me at all times* of which both with a mean value of 4.63 and a descriptive equivalent of Very High; and *I know what is making me happy of* with a mean value of 4.33 with a descriptive equivalent of Very High.

Table 3

Level of emotional Intelligence

Items	SD	Mean	D.E.
Being able to realize immediately when I lose my temper	0.85	4.53	Very High
Being able to know when I am happy	0.67	4.31	Very High
Being able to usually recognize when I am stressed	0.72	4.12	High
When I am being 'emotional' I am being aware of this	0.79	4.35	Very High
When I feel anxious I usually being able to account for the reason(s)	0.72	4.63	Very High
Being able to know when I'm being unreasonable	0.69	4.30	Very High
Awareness of my own emotions is very being important to me at all times	0.70	4.63	Very High
Being able to tell if someone has upset or annoyed me	0.59	4.73	Very High
Being able to let anger 'go' quickly so that it no longer affects me	0.59	4.73	Very High
I know what is making me happy	0.67	4.61	Very High
Being able to 'reframe' bad situations quickly	0.94	4.04	High

Table 3 ... continued

Not wearing my 'heart on my sleeve'	0.85	4.15	High
Others can rarely being able to tell what kind of mood I am in	0.98	4.09	High
I rarely not 'flying off the handle' at other people	0.68	4.17	High
Difficult people are not annoying me	0.78	4.15	High
Being able to consciously alter my frame of mind or mood	0.84	4.10	High
Not letting stressful situations or people affect me once I have left work	0.57	4.12	High
I rarely been worrying about work or life in general	0.57	4.16	High
Being able to suppress my emotions when I need to	0.76	4.17	High
Others often are not knowing how I am feeling about things ²	0.68	4.31	Very High
Being able to always motive myself to do difficult tasks	0.89	4.21	Very High
Being able to prioritize important activities at work and get on with them	0.82	4.19	High
I always meet deadlines	0.83	4.09	High
I am not wasting time	0.78	4.11	High
I am not prevaricating things	0.81	4.20	Very High
Believing that you should do the difficult things first	0.86	4.24	Very High
Delayed gratification is a virtue that I am holding to	0.78	3.92	High
Believing in 'Action this Day	0.82	4.22	Very High
Being able to always motivate myself even when I feel low	0.84	4.28	Very High
Motivations is being the key to my success	0.74	4.08	High
I am always being able to see things from the other person's viewpoint	0.80	4.21	Very High
I am being excellent at empathizing with someone else's problem	0.85	4.25	Very High
Being able to tell if someone is not happy with me	0.80	4.09	High
Being able to tell if a team of people are not getting along with each other	0.79	4.26	Very High
Being able to usually understand why people are being difficult towards me	0.85	4.27	Very High
Other individuals are not 'difficult' just 'different'	0.82	4.17	High
Being able to understand if I am being unreasonable	0.88	4.22	Very High
Having the ability to understand why my actions sometimes offend others	0.84	4.09	High
I am sometimes seeing things from others' point of view	0.83	4.15	High
I am generally building solid relationships with those I work with	0.88	4.15	High
I am being an excellent listener	0.87	4.02	High
I am not interrupting other people's conversations	0.95	3.92	High
I am being good at adapting and mixing with a variety of people	0.88	3.80	High
People are being the most interesting thing in life for me	0.79	3.83	High
I am loving to meet new people and get to know what makes them 'tick'	1.12	3.78	High

Table 3 ... continued

I am needing a variety of work colleagues to make my job interesting	1.13	3.90	High
I like asking questions to find out what it is important to people	0.88	3.76	High
I am seeing that working with difficult people as simply a challenge to win them over	1.01	3.75	High
I am being good at reconciling differences with other people	1.01	3.77	High
I am generally building solid relationships with those I work with	0.88	3.79	High
Overall	0.37	4.16	High

3.4 Level of school climate

As can be gleaned in Table 4, it presented the level of school climate with an overall standard deviation of 0.34 and an overall weighted mean score of 4.12 and has a verbal interpretation of High. For specific items' result, the highest means with a verbal description of Very High are Faculty members are having the time and interest to commune with one another, and are feeling very little isolation with a mean value of 4.08; Students are learning to work cooperatively and as members of teams with a mean value of 4.52, Students are being given systematic opportunities to reflect on their learning progress and Classrooms are positive places, and teachers are maintaining a positive affect of which both have a mean value of 4.46. Meanwhile, some items have the lowest means and have a verbal description of Moderate.

Table 4

Level of school climate

Items	SD	Mean	D.E.
Welcoming to outsiders, the school projects is being introduced to visitors.	0.76	3.87	High
Having purposeful use of school colors/symbols.	0.86	4.07	High
Staff and students are taking ownership of physical appearance.	0.69	4.31	Very High
Having no litter.	0.80	4.29	Very High
Current student work is being displayed to show pride and ownership by students.	0.59	4.07	High
Things are working and/or getting fixed immediately.	0.72	3.97	High
Staff and students are having respect for custodians.	0.49	4.07	High
Graffiti is rare because students are feeling some sense of ownership of the school.	0.49	4.05	High
Faculty members are commonly collaborating on matters of teaching.	0.77	3.90	High
Faculty members are approaching problems as a team/collective.	0.83	4.24	Very High
Faculty members are using their planning time constructively and refraining from denigrating students in teacher areas.	0.71	4.30	Very High
Faculty members are being typically constructive when speaking of each other and/or administrators.	0.80	4.24	Very High
Faculty members are feeling a collective sense of dissatisfaction with status quo, and finding ways to take action to improve.	0.62	4.07	High

Table 4 ... continued

Faculty members are exhibiting high level of respect for one another.	0.72	3.98	High
Faculty meetings are being attended by most, and addressing relevant content.	0.51	4.09	High
Staff and all-school events are being well attended by faculty.	0.50	4.03	High
Leadership roles are being most likely performed by faculty members with other faculty expressing appreciation.	0.60	4.36	Very High
Faculty members are having the time and interest to commune with one another, and are feeling very little isolation.	0.56	4.74	Very High
“School” is being defined by the warm regard for the inhabitants of the building.	0.88	3.80	High
Students of various cultures and subgroups are blending, interrelating, and feeling like valued members of the community.	0.90	3.62	High
Students are readily accepting the purpose of zero tolerance for “put-downs.	0.86	3.72	High
Many students are attending school events.	0.79	3.32	Moderate
Popular” students are having a feeling of an obligation to serve the school, not a sense of entitlement.	0.70	4.04	High
Most students are feeling safe from violence.	0.84	3.45	High
Leaders are being easy to find due to the wide range of gifts that are validated and harnessed.	0.76	3.65	High
Athletes are being valued as quality community members and approaching their role with a humble sense of honor.	0.90	3.67	High
Most students are being expected to be given ownership over decisions that affect them.	0.86	3.32	Moderate
Most students are being expected to engage in “authentic learning” activities and to be taught with methods that make them responsible.	0.75	3.48	High
School is having a sense of vision and a mission that is shared by all staff.	0.89	4.29	Very High
Vision is coming from the collective will of the school community.	0.92	4.32	Very High
School’s decisions are being conspicuously grounded in the mission.	0.88	4.06	High
Vast majority of staff members are feeling valued and listened to.	0.80	4.08	High
A sense of “shared values” is being purposefully cultivated.	0.77	4.17	High
Staff is using a clear system for selecting priority needs, and has a highly functioning team for “shared decision-making.”	0.89	3.97	High
Most of the faculty and staff are having a high level of trust and respect for leadership.	0.87	4.08	High
Teacher leadership is being systematic and integral to the school’s leadership strategy.	0.83	3.95	High
Leadership is demonstrating a high level of accountability, and finding ways to “make it happen.”	0.75	4.16	High
Leadership is being in tune with students and community	0.77	4.05	High
School-wide discipline policy is being consistently applied.	0.79	4.26	Very High
It is being evident from student behavior that there are clear expectations and consistency in the discipline policy.	0.75	4.44	Very High

Table 4 ... continued

Most teachers are using effective discipline strategies that are defined by logical consequences and refrain from punishments or shaming.	0.79	4.23	Very High
Classrooms are positive places, and teachers are maintaining a positive affect, and following-through with consequences in a calm and non personal manner.	0.69	4.46	Very High
Having maximum use of student-generated ideas and input.	0.77	4.28	Very High
Most consider teaching and discipline within the lens of basic student needs that are being met for a functional class.	0.78	4.07	High
Teacher-student interactions are being typically described as supportive and respectful.	0.85	4.28	Very High
When disciplining students, teachers typically are focusing on the problematic behavior, not the student as a person.	0.79	4.14	High
Management strategies are consistently promoting increased student self direction over time.	0.70	4.17	High
Teachers are successfully creating a sense of community in their classes.	0.99	4.42	High
Learning targets for assessments are being clear and attainable for learners.	0.79	4.46	Very High
Instruction/Assessment is promoting students' sense of ownership and responsibility for their learning.	0.87	4.42	Very High
The grading in most classes is focusing on both the end result and the process.	0.85	4.24	Very High
Teachers are having some mode of making sense of, and being responsive to, varying learning styles.	0.87	4.41	Very High
Instruction is being dynamic, involving, learner centered, and challenging.	0.94	4.36	Very High
Students are learning to work cooperatively and as members of teams.	0.74	4.52	Very High
Students are being given systematic opportunities to reflect on their learning progress.	0.73	4.46	Very High
Students are being seen as the primary users of assessment information, and assessment is being used for the purpose of informing the learning process and is never used to punish or shame.	0.71	4.47	Very High
Classroom dialogue is being characterized by higher-order thinking (e.g., analysis, application, and synthesis)	0.78	4.44	Very High
Students are consistently feeling as though they are learning subjects in-depth.	0.72	4.33	Very High
Students are feeling as though they are part of a community.	0.91	4.15	High
Students are voluntarily correcting peers who use destructive and/or abusive language.	0.86	4.21	Very High
Students are feeling as though they are working toward collective goals.	0.91	4.24	Very High
Students are speaking about the school in proud, positive terms.	0.89	4.27	Very High
Most students are feeling listened to, represented, and that they have a voice.	0.90	4.29	Very High
Most students are feeling a sense of belonging to something larger.	0.92	4.14	High
Teachers are sharing commonly high expectations for all students.	0.89	4.07	High

Table 4 ... continued

Most students are feeling as though they owe their school a debt of gratitude upon graduation.	0.82	4.19	High
Students are feeling welcome and comfortable in talking to adults and/or designated peer counselors.	0.88	4.21	Very High
School is maintaining traditions that promote school pride and a sense of historical continuity.	0.82	4.16	High
School is being perceived as welcoming to all parents.	0.87	4.05	High
School is sending out regular communication to community, including invitations to attend key events.	0.69	4.27	Very High
Community members are regularly being invited to speak in classes.	0.81	4.05	High
Service learning efforts are being regular, promoting student learning and positive community-relations.	0.76	4.07	High
Parents and coaches are all working for the best interest of student athletes.	0.92	3.90	High
Volunteer efforts are being well coordinated, volunteers are plentiful, and conspicuously appreciated.	0.91	3.97	High
Athletic events and Fine Arts performances are being well attended due to deliberate efforts toward promotion and crowd appreciation.	0.87	4.08	High
Overall	0.34	4.12	High

3.5 Relationship between technological leadership and teaching effectiveness

Presented in Table 5 are the test results of the relationship between Technological Leadership and Teaching Effectiveness. It can be noted in the hypothesis, the relationship was tested at 0.05 level of significance. The overall r-value of .508 with a p-value of <0.05 signified the rejection of the null hypothesis. This means that there is a significant relationship between Technological Leadership and Teaching Effectiveness and that Technological Leadership is correlated with Teaching Effectiveness.

3.6 Relationship between technological leadership and emotional intelligence

Shown in Table 6 are the results of the test of the relationship between Technological Leadership and Emotional Intelligence. The results show that the overall values reveal a positive and significant relationship between Technological Leadership and Emotional Intelligence ($r=.567$, p less than .05). Further, all of the indicators of Technological Leadership correlate positively with Emotional Intelligence, namely the overall r-value is .259 on Leadership and Vision as a Teacher, .197 on Learning and Teaching, .477 on Productivity and Professional Practice, .400 on Support, Management, and Operations, .350 on Assessment and Evaluation, and on Social, Legal, and Ethical Issues ($r=.314$, p , less than .05).

Table 6

Significance on the relationship between levels of technological leadership and emotional intelligence

Technological Leadership	Emotional Intelligence
	Overall
Leadership and Vision as a Teacher	.259* (0.000)
Learning and Teaching	.197* (0.000)
Productivity and Professional Practice	.477* (0.000)
Support, Management, and Operations	.400* (0.000)
Assessment and Evaluation	.350* (0.000)
Social, Legal, and Ethical Issues	.314* (0.000)
Overall	.567* (0.000)

*Significant at 0.05 significance level.

3.7 Relationship between levels of technological leadership and school climate

Depicts in Table 7 are the results of the test of the relationship between Technological Leadership and school climate. The results show that the overall r-value of .545 with p less than .05 reveal a positive and significant relationship between Technological Leadership and school climate. More precisely, all of the indicators of Technological Leadership correlate positively with school climate, namely on Leadership and Vision as a Teacher gained an r-value of .216; while on Learning and Teaching has .193; on Productivity and Professional Practice got .460; on Support, Management, and Operations obtained .452; on Assessment and Evaluation, .341 and on Social, Legal, and Ethical Issues ($r=.266$ p less than .05).

Table 7

Significance on the relationship between levels of technological leadership and school climate

Technological Leadership	School Climate
	Overall
Leadership and Vision as a Teacher	.216* (0.000)
Learning and Teaching	.193* (0.000)
Productivity and Professional Practice	.460* (0.000)
Support, Management, and Operations	.452* (0.000)
Assessment and Evaluation	.341* (0.000)
Social, Legal, and Ethical Issues	.266* (0.000)
Overall	.545* (0.000)

*Significant at 0.05 significance level.

3.8 Mediating Effect: Path Analysis (Significant Partial Mediation)

Results show the mediating effect of emotional intelligence and school climate using path analysis as depicted in Table 10. Path TechLead (Technological Leadership) to SchoolClimate (School Climate) revealed a significant regression with p less than 0.001. This path signifies that every unit increase in Technological Leadership corresponds to a .545-unit increase in school climate with a standard error of .036. Also, Path TechLead to EmoIntelligence (Emotional Intelligence) revealed a significant regression with p less than 0.001. This path signifies that for every unit increase Technological Leadership corresponds to a .567-unit increase in Emotional Intelligence with a standard error of .039. While Path SchoolClimate to TeachEffect (Teachers Effectiveness) also shows a significant regression with p less than 0.001, which further implies that every unit increase in school climate corresponds to a 0.239-unit increase in teachers' effectiveness.

Table 8

Significance on the relationship between levels of emotional intelligence and teaching effectiveness

Emotional Intelligence	Teaching Effectiveness				
	Commitment	Knowledge of Subject Matter	Teaching for Independent Learning	Management Learning	Overall
Overall	.281* (0.000)	.293* (0.000)	.286* (0.000)	.343* (0.000)	.483* (0.000)

*Significant at 0.05 significance level.

4. Conclusions and recommendation

As reflected in the findings of the study, conclusions are drawn in this section. The results exhibit a very high level for technological leadership, a high level for emotional intelligence, a high-level on school climate and a very high level for teaching effectiveness. It generally indicates that there is a significant relationship between technological leadership and teaching effectiveness, technological leadership and emotional intelligence, technological leadership and school climate, emotional intelligence and teaching effectiveness, school climate and teaching effectiveness.

Further, it generally conclude that though the school has a very high level in the aspect of technological leadership, it is still needs to improve and level up the emotional intelligence of the teachers as well as the school climate. This may help to establish the effectiveness of the teachers.

The findings of this study confirm the assumptions about the partial mediating effect of emotional and school climate on the relationship between technological leadership and teaching effectiveness. Although emotional intelligence and school climate only have partial mediation, it means that the mediator cannot explain the influence of technological leadership on teaching effectiveness.

The findings of this study validate the Educators Theory of Action which was articulated by Brown, 2020; Reinholz & Andrews, 2020). This theory would best explain to fully understand the relationship between school heads and teachers in the effectiveness of education. He believed that teaching effectiveness is the most important factor and greatly needed in the education. A students deserved to have a team of effective mentor. Since effectiveness can be developed, teachers teaching skills would best achieved through the help of their superior by

Based on the findings and conclusions, several recommendations are offered. Study revealed that among the indicators of technological leadership of the school heads, teaching and learning obtained the lowest mean. Specifically on the items;

- Facilitating or ensuring the delivery of professional development on the use of technology to faculty and staff,
- Disseminating or modeling best practices in learning and teaching with technology to faculty and staff.
- Providing support to teachers or staff who were attempting to share information about technology practices, issues, and concerns. This can be address through inclusion of the professional development of teachers with technology in the school improvement plan so that in-service training focusing the technology enhancing during MPRE time will be given a budget.

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