A PATH MODEL OF TEACHERS' TEACHING EFFECTIVENESS AS ESTIMATED BY MANAGERIAL, INTELLECTUAL AND COMMUNICATION SKILLS

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ABSTRACT

This study attempted to investigate the managerial skills, intellectual skills, communication skills and teaching effectiveness of elementary and secondary public-school teachers. Four hundred teachers from M'lang Central district, Cotabato participated during the conduct of this study for the S.Y. 2021 – 2022. This study employed a path analysis method using quantitative approach. The data gathering tool contained an adopted questionnaire coming from the different authors. Mean, standard deviation, Pearson product moment correlation, multiple regression analysis and structural equation modeling were used in statistical tool. Based on the findings of the study, teaching effectiveness, managerial skills and intellectual skills were described as high. Meanwhile, the communication skills were described as moderate. The results also revealed that there is a significant relationship between managerial skills, intellectual skills, communication skills and teachers' teaching effectiveness. Managerial skills and intellectual skills have significantly predicted the teachers' teaching effectiveness compared to communication skills. Hypothesized model 5 have successfully met the criteria set by each index. This means that the model fits well with the data which can best explain the teaching effectiveness of teachers.

Keywords: *Teaching Effectiveness, Managerial Skills, Intellectual Skills, Communication Skills, Path Analysis, M'lang Central District*

INTRODUCTION

Education is a dominant factor that acts as a catalyst for human intellectual, physiological, moral, and social progress and is among the most valuable aspects that have a significant role in the nation's development, affluence, and advancement. As a result, education is the fundamental basis of national integration, and teaching is the foundation of knowledge; thus, the significance of research arises in this vital field. The reality of course shows that many studies have been conducted on education, but there is still room for new studies because a person's advancement and development are ongoing, as is the need for this field to continue to thrive. That is why teaching effectiveness has grown in importance (Elizabeth et al., 2018; Haigh & Macjisack, 2018; Kyriacou & Chein, 2019; & Westwood, 2018).

It is argued that effective teaching and learning can happen if teachers hold adequate extensive experience because experience has been always considered the best teacher. Contrastingly, according to the Department of Education (2018), 68% of newly qualified and less

experienced teachers are regarded as ineffective. It is assumed that newly trained qualified employees have less to offer than those with more experience because they have new knowledge, skills, and experience. Tshabalala (2018) diagnosed that the effectiveness of teacher education influences teaching methods and skill improvement.

Thus, several studies have been conducted to measure the dimensions and factors of teaching effectiveness of teachers in different methods such as quantitative and qualitative approaches, sequential design, and mixed methods design. However, there are no related studies on teaching effectiveness that was already conducted in M'lang, Cotabato linking different variables utilizing the path analysis model. Therefore, the researcher is interested in filling the gap in this research study by formulating and developing a new approach, model, and theoretical framework examining the interrelationship of dependent and independent variables.

This study is relevant to the readers for it leads to the development of a framework designed to categorize empirical work of effective research and inform subsequent literature searches. This was also used to provide insight into the themes on which a considerable body of work agrees and could provide educational leaders with the knowledge needed to motivate, engage and retain teachers. Results, discussions, and findings from this study can be used by policymakers, school administrators, and teachers as credible source to improve school productivity. Similarly, intellectuals and research scholars can utilize this study by getting concepts for their next research projects.

FRAMEWORK

A variety of theories can illustrate teaching effectiveness, but the point of view of Bolhuis (2003) on teaching effectiveness appears to be relevant for this current study. He distinguished five interconnected components which consisted of goal setting, goal orientation, learning activity implementation, evaluation, and regulating/monitoring/decoding. Goal setting and goal orientation are described as class activities that structure the targets or objectives of students and guide them forward into learning to achieve the goals. Besides, classroom learning activities influence students' internal (such as processing of information) and external (such as hands-on) learning.

The evaluation activities that were undertaken in the activities in the classroom evaluate the students' and teachers' progress concerning the instructional objectives. Subsequently, the framework includes a regulatory element, which is outlined by activities that are needed to determine, induce, or monitor learning.

As per Bolhuis (2003), the first four components come last in a cycle, but the central integrative components regulate/monitor/decide to connect the other four. In any case, the cycle of the components is arranged in, they do not perform a specific function in a sequence, and the arrangements can be connected by slopes and moves between components. However, to build knowledge, students must participate in the classroom process. The author further assumed that learning activity implementation is strongly connected to knowledge management processes.

METHOD

Research Design

This study utilized the descriptive-correlational research design. Descriptive research design was used to obtain information concerning the current status of the phenomena to describe (Shuttleworth, 2008). Moreover, it is a fact-finding study that will allow the researcher to examine characteristics, behaviors, and experiences of study participants (Calmorin, 2007). Furthermore, the correlational design was used to identify the strength and nature of association between two or more variables (Creswell, 2003).

Respondents

The public-school teachers in elementary and secondary level in M'lang, Central district were the respondents of this study. Using the Slovin's formula to compute the sample size, a total of 400 teachers were selected using the stratified sampling technique.

Instruments

Sets of adopted questionnaires were used to gather data from the respondents. Even if the tools already have validity and reliability assessment. These instruments were subjected to validity and reliability test. The instruments include teaching effectiveness and managerial skills questionnaire (Silva, 2021), intellectual skills questionnaire (Punturat et al., 2014), and communication skills questionnaire (Obilor, 2020).

Statistical Tools

Mean and Standard Deviation was used to determine the levels of teaching effectiveness, managerial, intellectual and communication skills of teachers. Moreover, the Pearson Product Moment Correlation was utilized to determine the relationship between teaching effectiveness, managerial, intellectual and communication skills of teachers. In addition, multiple regression analysis was used to measure the teaching effectiveness, managerial, intellectual and communication skills. Furthermore, structural equation modeling was employed to assess the interrelationships of the variables.

RESULTS AND DISCUSSION

Level of Teachers' Teaching Effectiveness

Table 1 shows the level of teaching effectiveness of teacher in Central district of M'lang, Cotabato. The teachers' teaching effectiveness contains four indicators namely, management of

students' behavior, organization of instruction, assessment of students' learning and adjustment of learning. The overall mean generates for this variable is 4.40 which can be described as high.

The management of students' behavior has a mean of 4.43 which described as high. This means that teachers frequently exhibit high level of teaching effectiveness in school. The result was supported by Vu (2019) that the ability to manage the behavior of students and the social setting in the classroom plays a crucial role in the development of students. These classroom experiences aid in the development of the behavioral, social, and academic skills of students.

In the same way, organization of instruction generates a mean score of 4.40 which described as high. It indicates that teachers have a high level of teaching effectiveness in the workplace. The result is corroborated to the findings of Libit (2018) who asserted that competent educational leaders emanate unwavering dedication to students' triumphs and adhere to enhancing the learning techniques that would fit the needs of every student. Thus, a teacher should formulate an effective framework of instruction for the teaching and learning process.

On the other hand, assessment of students' learning reaches a mean score of 4.38 which described as high. This means that teachers frequently exhibit high level of teaching effectiveness in their profession. The finding is congruent to the statement of Morales (2018) that the additional overbearing responsibility of a teacher is to strategize assessments. Assessment is an important tool that will measure the student's learning and performance and will be the basis of the teachers' observations which will be reported to the parents.

Moreover, the adjustment of learning generates a mean score of 4.40 which also described as high. This indicates that teachers have high level of teaching effectiveness in school. The result is parallel to the conclusion of Carpo (2018) that highly efficient teachers catalyze learning objectives which ensure that all students should understand what is expected of them to learn. This can be done by letting the teacher master different teaching strategies and the application of knowledge.

Table 1. Level of Teachers' Teaching Effectiveness

Teaching Effectiveness Items	Mean	Std. Deviation	Description
Management of Students' Behavior	4.43	.464	High
Organization of Instruction	4.40	.460	High
Assessment of Students' Learning	4.38	.475	High
Adjustment of Learning	4.40	.487	High
OVERALL	**4.40**	**.389**	**HIGH**

Level of Managerial Skills of Teachers

Table 2 shows the level of managerial skills of the teachers in central district of M'lang, Cotabato. The managerial skills contain three indicators namely, technical skills, conceptual skills, and human skills. The overall mean is 4.33 which can be described as high.

In terms of technical skills, the mean score is 4.38 which described as high. This indicates that teachers frequently manifest high level of managerial skills in their workplace. The

result of the study is supported by Javier (2018) that skill set, awareness of, and competence in a particular kind of activity, which includes methods, processes, operations, or strategies, is required for teachers. It necessitates specialized knowledge, the analytical ability within the same specialty, and proficiency with the tools and procedures of the given discipline.

As of conceptual skills, it also generates a mean score of 4.38 which described as high. This implies that teachers are highly skilled in managerial aspect of their teaching profession. The finding is congruent to the statement of Patrinos (2019) who emphasized that teachers ought to improve their conceptual competencies to strategize and take a wider view that will allow them to observe what is going on in their workplace and will assist them in reacting correctly and accountably to situations when they occur.

With regards to human skills, it reaches a mean score of 4.33 which described as high. This means that teachers are highly skills in human management. The result conforms by Barberos (2019) that the primary responsibility of the teacher is to have effective classroom management and must be cognizant of the significant interest in the classroom. As a result, teachers must fluctuate their instructional methods and approaches to keep students engaged inside the classroom.

Table 2. Level of Managerial Skills of Teachers

Managerial Skills Items	Mean	Std. Deviation	Description
Technical Skills	4.38	.494	High
Conceptual Skills	4.38	.511	High
Human Skills	4.33	.630	High
OVERALL	**4.33**	**.504**	**HIGH**

Level of Intellectual Skills of Teachers

Table 3 shows the level of intellectual skills of the teachers in central district of M'lang, Cotabato. The intellectual skills contain five indicators namely, analytical thinking, critical thinking, synthesis thinking, creative thinking, and problem-solving thinking. The overall mean is 4.30 which can be described as high.

In terms of analytical thinking, the mean score is 4.22 which described as high. This means that teachers frequently exhibit high level of intellectual skills in the workplace. The result is supported by Sartika (2019) asserted that analytical thinking is an important aspect of cognitive tasks because it allows individuals to solve efficiently. It employs a systematic assessment technique that enables difficult issues to be broken down into more straightforward and even simpler parts.

As of critical thinking, it generates a mean score of 4.31 which described as high. This implies that teachers possess high level of intellectual skills in their teaching profession. The finding conforms by Furedy (2018) that the critical features of critical thinking are indeed an overall disposition for systematic investigation relying on an ability to ask all hypotheses as well as the capacity to understand when this is appropriate, indifferent grant, and the ability to compare and contrast.

With regards to synthesis thinking, the mean score reaches to 4.29 which described as high. It indicates that teachers frequently manifest high level of intellectual skills in school. This was supported by Joan et al., (2020) concluded that synthesis seeks to generate a new suggestion or concept. When somebody asks to be synthesized, they are already attempting to combine the different components that have previously been evaluated with those other concepts or theories to construct anything fresh or unique.

In the same manner, creative thinking generates a mean score of 4.32 which described as high. This implies that teachers clearly manifest intellectual skills in school. The result is parallel to the statement of Guilford (2018) that creativity is empowers students and teachers to express ideas and opinions in unique ways. Teachers who can model creative ways of thinking, playfully engage with content and express their ideas will beget creative students.

In addition, problem-solving teaching has a mean score of 4.36 which described as high. This means that teachers frequently exhibit high level of intellectual skills in the workplace. This was supported by Reif et al., (2019) stated that problem-solving has been defined as a procedure made up of a series of stages or methods, as opposed to a variety of attributes, as was critical thinking. The problem solver calculates which supplemental data is necessary to conclude and specifies whether that data could be interpreted. Then he or she attempts to deduce something regarding the solution.

Table 3. Level of Intellectual Skills of Teachers

Intellectual Skills Items	Mean	Std. Deviation	Description
Analytical Thinking	4.22	.537	High
Critical Thinking	4.31	.521	High
Synthesis Thinking	4.29	.519	High
Creative Thinking	4.32	.475	High
Problem-Solving Thinking	4.36	.497	High
OVERALL	**4.30**	**.417**	**HIGH**

Level of Communication Skills of Teachers

Table 4 shows the level of communication skills of the teachers in central district of M'lang, Cotabato. The communication skills contain five indicators namely, speaking, listening, attitude, gestures and facial expression. The overall mean of this variable is 4.36 which can be described as moderate.

In particular, speaking generates a mean score of 4.36 which described as high. This implies that teachers sometimes manifest high level of communication skills in the workplace. This result was supported by Najafi & Rahmanzade (2018), that excellent speaking skills necessitate nonverbal communication like listening, attitude, gestures, facial expression, etc. to fully influence the audience.

Similarly, listening reaches a mean score of 4.44 which described as high. This implies that teachers communicate effectively with their students and co-teachers. The finding is corroborated with the expression of Friedman & Hunsaker (2018) that listening improves

students' school performance, as it is a skill that requires obtaining, attending, organizing, recognizing, perceiving, and analyzing messages from the school setting, and it's a conditioned response that should be cultivated.

Meanwhile, attitude has a mean of 4.22 which described as high. It indicates that teachers show effective communication skills in the workplace. The result is congruent to the definition of Thurstone (2019) defines attitude as the sum of a man's predispositions and emotions, derogatory comments, basic assumptions, thoughts, and menaces. Attitudes are discovered preconceptions of our surroundings.

In addition, gestures showed a mean score of 4.38 which described as high. This means that teachers moderately manifest good communication skills in school. The result is aligned to the statement of Enyedy (2020) that a gesture is a movement of certain or whole parts of the person's body, most often throughout speaking. It emphasizes communication by using the hands, legs, eyes, head, as well as other body parts to communicate. Nonverbal communication comprises more than half of all human interaction.

Furthermore, facial expressions resulted a mean score of 4.39 which described as high. This signifies that teachers sometimes exhibit high level of communication skills in their teaching profession. The finding is explained by the assertion of Najafi & Rahmanzade, (2018) that facial expression is so much more useful than other subtle signals and provides us with a variety of details well about the emotional reaction of everyone else, to the point where some researchers assume it's the most important data source of language.

Table 4. Level of Communication Skills of Teachers

Communication Items	Mean	Std. Deviation	Description
Speaking	4.36	.498	High
Listening	4.44	.476	High
Attitude	4.22	.537	High
Gestures	4.38	.501	High
Facial Expressions	4.39	.440	High
OVERALL	**4.36**	**.362**	**HIGH**

Relationship between Variables

Table 5 shows relationship between managerial skills, intellectual skills, communication skills and teaching effectiveness of teachers. The results show that all the independent variables have significant relationship with the teaching effectiveness of teachers (p<.05).

In particular, there is a relationship between managerial skills and teaching effectiveness (r=.775**, p<.05). This suggests that the increase in managerial skills would essentially increase the teaching effectiveness of teachers. The study's findings support Abila's (2019) assertion that managerial skills allow teachers to supervise the entire institution. These abilities can help each member of the institution grow. It is the way teachers interact with learners on tasks, carry out the necessary functional areas, and work in collaboration with other workers. These abilities are used to create as well as arrange policies and guidelines and made them become more effective.

In the same way, there is a significant relationship between intellectual skills and teaching effectiveness of teachers (r=.700**, p<.05). This means that as intellectual skills increase, the teaching effectiveness of teachers would also likely increase. The findings of this study corroborated Schmidt's (2018) conclusion that there is immense study evidence that demonstrates a clear association for both intellectual ability along with specialized cognitive skills and work performance in such a wide range of careers, with said greatest connections in both cognitive strengths and abilities observed for jobs that involve wider scope.

Meanwhile, there is a significant relationship between communication skills and teaching effectiveness of the teachers (r=.552**, p<.05). This suggests that the increase in communication skills would essentially increase the teaching effectiveness of teachers. The finding was supported by Ehindero & Ajibade (2019), that good communication requires the ability to communicate and acknowledge his/her message in a variety of situations and contexts. A wide range of expertise is required for great teaching and teachers, effective communication is regarded as a powerful tool for efficiency within the profession of teaching.

Table 5. Relationship between Variables

INDEPENDENT VARIABLES	TEACHERS' TEACHING EFFECTIVENESS		
	R	p-value	Remarks
Teacher's Managerial Skills and Teaching Effectiveness	.775**	.000	Significant
Teacher's Intellectual Skills and Teaching Effectiveness	.700**	.000	Significant
Teacher's Caring and Teacher's Empowerment	.552**	.000	Significant

*Significant at .05 level

Influence of Managerial, Intellectual and Communication Skills on Teachers' Teaching Effectiveness

Table 6 presents the results of regression analysis which purpose is to show the significant predictors of teachers' teaching effectiveness. The results indicate that managerial skills and intellectual skills were found to be significant predictors of teaching effectiveness.

In particular, the managerial skills have significant direct effect on teaching effectiveness of teachers (β=.577, p<.05). This means that the regression weight for managerial skills in the prediction of teaching effectiveness is significantly different from zero at the 0.05 level (two-tailed). Thus, for every unit increase in managerial skills there is a corresponding increase in the teaching effectiveness by .577. Through this, would imply that managerial skills can improve better the teaching effectiveness of teachers. The study's findings, which have been backed up

by researchers Silva (2021), show that basic school teachers' technical, theoretical, and individual managerial skills are exercised, and their tier of instructional leadership has always been useful in the control of students' conduct and review of students' learning, as well as efficacious within instruction and modification of education. The researcher also discovered the existence of a meaningful correlation between organizational abilities and teaching performance.

Similarly, the intellectual skills significantly predict the teaching effectiveness of teachers (β=-.267, p<.05). This means that the regression weight for intellectual skills in the prediction of teaching effectiveness is significantly different from zero at the 0.05 level (two-tailed). In other words, when the intellectual skills are increase by 1, the teaching effectiveness of teachers would increase by .267. This conclusion supports Harris & Rutledge (2019) assertion that effective teachers respond and easily adjust their instruction to tackle classroom conditions to make sure that almost all learners can gain knowledge. Furthermore, to responsibly advertise students' academic achievement, teachers participate in long-term preparation, such as instructional structure and content. In conclusion, previous studies comprising numerous different careers and related theories relating knowledge materials to teacher work requires to provide a rational basis for investigating the relationship between both instructors' intellectual ability and the effectiveness of teachers.

However, communication skills do not significantly predict the teaching effectiveness of teachers (β=-.012, p<.05). This means that the regression weight for communication skills in the prediction of teaching effectiveness is not significantly different from zero at the 0.05 level (two-tailed). In other words, when the communication skills are decrease by 1, the teaching effectiveness of teachers would decrease by -.012. This result is corroborated to the claims of Kareva (2011) that effective classroom communication is not very close to what the existing literature refers to as "effective teaching" and it is claimed that effective teachers should possess many different features such as good communication, management and organizational skills. But, the perceived ineffectiveness of some teachers in schools seems to be as a result of poor communication skills.

Table 6. Influence of Managerial Skills, Intellectual Skills, and Communication Skills on Teachers' Teaching Effectiveness

| Variables	Unstandardized Coefficients		Standardized Coefficient	T	p-value	Remarks
	B	Std. Error	Beta			
(Constant)	1.144	.149		7.665	.000	
Managerial Skills	.514	.043	.577	12.03	.000	Significant
Intellectual Skills	.250	.053	.267	4.698	.000	Significant
Communication	-0.13	0.51	-0.12	-.258	.797	Not Significant

Skills

Note: R=.358[a], R-square=.128, F=14.539, P>.05

STRUCTURAL FIT MODEL

Figure 7 presents the direct relationship of exogenous on the endogenous variables. Based on the results, the amount of variance explained by the combined influence of managerial skills, intellectual skills and communication skills on teaching effectiveness is 52 percent. Managerial skills, intellectual skills and communication skills significantly predict teaching effectiveness with beta values of .66, .30, and -.01. Furthermore, the goodness of fit results revealed that the values were not within the range of the indices criteria as shown by CMIN/DF > 3.0, (NFI, TLI, CFI, GFI < 0.95), and RMSEA < 0.05 with a PCLOSE > 0.05. This means that the model does not fit with the data.
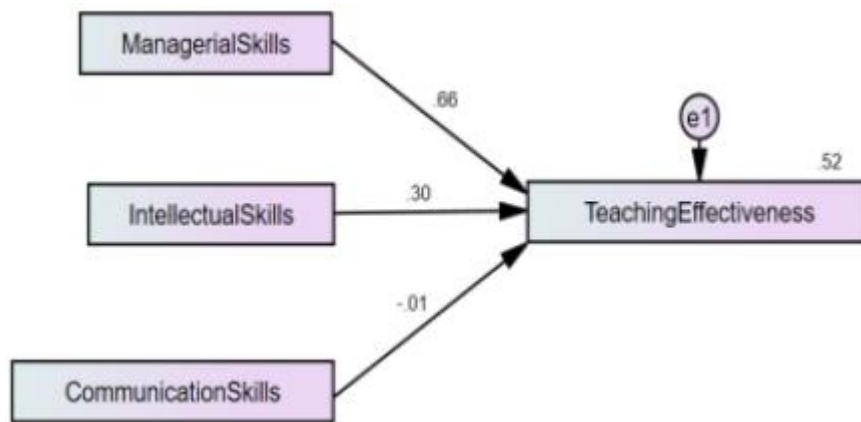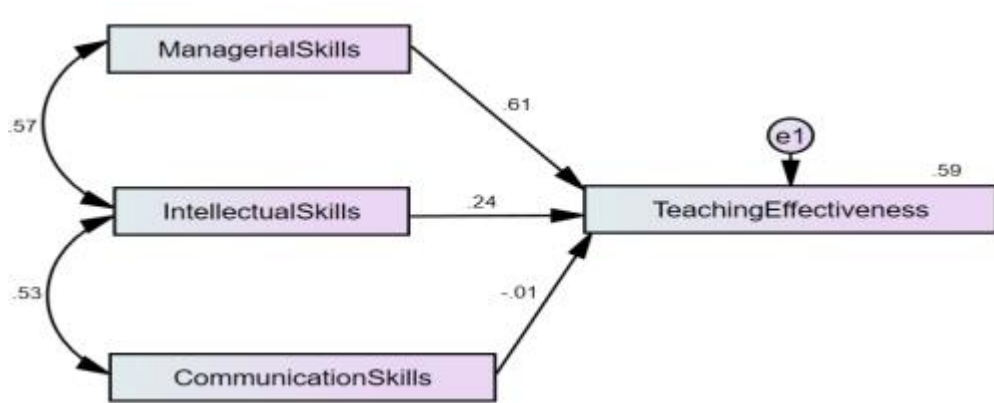

MODEL FIT VALUES

INDEX	CRITERION	MODEL FIT VALUES
CMIN/DF	<3.0	27.107
P-value	>.05	.000
NFI	>.95	.000
TLI	>.95	.000
CFI	>.95	.000
GFI	>.95	.927
RMSEA	<.05	.419
PCLOSE	>.05	.000

Figure 7. Test of Hypothesized Model 1

Figure 8 presents the results of Hypothesized Model 2. Based on the results, a total of 59 percent of the variance of teaching effectiveness is explained by the combined influence of managerial skills, intellectual skills and communication skills. Meanwhile, the managerial skills, intellectual skills and communication skills significantly predict teaching effectiveness with beta values of .61, .24 and -.01, respectively. Moreover, the goodness of fit results revealed that the values were not within the range of the indices criteria as shown by CMIN/DF < 3.0, (NFI, TLI,

CFI, GFI > 0.95), and RMSEA < 0.05 with a PCLOSE > 0.05. This means that Hypothesized Model 2 does not fit with the data and a poor fit model of teaching effectiveness.
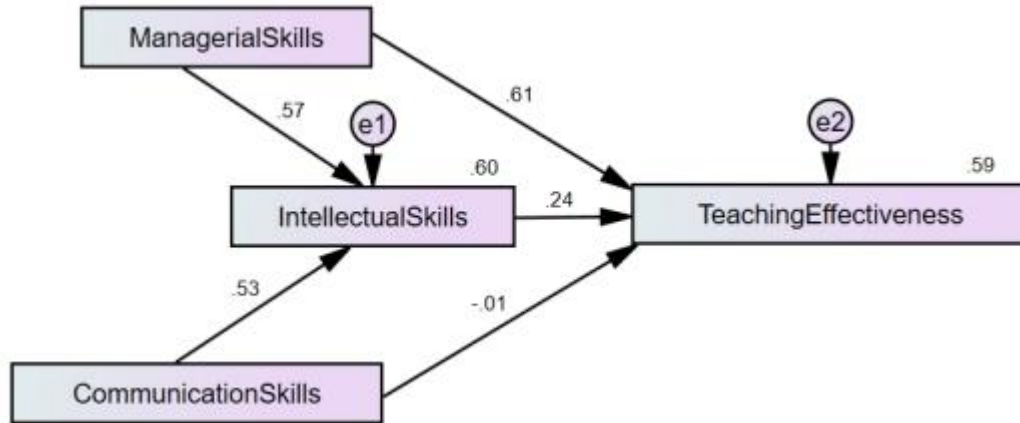

MODEL FIT VALUES

INDEX	CRITERION	MODEL FIT VALUES
CMIN/DF	<3.0	27.107
P-value	>.05	.000
NFI	>.95	.000
TLI	>.95	.000
CFI	>.95	.000
GFI	>.95	.912
RMSEA	<.05	.419
PCLOSE	>.05	.000

Figure 8. Test of Hypothesized Model 2

Figure 9 presents the results of Hypothesized Model 3. Based on the results, a total of 59 percent of the variance of teaching effectiveness is explained by the combined influence of managerial skills, intellectual skills and communication skills. Moreover, managerial skills and communication skills explain 60 percent of the variance of intellectual skills. Meanwhile, the managerial skills, intellectual skills and communication skills significantly predict teaching effectiveness with beta values of .61, .24 and -.01, respectively. Furthermore, managerial skills and communication skills have direct effect on intellectual skills with beta values of .57 and .53, respectively. The goodness of fit results revealed that the values were not within the range of the indices criteria as shown by CMIN/DF < 3.0, (NFI, TLI, CFI, GFI > 0.95), and RMSEA < 0.08 with a PCLOSE > 0.05. This means that Hypothesized Model 3 does not fit with the data and a poor fit model of teaching effectiveness.
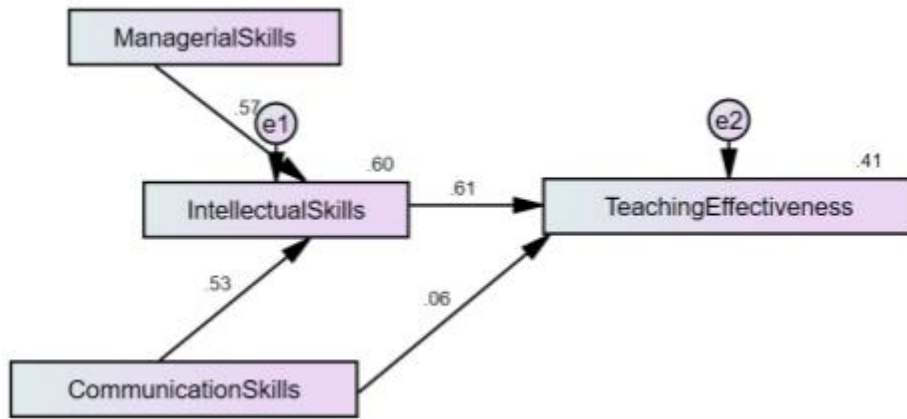
MODEL FIT VALUES

INDEX	CRITERION	MODEL FIT VALUES
CMIN/DF	<3.0	27.107
P-value	>.05	.000
NFI	>.95	.000
TLI	>.95	.000
CFI	>.95	.167
GFI	>.95	.568
RMSEA	<.05	.419
PCLOSE	>.05	.000

Figure 9. Test of Hypothesized Model 3

Figure 10 presents the results of Hypothesized Model 4. Based on the results, a total of 41 percent of the variance of teaching effectiveness is explained by the combined influence of intellectual skills and communication skills. Moreover, managerial skills and communication skills explain 60 percent of the variance of intellectual skills. Meanwhile, the intellectual skills and communication skills significantly predict teaching effectiveness with beta values of .61 and .06, respectively. Furthermore, managerial skills and communication skills have direct effect on intellectual skills with beta values of .57 and .53, respectively. The goodness of fit results revealed that the values were not within the range of the indices criteria as shown by CMIN/DF < 3.0, (NFI, TLI, CFI, GFI > 0.95), and RMSEA < 0.05 with a PCLOSE > 0.05. This means that Hypothesized Model 4 does not fit with the data and a poor fit model of teaching effectiveness.
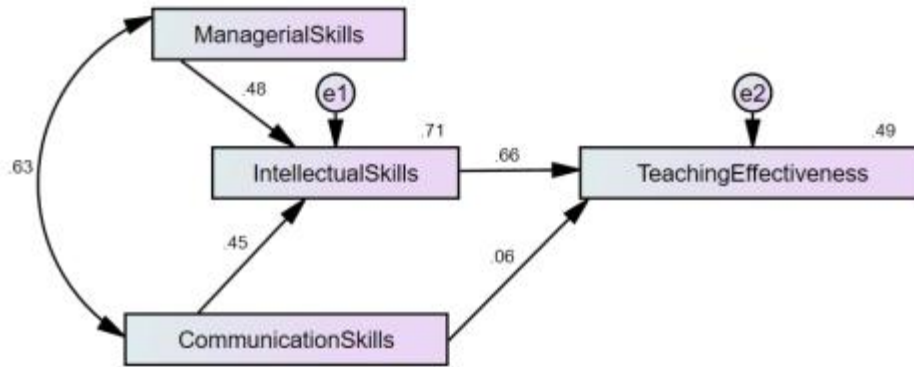
MODEL FIT VALUES

INDEX	CRITERION	MODEL FIT VALUES
CMIN/DF	<3.0	63.557
P-value	>.05	.000
NFI	>.95	.000
TLI	>.95	.000
CFI	>.95	.796
GFI	>.95	.736
RMSEA	<.05	.648
PCLOSE	>.05	.000

Figure 10. Test of Hypothesized Model 4

Best Fit Model of Teaching Effectiveness

The hypothesized model 5 in standardized estimates is presented in Figure 11. It can be observed in the results that 49 percent of the variance of teaching effectiveness is explained by the combined influence of managerial skills and communication skills. On the other hand, a total of 71 percent of the intellectual skills can be attributed to managerial skills and communication skills. Furthermore, the model illustrates the relationship of managerial skills and communication skills (r=.63, p>.05), and the direct effect of managerial skills and communication skills on intellectual skills with beta values of .48 and .45, respectively. On the other hand, it shows the direct effect of intellectual skills and communication skills on teaching effectiveness with beta values of .66 and .06.

Figure 11. Test of Hypothesized Model 5

As shown in Table 7, all model fit value has successfully met the criteria set by each index (CMIN/DF=127.041 with its p-value >.05, (NFI, TLI, CFI, and GFI >.95), and RMSEA <.05 with a PCLOSE >.05. This means that the model fits well with the data which can be best explain the teaching effectiveness of teachers. This is supported by Arbuckle and Wothke (1999) denoting that CMIN/DF should be less than 3.0, and Tucker-Lewis Index (TLI) and comparative Fit Index (CFI) should be close to 0.90. Moreover, the RMSEA and PCLOSE values are supported by MacCallum, Browne & Sugawara (1996) indicating 0.01, 0.05, and 0.08 as excellent, good and mediocre fit respectively, with P of close fir (PCLOSE) that is greater than 0.05.

Table 7
Goodness of fit measures of the Hypothesized Model 5

MODEL FIT VALUES

INDEX	CRITERION	MODEL FIT VALUES
CMIN/DF	<3.0	127.041
P-value	>.05	.000
NFI	>.95	.988
TLI	>.95	1.000
CFI	>.95	1.001
GFI	>.95	.988
RMSEA	<.05	.000
PCLOSE	>.05	.522

CONCLUSION

The teachers have high level of teaching effectiveness, managerial skills and intellectual skills while communication skills were in a moderate level. On the other hand, all indicators such as managerial, intellectual and communication skills have significant relationship with teachers' teaching effectiveness. Furthermore, only managerial and intellectual skills were found to be significant predictors of teachers' teaching effectiveness. Hence, communication skills do not predict teaching effectiveness of teachers. Model that has successfully met the criteria set by

each index. This means that the models fit well with the data which can best explain the teaching effectiveness of teachers.

REFERENCES

Abila, J. G. (2019). Management Practices and Teachers: Performance Satisfaction Among Teachers in Fule Almeda District: Input to Quality Management. (Unpublished Thesis). Laguna State Polytechnic University. San Pablo City.

Barberos, T., Gonzalo, A., Payadogdog, A. (2019). The Effect of Teachers' Teaching Style on Students' Motivation. Retrieved from January 2019 from https://steinhardt.nyu.edu/teachlearn/research/action/motivation

Bolhuis, S. (2003). Towards process-oriented teaching for self-directed lifelong learning: A multidimensional perspective. Learning and Instruction, 13(3), 327–347

Carpo, R. E. (2018). Building Mathematics Confidence: Determining the Strategies utilized by intermediate Teachers of Selected Public School in Lucena City. (Unpublished Thesis) Manuel S. Enverga University Foundation Candelaria Inc. Candelaria, Quezon.

Department of Education (2018). Education Regulation. Harare: Government Printers.

Ehindero, O.J., & Ajibade, Y.A. (2019). What our student says about how we teach. Ife J. Educ. Studies. 7(1), 1-9.

Elizabeth, C. L., May, C.M., & Chee, P.K., (2018). Building a model to define the concept of teacher success in Hong Kong. Teacher and Teacher Education, 24, 623-634.

Furedy, J.J., & Furedy, C. (2019). Ways to promote critical thinking in higher education. HERDSA News (Higher Education Research & Development Society for Australasia), 5, 3-4.

Guilford, J.P. (2018). Intelligence, creativity, and their educational implications. San Diego, Ca: Robert R. Knapp.

Javier, N.T. (2018). School Head's Management Skills and Work Values towards Efficiency and Effectiveness of the Public Secondary Schools. (Unpublished Thesis). Laguna State Polytechnic University.

Joan L. H., Ellen O., & Ronald D. (2020). Benchmark Assessments for Improved Learning. Assessment and Accountability Comprehensive Center: The Regents of the University of California.

Kareva, V. (2011). The influence of classroom communication on student commitment to the university. *European Scientific Journal, 90.*

Libit, I. D. (2018). Management Styles and Academic Strategies of Performing Teachers in Public Secondary Schools in Cluster V Division of Quezon: Basis in Designing

Framework for Effective Teaching. (Unpublished Thesis). Laguna State Polytechnic University. San Pablo City.

Morales, M.P.E. (2018). Examining teachers' conception of and needs on action research. (Thesis). Manila. Philippine Normal University.

Najafi T, & Rahmanzade A. (2018). The relationship between communication skills and educational effectiveness of teachers of girls in Valiasr Technical College in Tehran. Journal of media studies, 8(4), 193–206.

Obilor, E.I. (2020). Teachers' Communication Skills and Students' Academic Performance. Rivers State University of Science and Technology. European Educational Research Journal. May 2020.

Patrinos, H. A. (2019). Decentralized Decision Making in Schools: The Theory and Evidence on School-Based Management. (Thesis) Washington, DC: World Bank Publications.

Puntarat, S., Suwannoi, P., & Ketchatturat, J. (2014). Intellectual Skills Assessment for the Teacher Students at the Faculty of Education, Khon Kaen University. Social and Behavioral Sciences 116, 1704 – 1708.

Reif, F., Larkin, J.H. & Brackett, G.C. (2019). Teaching general learning and problem-solving skills. American Journal of Physics, 44 (3), 212-217.

Sartika, S. (2019). Teaching models to increase students' analytical thinking skills. Advances in Social Science, Education and Humanities Research (ASSEHR), volume 125. 1st International Conference on Intellectuals' Global Responsibility (ICIGR), Atlantis Press.

Schmidt, F.L. (2018). Select on Intelligence. In E.A. Locke (Ed.) Handbook of Principles of Organizational Behavior (pp. 3-14) Haboken, NJ: John Wiley & Sons.

Silva, M.H. (2021). The Relationship between the Managerial Skills and Teaching Effectiveness of Elementary School Teachers. International Journal of Educational Management and Development Studies, Volume 2, Issue 2, pp. 1 - 19.

Thurstone, L. L. (2018). The measurement of attitude. Journal of Abnormal and Social Psychology, 26, 249-269

Tshabalala, T. (2018). Comparative Education. Harare: Zimbabwe Open University.

Vu, P. A. (2019). The Influence of Classroom Characteristics and Student Relations on Student Academic Achievement. Retrieved April 2018 fromhttps://pdfs.semanticscholar.org/f06a/b3a2e61853d31a6b81fae67b386d21f8ec03 .pdf

Westwood, P. (2018). Effective teaching. Australian Journal of Teacher Education, 21(1), 5.