



THE MEDIATING EFFECT OF TEACHER COLLEGIALITY ON THE RELATIONSHIP BETWEEN INSTRUCTIONAL LEADERSHIP AND PROFESSIONAL DEVELOPMENT OF TEACHERS

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Abstract:

The purpose of this study was to determine the mediating effect of teacher collegiality on the relationship between instructional leadership and professional development of teachers. Utilizing quantitative, non-experimental design via correlational technique, data were obtained from 300 elementary public school teachers who belong to the 3 districts, Magsaysay, Bansalan and Matan-ao under the Division of Davao Del Sur. Davao Del Sur. The researcher utilized stratified random sampling technique and survey mode of data collection. The researcher also utilized the statistical tools mean, Pearson r and Medgraph using Sobel z- test. From the results of the study, it was found out that there is a very high level of mean scores for all variables of teacher collegiality, instructional leadership and professional development of teachers. Also, results revealed that there are significant relationships between instructional leadership and between teacher collegiality and professional development of teachers. Further, it was revealed that there was full mediation effect of teacher collegiality on the relationship between instructional leadership and professional development of teachers. This implies that the teacher collegiality conveys instructional leadership of teachers.

Keywords: education, teacher collegiality, instructional leadership, professional development, mediating effect, teachers, Philippines

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1. Introduction

Professional development is the cornerstone of quality education. However, the large majority of teachers are challenged and demanded to strengthen their subject knowledge base, pedagogical content knowledge, and teaching skills. In certain contexts, some teachers may find themselves confronted with highly difficult tasks and teaching responsibilities because they may lack the sufficient subject knowledge as well as the appropriate teaching skills that are highly needed and required in the teaching profession nowadays. Other researchers mentioned that one of the significant challenges principals face is encouraging teachers to become committed to their professional development. Also, principals are not competent enough or simply unwilling to develop their teachers (Geldenhuys & Oosthuizen, 2015; Gulston, 2011; Moodley, 2019).

Teacher training and professional development are seen as central mechanisms for the improvement of teachers' content knowledge and their teaching skills and practices in order to meet high educational standards. Effective professional development is needed to help teachers learn and refine the pedagogies required to teach these skills. Further, effective professional development is a structured professional learning that results in changes in teacher practices and improvements in student learning outcomes. A well-designed and implemented professional development should be considered an essential component of a comprehensive system of teaching and learning that supports students to develop the knowledge, skills, and competencies they need to thrive in the 21st century (Bourdesa, 2016; Darling-Hammond et al., 2017).

Also, instructional leadership supports the degree to which teachers work together to improve instruction, and together leadership and teacher collegiality may contribute to school effectiveness by strengthening collective efficacy beliefs. The findings from a previous study by Goddard et al. (2015) suggested that strong instructional leadership can create structures to facilitate teachers' work in ways that strengthen organizational belief systems and foster student learning. Additionally, student achievement can be positively influenced when effective collegiality structures for teachers to learn together are utilized. Teacher collegiality is one of the factors that constitute effective professional development wherein by working collaboratively, teachers can create communities that positively change the culture and instruction of their entire department and school (Mora-Ruano et al., 2019).

Teachers address students' basic needs when they provide pencils and paper to students. Likewise, principals provide a service to teachers' basic instructional needs by allocating resources and materials. When instructional leaders know what is happening in classrooms, they are better able and willing to provide resources and materials that support teachers' instructional efforts. Researchers called this mobilizing resources and described it as rallying personnel, building, district, and community resources, including materials as well as information. It was reported that one of the variables determining high achieving schools was the principal's assistance to teachers in acquiring needed instructional resources. Attending to the materials needed, the utilization of instructional

resources to achieve maximal student outcomes was an identified characteristic. Providing the assured availability of materials by designating personnel to provide the necessary materials to individual teachers was a leadership behavior (Heck & Marcoulides, 2016).

Furthermore, the researcher has not come across of a study that dealt on the mediating influence of teacher collegiality on the relationship between the instructional leadership and professional development of teachers in the local setting. It is in this context that the researcher was interested to determine whether the teacher collegiality has a mediating influence on the relationship between the instructional leadership and professional development of teachers as this can raise concern to the intended beneficiaries of this study and possibly develop action plans to improve instructional leadership, teachers' collegiality and their professional development, thus, the need to conduct this study.

The main thrust of the study was to find out the significance of the mediation of teacher collegiality on the relationship between the instructional leadership and professional development of teachers. Specifically, it aimed to answer the following objectives: to describe the level of instructional leadership in terms of instructional resource provider, maintaining visible presence, maximizing instructional time, monitoring students' progress, feedback on teaching learning, and curriculum implementation; to ascertain the level of professional development of teachers in terms of teachers' experience, educational leadership and humane relations, curriculum and teaching methods/techniques, students, teaching materials and activities, classroom management, and assessment; to describe the level of teacher collegiality; to determine the significance of the relationship between instructional leadership and professional development of teachers, instructional leadership and teacher collegiality, and teacher collegiality and professional development of teachers; and to determine the significance of the mediation of teacher collegiality on the relationship between the instructional leadership and professional development of teachers.

2. Literature Review

Students' perceptions of an absent or invisible instructor in online courses are also evident in their convictions that they are unable to ask questions, seek assistance, attend office hours, or otherwise interact with the instructor. On a related note, some have expressed concern that online instructors cannot as easily show enthusiasm for the subject, insert their personalities into the course, or convey which points are most important for them to understand. This concern relates to the same feeling of student-instructor disconnect in online courses. A lack of "teaching presence" may be indicated by comments about how students prefer to be taught by "actual teachers" or "humans" rather than having to teach themselves in online courses (Tichavsky et al., 2015). Visible presence is being present throughout in-person interactions and casual conversations during daily activities. The school's vision and mission must explicitly place a high

priority on student wellbeing. It is also necessary to provide wellbeing resources, opportunities for high-quality professional development, and instruments for using in classroom observations to gauge the effect of teachers' actions on students' wellbeing (Waters, 2018).

Instructional time incorporates increasing/protecting time scheduled for purposes of instruction, examinations/testing guidelines, and other student activities where direct student-teacher communication and supervision are maintained. It can be determined as the time spent by principals working directly with teachers and students to accomplish teaching and learning. For protecting instructional time and time allocation for instructions, it is suggested to set up a prize framework for good participation, appropriate obligation with staff in advising parents about irregular class attendance, to hold staff meeting to talk about regular issues in instructional organizing and offer arrangements, protect classroom instructional time from disturbance, demand supervision plan, anticipate time that teachers will begin and end classes on time, utilize the full distributed time for direction, and visit classrooms to watch staff and students (Akram, Kiran & Ilgan, 2017)

Curriculum prioritization, teaching more concisely and purposefully, and adherence to a standard timetable for daily recess breaks were among the most popular strategies teachers utilized to maximize instructional time. Other, less common methods teachers used to "fit it all in" included having the materials ready in advance, getting rid of departmentalized classrooms to allow for greater subject-specific flexibility, and developing a positive outlook on not being able to complete every aspect of every session. Through more focused instruction and the elimination of pointless distractions, teachers are also maximizing instructional time (Bauml et al., 2020). To enhance instruction, student instructors practice technology integration in elementary classrooms. The crucial decision appears to be how to use the chosen technology to maximize learning results within the allotted teaching time, not what technology to choose. How they choose and employ technological tools for their instruction might be influenced by a variety of internal and external factors. Although school budgets are more closely related to physical infrastructure, teacher candidates' interests and technological aptitude can have a direct impact on their decisions and behavior. They should be motivated and assisted in making adequate use of all resources, both within and outside the classroom, to increase and enhance instruction (Liu, 2016).

Activities received by principals monitor student learning for purposes of making instructional decisions and providing feedback to students on their progress and learning achievements. Good school principals provide teachers and parents with assessment results on an ongoing basis. General student supervision is likewise among the key obligations of the instructional leader. It mostly includes teachers in understanding different matters giving them the grade they deserve. Principals who demonstrate strong instructional leadership sets priority on regular classroom inspection, clear evaluation criteria, feedback on teaching learning which utilized to help staff and students to increase their performance, and frequently monitor students' improvements toward

school outcomes and teacher effectiveness in obtaining learning objectives (Akram, Kiran & Ilgan, 2017; Hallinger, 2011; Jenkins, 2009; Nawab, 2011; Yunus et al., 2013).

Principal practices include being observable throughout the school, providing praise and feedback to teachers about classroom and professional growth activities, presenting praise and feedback to students about classroom act or behaviors, and making sure of uninterrupted instructional time. This factor in model of instructional leadership has suggested to the input on the education and learning process as facilitative principalship. It assumes that the head of the school can be regarded as instructional leader and as one of the encouraging sources for effective educating and learning. The literature stresses the exercises in which the principal ought to connect himself with the checking and obtaining of feedback. Following this, locating of instructional needs through talking about instructional issues, inspecting classroom learning process and giving criticism on his/her perceptions as a method for giving and empowering best instructional activities, and giving and supporting change through public and private praise are among the factors that must be taken into account (Akram, Kiran & Ilgan, 2017).

A practice that demands the focus of principal preparation programs is knowing how to provide positive feedback to teachers, given the significance of teacher reflection to develop improvement. Teachers can develop objectives that will direct their learning by assisting them in looking at their work both prospectively and retrospectively once a task is finished (Leiva et al., 2016). Teachers receive feedback from school administrators for a variety of reasons. The two most significant ones are coaching and evaluation. Feedback for evaluation purposes helps us make decisions regarding hiring, tenure, and resources; it also gives teachers a sense of where they stand and whether their job is secure. (A third goal, appreciation, is also important, but that's a topic for another day.) Teachers can enhance their teaching practices by receiving feedback for coaching purposes (Stone & David-Lang, 2017).

The principal maintains an environment that promotes effective functioning of instructional content, arrangement, interventions, management, and monitoring in the classroom, and it is important that the principal needs to know why, how, and when to do things. The real part of the instructional principal incorporates a strong educational learning action, scope of syllabus in time, and a sharp supervision. Possibly, this is conceivable just when the instructional principal has sufficient learning, aptitudes, and expert excitement (Akram, Kiran & Ilgan, 2017; Yunus et al., 2013).

Teachers' experience has a significant effect on pupil performance in primary schools and at upper secondary level. Experienced teachers have a richer background of experience to draw from and can contribute insight and ideas to the course of teaching and learning, are open to correction and are less dictatorial in classroom. Teachers' experience and student achievement was that students taught by more experienced teachers achieve at a higher level, because their teachers have mastered the content and acquired classroom management skills to deal with different types of classroom problems. Furthermore, more experienced teachers are considered to be more able to

concentrate on the most appropriate way to teach particular topics to students who differ in their abilities, prior knowledge and backgrounds (Kosgei, Mise, Odera & Ayugi, 2013).

Leadership is often described as the ability to enlist, mobilize, and motivate others to apply their abilities and resources to a given cause. This capacity is fundamental to discussions of charismatic or transformational leadership in general and in the educational sphere in particular. It illuminates the ways in which individuals influence others and persuade them to devote their utmost efforts to tasks that promote their goals (Bono et al., 2013; Eval & Roth, 2011).

Moreover, teachers should develop effective leadership to achieve success in organizational commitment. They should have strong soft skills competencies to achieve excellence in education. Therefore, the school organization must prepare teachers to be effective leader so that changes can be implemented at the school level good governance. It is important for teachers to develop their ability to design and manage curriculum as well as improving their methods and techniques in teaching. It is important for teachers to align curriculum contents with the intellectual and physical needs and abilities of learners. Moreover, teachers should facilitate the compliance of principles of education into instruction such as utilizing authentic classroom learning activities and experiences (Hernandez et al., 2014; Ranaweera & Montplaisir, 2010).

As part of teachers' professional development, they should be guided to identify the students' developing characteristics to create positive learner attitudes towards learning and should be directed to develop their skills in dealing with the students' varied behaviors. Further, teachers must develop their ability to use effective methods to help students to overcome the difficulties that they face in learning as well as how they deal with the outstanding students and treat the learners' weaknesses (Applewhite, 2009; Hismanoglu & Hismanoglu, 2010). In consonance, based upon a review of several studies, it was concluded that the professional development activities experienced by teachers have a similar impact on student achievement. If we want students to learn, the most critical element is the teacher. So professional development is the overall most important thing we can do to help students learn (Johnson et al., 2014; Quattlebaum et al., 2012).

Teachers should be directed to use the classroom activities which develop the learners' thinking skills. They must be encouraged to carry out extra-activities such as English club, magazines, and competitions thereby the students will receive novel information (Hismanoglu & Hismanoglu, 2010; Robbins et al., 2009; Romesh et al., 2015). Instead of relying too heavily on verbal communication alone, learning is best when a variety of senses are involved. For conflict and conflict resolution to be taught effectively, instructional materials are crucial. The utilization of instructional materials is a crucial aspect of teacher education that is receiving a lot of attention. A teacher uses instructional resources to make their lessons easier to understand. They could be either concrete or non-concrete and incorporate both visual and audio-visual aids. More than only hearing needs to be activated for more information to be assimilated by the learner. The usage of audiovisual resources can stimulate the senses when studying and teaching.

Additionally, teachers' appropriate classroom management strategies are important for addressing students' misbehaviors. Thus, a successful teacher must develop strategies for establishing rule management and monitoring inside the classroom (Putman et al., 2017). Classroom management has changed from depicting control management and behavioral mediations to serving as a more comprehensive descriptor of educators' activities in organizing strong learning situations and building group. It is said that managing a classroom is a basic fixing in the three-route blend of successful showing techniques, which incorporates significant content, capable teaching procedures, and a hierarchical structure to bolster beneficial learning (Allen, 2010).

It is necessary to make the teachers familiar with the assessment techniques and encourage them to take notes about students' in-class performance and use them as assessment record. Also, the school should train the teachers to design effective exams to be used in their classes and provide them with recent assessment techniques. Additionally, teachers must be trained to ask students variety of oral questions that are more suitable to the teaching-learning situation and they must use practical ways of diagnosing the strengths and weaknesses of students. Also, the school leaders must encourage teachers to benefit from the assessment results to suggest ways and solutions for the difficulties that the students face (Hismanoglu & Hismanoglu, 2010; Yildirim, 2014).

In the same manner, teachers must develop their role in applying different assessment methods to assess and evaluate the learners. Further, they must develop constructivist teaching which concentrates on performance assessment, portfolio assessment and authentic assessment. Its assessments concentrate on the process that the every learner benefits in the information creation process. Evaluation focuses on how learners are competent to learn new things through connecting it with their prior knowledge. With this linkage, learners are assessed on their capacity to apply what they learn to authentic settings. Further, one best assessment measurement in the constructivist pedagogy is self-assessment which is an essential instrument for measuring learners' own qualities and shortcomings in learning (Nguyen et al., 2012; Yildirim, 2014).

There are factors which influence teachers' professional development. This includes teacher collegiality and instructional leadership. In the practice of school leadership, school leaders exercise significant influence on teacher professional development. They can have the opportunity to have a substantial impact on teacher learning. Further, it was indicated that effective school leaders can sustain high levels of teachers' professional development by creating structures that promote teacher learning. School leaders can enhance teachers' capacity by promoting an atmosphere where teachers collaborate and reflect on their practice. School leaders can shape school conditions and teaching practices is through their beliefs and actions regarding teacher professional development. They can connect their schools to sources of professional development that concentrate on instruction and student outcomes (Youngs & King, 2002).

In addition, teacher collegiality plays a vital role in augmenting teacher professional growth and development. Collegiality is seen as a key aspect of teacher professional development and a vehicle to increase teacher knowledge. Schools in recent years are believed to be the best places for teachers to learn and grow professionally and schools are beginning to restructure in ways that provide more opportunities for teachers to learn together. Collegial communities create such a cooperative climate that heightens the level of innovation and enthusiasm among teachers and provides a continuous support for staff professional enhancement (Lofgren & Karlsson, 2016; Retallick & Butt, 2004; Shah, 2012).

Compared to other forms of professional development, principal instructional leadership can affect teachers' participation in coaching, peer observation, mentoring, and mentoring. The training of principals might put more of an emphasis on instructional leadership abilities that promote peer observation, coaching, and peer mentoring for teachers to fulfill their specific needs and collaborate on professional development. In nations like Japan, Singapore, and South Korea, principal leadership training has to place more of an emphasis on fostering teacher growth through school-based learning (You et al., 2020). Principals' instructional leadership behaviors support teachers' motivation and task concentration, the growth of students' learning capacity, and the development of teachers' skills to evaluate themselves and their students. For teachers to feel more confident, principals can foster conditions where they can communicate with them, assist them in setting up learning environments that are appropriate for school and encourage their professional development by modeling instructional leadership behaviors (Özdemir et al., 2020).

Teacher efficacy is immediately and favorably influenced by instructional leadership in terms of creating a positive learning environment. Faculty trust is positively impacted by instructional leadership strategies that clarify the school's objective, oversee the curriculum, and foster a supportive learning environment. Teachers have control over how they allocate their time and resources to working with students. In a demanding accountability environment, school leaders with more institutional influence must take on the burden of establishing and sustaining trusted relationships inside the institution (Ma & Marion, 2021).

The ability of leaders to affect the collective work and beliefs of teachers in their schools is significant. Teachers' collaboration to improve instruction may be supported by principals' instructional leadership, and these two factors combined may increase school performance by fostering a sense of collective efficacy. When these variables work together to support student learning, great instructional leadership can build frameworks to support teachers' work in ways that reinforce organizational belief systems (Goddard et al., 2015). Building relationships, taking into consideration teaching and learning in the classroom, encouraging collegiality and collaboration, establishing teacher support techniques, adhering to district policies, and focusing on students' learning are all priorities for new principals. Many also think it's necessary to account for teacher performance, monitor and implement school plans, and account for monitoring and

implementing teacher performance. Acknowledging that the responsibility of the school principle for the majority of school leadership duties aimed at ensuring successful teaching and learning in schools is given a lot of weight (Angura, 2020).

This study is anchored on the Social Learning Theory by Bandura (1977). SLT provides an integrated view of learning, accounting for individual, cognitive aspects of learning, such as knowledge and beliefs as well as social and participatory aspects of learning. SLT provides a potentially useful theoretical approach in the context of teachers' professional learning. From the perspective of SLT, the mechanism of learning and the formation of individual knowledge is through observation. SLT posits a sophisticated mental modelling of observed behaviours and subsequent construction of novel behaviours, but this does not necessarily mean direct imitation of others' behaviours. Observational learning has been found to be an important mechanism in teacher development, as has the importance of a mental model or a picture of the lesson as the teacher enters a classroom. The way in which teachers choose and construct behaviours is influenced by the extent to which they believe they will be successful with a course of action in a particular context.

This study is supported by the Instructional Leadership Theory by Hallinger and Murphy (1985) which has three domains namely: defining the schools' mission, managing the instructional program, and promoting a positive school-learning climate. Defining the school mission consists of two specific job functions: frame goals and communicates goals. Managing the curriculum and instructional behaviour has four specific job functions: knows curriculum and instruction, coordinates curriculum, supervises and evaluates, and monitor progress. Promoting the school learning climate also has four specific job functions: sets standards, sets expectations, protects time, and promotes improvement. Each of the stated functions includes various practices called as behaviours and these behaviours are related to the core tasks carried out in daily duties of leaders in schools.

This study is also supported by the Action Theory by Leithwood and Jantzi (1990) which described beliefs about people and their motivations, suggesting that open sharing of information can enhance interpersonal relationships, encourage professional development, and stimulate organizational effectiveness. The theory highlighted trust, collaboration, and effective problem solving as the core of collegial school cultures. To change, schools must create new beliefs, meanings, and skills. When teachers work in an environment supportive of their collegial work, the implementation of change is of a higher quality and more easily sustained.

3. Material and Methods

There were 300 respondents of the study who were elementary public school teachers in the three public schools in Magsaysay, Bansalan and Matan-ao (MABAMA), Davao del Sur. With a desire to give everyone a chance to be included in the study, stratified random sampling was used. Stratified random sampling was employed in the study such that all

public elementary school Teachers under the 3 identified districts had a chance to be selected and considered for inclusion in the final sample. This is a sampling technique in which the population is divided into groups called strata Salkind (2007). Moreover, the idea was that the groupings were made so that the population units within the groups are similar. Specifically, with a total population of 1,200 teachers for the 3 districts (MABAMA), the sample size was taken using the Slovin's formula ($n = N / (1+Ne^2)$) Stephanie (2003). In this case the public elementary school teachers in MABAMA only were the groups to become respondents. Moreover, the idea was that the groupings were made so that the population units within the groups are similar. In particular, included in this study as the respondents were the regular public elementary school teachers of the 3 identified districts (MABAMA), who were currently employed and whose plantilla numbers are in the Department of Education, as they are the ones who are in the position to provide useful information upon testing the hypothesis of the study.

Those teachers who were not teaching under the elementary department in the areas of Matanao, Bansalan and Magsaysay were excluded in the study, for they were in different work environment and supervision. Also, teachers who were working in the secondary and private schools whether in the same identified areas including those teachers also who hold managerial or supervisory positions were excluded in the study. The respondents were chosen accordingly to answer the questionnaire with confidentiality. The target respondents were free to decline from participating the survey. They were not forced to answer the research questionnaire and were encouraged to return the same to the researcher for its automatic disposal. Moreover, they can withdraw anytime their participation in the research process if they felt uncomfortable about the study since they are given the free-will to participate without any form of consequence or penalty.

The study utilized the quantitative, descriptive, non-experimental design using correlation technique. This aided in determining the levels of teacher collegiality, instructional leadership and professional development of teachers. Quantitative research narrows itself to statistical analyses of collected data via survey questionnaires employing computational approaches (Trefry, 2017). The researcher obtained the numerical data from population in order to establish accurateness. Descriptive research depicts the precise selection of respondents through survey (Kowalczyk, 2018). The design provided description on the relationship between teacher collegiality, instructional leadership and professional development of teachers.

Correlational technique is a non-experimental approach in which it analyzes the relationship between two or more variables without reserve. It also looks into the degree of association by relating it with other variables. Apparently, correlational studies have independent and dependent variable with the effects of independent variable is observed on the dependent value (Patidar, 2013). The researcher chose his design to align the variables based on the discussion of the aforementioned related literature. This technique was appropriate since the study aimed to determine the significant relationship between teacher collegiality, instructional leadership and professional development of teachers.

The mediation process was used to determine whether the relationship between instructional leadership as the independent variable and professional development as the dependent variable was significantly reduced after inclusion of the mediator variable-teacher collegiality. In other words, mediating relationships occurred when a third variable plays an important role in governing the relationship between the other two variables (MacKinnon, 2008).

The data was gathered through the procedures mentioned as follows. First, before the conduct of the study, the researcher sent a letter asking for permission to the Schools Division Superintendent of the Department of Education Division of Davao del Sur. Then, the researcher sent letters asking for permission to the School Heads of the participants. Once approved, the survey questionnaire was administered to the respondents of the 3 schools under the division of Davao del Sur. As soon as request was approved and strictly observing the safety protocols in this pandemic time as per mandate by the Inter-Agency Task Force for the Emerging Infectious Disease (COVID 19) such as physical/social distancing and wearing of face masks, the researcher immediately visited the concerned school heads of the 3 schools, as part of the courtesy call and discussed the plan on the conduct of online survey thru google forms to all concerned respondents.

During the courtesy call, a list and contact numbers/email addresses of all respondents/students were requested from the offices of the concerned school heads/principals. The list served as the basis for the researcher for the data gathering which activity took around one month from the sending of the survey questionnaire to all the respondents in Google forms up to the retrieval of the accomplished survey questionnaires. Also, before the actual data collection, the researcher secured Certificate of Compliance from U MERC to ensure compliance of some ethical considerations in research. All retrieved questionnaires were encoded in the excel template after verification and checking as to completeness of the answers. After all the tallying and validating of results, the data was analysed and interpreted in line with the objectives of the study. Based from the findings of the study, conclusions and recommendations were formulated.

The following statistical tools were used in the computation of data and testing the hypotheses at 0.05 level of significance: Mean was used to determine the levels of instructional leadership, teacher collegiality and professional development of teachers; Pearson Product Moment Correlation (Pearson r) was used to determine the significance of the relationship between and among instructional leadership, teacher collegiality and professional development of teachers; and Medgraph using Sobel z-test was used to determine the significance of the mediation of teacher collegiality on the relationship between instructional leadership and professional development of teachers.

In the conduct of this study especially before the data was gathered, ethical issues and considerations will be dealt. The researcher underwent evaluation conducted by the members of ethics review committee. After several review process, this study was marked as passed and approved by the UM Ethics Review Committee (UMERC). The

participation of the respondents was completely voluntary and anonymous to protect their privacy and information was given whenever the respondents did not understand, before deciding whether to participate or not in the study. As a researcher, all data gathered were kept confidential and that such information was only be utilized for the purpose of the research. Informed consent was secured from all the respondents involved in the study.

The participants were carefully selected based on the criteria provided in the research. The criteria in the selection of respondents included only those who are elementary public school teachers in the three public schools in Magsaysay, Bansalan and Matana-ao (MABAMA), Davao del Sur. The study did not involve in high risks of situations that the respondents may experience since the respondents public elementary school teachers and this was conducted in accordance to due process. All the teachers are the primary beneficiaries of the study. The study used the Grammarly or Turnitin software and/ or Plagiarism Detector to ensure that there was no plagiarism that happened in the whole duration of the study. The study underwent the standard procedure of research established by the Professional Schools of the University of Mindanao. There was no evidence that the study was intentionally misrepresented to match a model or theoretical assumption. The study had no conflict of interest since the researcher has no relationship to the respondents of the study, but it was a requirement for the completion of the master degree in education at the University of Mindanao Professional Schools.

In this study, there was no deceit. Everything written and reflected was true and has undergone validation and thorough checking from different experts in the field of research. The researcher secured proper permission from the targeted agencies where the respondents were teaching/working. Considering the risks of COVID-19, and in the conduct of the online data gathering, the researcher utilized the google forms where the respondents indicated their responses on the specific item-questions being asked. No person was authorized to publish nor present this paper except the researcher or the adviser without the consent of the researcher.

4. Results and Discussion

Table 1: Level of Instructional Leadership

Indicators	Mean	SD	Descriptive Level
Instructional Resource Provider	4.30	0.275	Very High
Maintaining Visible Presence	4.48	0.375	Very High
Maximizing Instructional Time	4.47	0.542	Very High
Monitoring Students' Progress	4.46	0.561	Very High
Feedback on Teaching Learning	4.46	0.559	Very High
Curriculum Implementation	4.48	0.541	Very High
Overall	4.44	0.415	Very High

The level of instructional leadership is very high due to the very high levels of responses. The indicators maintaining visible presence, curriculum implementation, maximizing instructional time, monitoring student's progress, feedback on teaching learning, and instructional resource provider. These indicators are arranged from highest to lowest. The very high level of maintaining visible presence suggests that there is very high inclination of the leaders and teacher to be visibly present in school and physically participate in school activities in order to encourage learning participation. This is in line with the statement of Waters (2018) that in order to gauge the effects of teachers' actions on students' well-being providing well-being resources, opportunities for high-quality professional development, and instruments for using in classroom observations is necessary, as well as visible presence is present throughout in-person interactions and casual conversations during daily activities, and school's vision and mission explicitly placed a high priority on student well-being.

In addition, the very high level of curriculum implementation suggests that the school leaders are actively participating in the curriculum implementation. This is in line to the statements of Akram, Kiran and Ilgan (2017) and Yunas and Iqbal (2013) that the principal maintains an environment that promotes effective functioning of instructional content, arrangement, interventions, management, and monitoring in the classroom, and it is important that the principal needs to know why, how, and when to do things. The real part of the instructional principal incorporates a strong educational learning action, scope of syllabus in time, and a sharp supervision. Possibly, this is conceivable just when the instructional principal has sufficient learning, aptitudes, and expert excitement.

Maximizing instructional time with its very high level suggests that the teachers used teaching time to maximize the learning of the students. This is in line to the statements of Bauml et al. (2020) that curriculum prioritization, teaching more concisely and purposefully, and adherence to a standard timetable for daily recess breaks were among the most popular strategies teachers utilized to maximize instructional time. Other, less common methods teachers used to "fit it all in" included having the materials ready in advance, getting rid of departmentalized classrooms to allow for greater subject-specific flexibility, and developing a positive outlook on not being able to complete every aspect of every session. Through more focused instruction and the elimination of pointless distractions, teachers are also maximizing instructional time.

Further, the very high level of monitoring student's progress suggests that the leaders of the school are monitoring students' progress to enable them to analyze the needs and areas of improvement of the students. This is in line with the statements of various researchers such as Akram, Kiran and Ilgan (2017), Hallinger (2011), Jenkins (2009), Nawab (2011), and Yunas and Iqbal (2013) stating that principals monitor student learning for purposes of making instructional decisions and providing feedback to students on their progress and learning achievements. They also sets priority on regular classroom inspection, clear evaluation criteria, feedback on teaching learning which utilized to help staff and students to increase their performance, and frequently monitor

students' improvements toward school outcomes and teacher effectiveness in obtaining learning objectives.

In addition the very high level of feedback on teaching learning suggested that the school leaders are actively participating in the teaching and learning progress. This is in line with the statements of Leiva et al. (2016) and Stone and David-Lang (2017) where they emphasized that giving feedback to teachers should be based on the significance of the realization that the teacher will gain that would encourage improvement and that by receiving feedback for coaching purposes teachers are able to enhance their teaching practices.

Lastly, the very high level of instructional resource provider indicated that the school leaders are able to provide the necessary teaching and learning needs of the teachers and students that help them maximize their performance. This is in line with the statements of various researchers (Heck, Larsen, & Marcoulides, 2010) that one of the variables determining high achieving schools was the principal's assistance to teachers in acquiring needed instructional resources. Attending to the materials needed, the utilization of instructional resources to achieve maximal student outcomes was an identified characteristic.

Table 2: Level of Professional Development of Teachers

Indicators	Mean	SD	Descriptive Level
Teachers' Experience	4.46	0.556	Very High
Educational Leadership and Humane Relations	4.47	0.556	Very High
Curriculum and Teaching Methods/Techniques	4.45	0.563	Very High
Students	4.45	0.568	Very High
Teaching Materials and Activities	4.46	0.551	Very High
Classroom Management	4.48	0.545	Very High
Assessment	4.46	0.567	Very High
Overall	4.46	0.552	Very High

The very high level of professional development of teachers resulted from the very high levels of responses. The indicators classroom management, educational leadership and humane relations, teachers' experience, teaching materials and activities, assessment, curriculum and teaching methods/techniques and students were arranged from highest to lowest. The very high level of classroom management suggests that the teachers' management of the class enables them to improve the students output and learning experience. This is in line to the statements of Allen (2010) stating that managing a classroom is a basic fixing in the three-route blend of successfully showcasing techniques, which incorporates significant content, capable teaching procedures, and a hierarchical structure to bolster beneficial learning.

Also, the very high level of educational leadership and humane relations indicates that teachers are capable leaders that are able to connect and maintain relations that foster motivation. This claim is in line to the statement of Bono and Judge (2013) and Eval and Roth (2011) that described leadership as the ability to enlist, mobilize, and motivate others

to apply their abilities and resources to a given cause. This capacity is fundamental to discussions of charismatic or transformational leadership in general and in the educational sphere in particular as it illuminates the ways in which individuals influence others and persuade them to devote their utmost efforts to tasks that promote their goals.

Moreover, the very high level of teachers' experience indicated the very high level of teaching experience the teachers have accumulated. This claim is in line with the statement of Kosgei, Mise, Odera and Ayugi (2013) that experienced teachers have a richer background of experience to draw from and can contribute insight and ideas to the course of teaching and learning, are open to correction and are less dictatorial in classroom. Further, more experienced teachers are considered to be more able to concentrate on the most appropriate way to teach particular topics to students who differ in their abilities, prior knowledge and backgrounds. Meanwhile, the very high level of teaching materials and activities suggests that there is abundance in the teaching materials and activities used by the teachers to enrich their students. This claim is in line to the statements of Hismanoglu and Hismanoglu (2010), Robbins (2009) and Romesh (2015) that teachers should be directed to use the classroom activities which develop the learners' thinking skills. They must be encouraged to carry out extra-activities so that the students will receive novel information.

The very high level of assessment suggests that the teachers are able to use different types of assessment to evaluate the learners. This claim is in line to the statement of Hismanoglu and Hismanoglu (2010) and Yildirim (2014) that teachers must be trained to ask students variety of oral questions that are more suitable to the teaching-learning situation and they must use practical ways of diagnosing the strengths and weaknesses of students, and that the school leaders must encourage teachers to benefit from the assessment results to suggest ways and solutions for the difficulties that the students face.

The very high level of curriculum and teaching methods/techniques indicates that the teachers are able to facilitate different teaching techniques. This claim is in line with the statement of Ranaweera (2010) stating that it is important for teachers to develop their ability to design and manage curriculum as well as improving their methods and techniques in teaching. It is important for teachers to align curriculum contents with the intellectual, physical needs and abilities of learners, and they should facilitate the compliance of principles of education into instruction such as utilizing authentic classroom learning activities and experiences.

Lastly, the very high level of students suggests that the teachers are able to facilitate learning to the diverse type of students. This claim is in line with the statement of Applewhite (2009) and Hismanoglu and Hismanoglu (2010) that teachers must be guided to identify the students' developing characteristics to create positive learner attitudes towards learning and should be directed to develop their skills in dealing with the students' varied behaviors, and that they must develop their ability to use effective methods to help students to overcome the difficulties that they face in learning as well as how they deal with the outstanding students and treat the learners' weaknesses.

Table 3: Level of Teacher Collegiality

Statements	Mean	SD	Descriptive Level
Providing strong social support for colleagues.	4.48	0.546	Very High
Considering that professional interactions among teachers are cooperative and supportive.	4.48	0.545	Very High
Appreciating that there is a feeling of trust and confidence among staff members.	4.47	0.551	Very High
Counting on most of my colleagues to help me out anywhere, anytime even though it may not be part of their official assignment	4.46	0.563	Very High
Believing teachers in this school can open up about their failures and mistakes	4.47	0.563	Very High
Considering my colleagues as their friends.	4.48	0.564	Very High
Knowing teachers in this school show respect in the professional competence of their colleagues.	4.47	0.557	Very High
Inviting other teachers to observe our teaching	4.43	0.584	Very High
Minding being observed by their colleagues while teaching	4.42	0.616	Very High
Regularly observing one another teaching as a part of sharing and improving instructional strategies.	4.43	0.606	Very High
Knowing most of the teachers in this school are receptive to the presence of other professionals in their classrooms.	4.45	0.568	Very High
Believing it to be beneficial for my teaching to be open with colleagues about my successes and challenges.	4.46	0.568	Very High
Appreciating that feedback received by the colleagues is considered and responded to appropriately.	4.47	0.563	Very High
Appreciating that cooperation and collaboration exists across departments.	4.47	0.557	Very High
Jointly planning and preparing teaching strategies and procedures	4.46	0.580	Very High
Knowing that majority of the teachers participate actively in meetings	4.47	0.563	Very High
Making collective agreements to test an idea or new approach in teaching.	4.46	0.557	Very High
Jointly accrediting new programs and practices	4.46	0.563	Very High
Collectively analyzing our teaching practice together with my colleague.	4.45	0.568	Very High
praising or criticizing each other	4.44	0.579	Very High
Often arguing over educational theories, philosophies, or approaches	4.42	0.631	Very High

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Encouraging each other to contribute ideas and suggestions	4.46	0.562	Very High
Often asking each other about classroom management ideas and suggestions.	4.44	0.561	Very High
Feeling comfortable about discussing their students' problems .with teachers.	4.45	0.579	Very High
Often asking for suggestions to specific discipline problems.	4.44	0.568	Very High
Discussing frequently about school improvement strategies	4.47	0.573	Very High
Often teaching each other informally.	4.46	0.551	Very High
Enjoying teaching in team.	4.46	0.563	Very High
Feeling part of a learning community which values shared responsibility for ongoing learning.	4.46	0.557	Very High
Giving demonstrations on how to use new models or strategies.	4.45	0.556	Very High
Liking to share what they have learned or want to learn.	4.46	0.556	Very High
Contributing actively to making decisions about curriculum.	4.44	0.551	Very High
Finding time to work with my colleagues on curriculum during a regular work day.	4.45	0.563	Very High
Jointly preparing their lesson plans.	4.44	0.557	Very High
Feeling comfortable in asking for help on specific instructional problems.	4.46	0.563	Very High
Sharing materials related to my subject teaching	4.46	0.557	Very High
Often lending and borrowing materials like worksheets and lesson plans.	4.43	0.617	Very High
Sharing journal articles and educational books.	4.45	0.553	Very High
Overall	4.45	0.553	Very high

All the responses resulted to the very high level of teacher collegiality. This indicates that the school teachers have maintained a healthy collegial relationship with each other. This claim is in line to the statement that high levels of collegiality among staff members is one of the characteristics found in successful schools, and that strong and healthy collegial relationships among the teaching personnel are regarded as an essential component of institutional effectiveness.

Further, the measures “provide strong social support for colleagues,” “consider that professional interactions among teachers are cooperative and supportive,” and “consider my colleagues as their friends” have gained a very high level which suggests that relationship built among teachers emanates a positive vibe. This claim is in line to the statement of that cooperative cultures encourage staff to contribute new ideas, suggestions, and opinions. Staff member feedback is considered and responded to, which in turn makes them feel more committed to the organization. If cooperation and

collaboration exist among staff members, the working climate can provide mental relaxation and a cheerful atmosphere, which is a crucial factor in enhancing working efficiency.

Table 4.1: Significance on the Relationship between Instructional Leadership and Professional Development of Teachers

Instructional Leadership	Professional Development of Teachers							
	TE	ELHR	CTM	TS	TMA	CM	Ass	Overall
IRP	0.08	0.077	0.09	0.153	0.087	0.089	0.104	0.098
	0.17	0.186	0.121	0.008	0.132	0.125	0.072	0.09
MVP	0.708	0.699	0.702	0.684	0.688	0.681	0.717	0.704
	<.001	<.001	<.001	<.001	<.001	<.001	<.001	<.001
MIT	0.958	0.95	0.958	0.948	0.963	0.969	0.95	0.966
	<.001	<.001	<.001	<.001	<.001	<.001	<.001	<.001
MSP	0.973	0.964	0.964	0.95	0.971	0.981	0.966	0.977
	<.001	<.001	<.001	<.001	<.001	<.001	<.001	<.001
FTL	0.982	0.978	0.967	0.947	0.974	0.98	0.96	0.98
	<.001	<.001	<.001	<.001	<.001	<.001	<.001	<.001
CI	0.969	0.968	0.959	0.941	0.972	0.981	0.956	0.974
	<.001	<.001	<.001	<.001	<.001	<.001	<.001	<.001
Overall	0.974	0.967	0.966	0.957	0.971	0.977	0.966	0.978
	<.001	<.001	<.001	<.001	<.001	<.001	<.001	<.001

The correlation between measures of instructional leadership and professional development of teachers revealed a significant relationship. This implies that instructional leadership is significantly correlated with professional development of teachers. The findings of this study were in line with Kim and Lee (2020) and Özdemir et al. (2020) stating principal instructional leadership has a significant effect on the teachers' participation in coaching, peer observation, mentoring, and mentoring. The training of principals might put more of an emphasis on instructional leadership abilities that promote peer observation, coaching, and peer mentoring for teachers to fulfill their specific needs and collaborate on professional development. In other nations, principal leadership training has to place more of an emphasis on fostering teacher growth through school-based learning. In order for the teachers to feel more confident, principals can foster conditions where they can communicate with them, assist them in setting up learning environments that are appropriate for school and encourage their professional development by modeling instructional leadership behaviors.

Table 4.2: Significance on the Relationship between
 Instructional Leadership and Teacher Collegiality

Instructional Leadership	Teacher Collegiality
Instructional Resource Provider	0.075
	0.195
Maintaining Visible Presence	0.673
	< .001
Maximizing Instructional Time	0.967
	< .001
Monitoring Students' Progress	0.974
	< .001
Feedback on Teaching Learning	0.974
	< .001
Curriculum Implementation	0.958
	< .001
Overall	0.966
	< .001

The correlation between the indicators of instructional leadership and teacher collegiality revealed a significant relationship. This implies that instructional leadership is positively correlated with teacher collegiality. The result of this study is in line to Ma and Marion (2021) that teacher efficacy is favorably influenced by instructional leadership in terms of creating a positive learning environment. Faculty trust is positively impacted by instructional leadership strategies that clarify the school's objective, oversee the curriculum, and foster a supportive learning environment. Teachers have control over how they allocate their time and resources to working with students. In a demanding accountability environment, school leaders with more institutional influence must take on the burden of establishing and sustaining trusted relationships inside the institution (Ma & Marion, 2021).

Table 4.3: Significance on the Relationship between Teacher
 Collegiality and Professional Development of Teachers

	Professional Development of Teachers							Overall
	TE	ELHR	CTM	TS	TMA	CM	Ass	
Teacher Collegiality	0.982	0.969	0.98	0.955	0.979	0.981	0.974	0.984
	< .001	< .001	< .001	< .001	< .001	< .001	< .001	< .001

The correlation between the measures of teacher collegiality and professional development of teachers revealed a significant correlation. This implies that the teacher collegiality is significantly correlated to the professional development of teachers. This result is in line to various authors (Lofgren & Karlsson, 2016; Retallick & Butt, 2004; Shah, 2012) stating that teacher collegiality plays a vital role in augmenting teacher professional growth and development. Collegiality is seen as a key aspect of teacher professional development and a vehicle to increase teacher knowledge. Schools in recent years are believed to be the best places for teachers to learn and grow professionally and schools

are beginning to restructure in ways that provide more opportunities for teachers to learn together. Collegial communities create such a cooperative climate that heightens the level of innovation and enthusiasm among teachers and provides a continuous support for staff professional enhancement.

Table 5: Regression results of the variables in the criteria of the presence of mediating effect

Effect	Estimate	SE	95% Confidence Interval		Z	P	% Mediation
			Lower	Upper			
Indirect	0.758	0.0420	0.676	0.840	18.1	< .001	58.3
Direct	0.542	0.0417	0.461	0.624	13.0	< .001	41.7
Total	1.300	0.0160	1.269	1.332	81.1	< .001	100.0

The aim of this study is to contribute to the literature regarding the possible mediating variable for the relationship between instructional leadership and professional development of teachers. Specifically, teacher collegiality was investigated as the possible mediating variable that could explain the effect of instructional leadership on the professional development of teachers. Full mediation is found in the study, and significant direct effects were presented that may help in the enrichment of the existing studies on instructional leadership and professional development of teachers. Importantly, the current study on the relationship of instructional leadership and professional development of teachers have found relevance to the study of Goddard et al. (2015) where it is important that the ability of leaders affect the collective work and beliefs of teachers in their schools. Teachers' collaboration to improve instruction may be supported by principals' instructional leadership, and these two factors combined may increase school performance by fostering a sense of collective efficacy. When these variables work together to support student learning, great instructional leadership can build frameworks to support teachers' work in ways that reinforce organizational belief systems. Specifically, the current study has found that teacher collegiality is a positive and significant full mediator of instructional leadership and professional development of teachers and met Baron and Kenny's (1986) mediation guidelines.

The mediation analysis involved the path between instructional leadership and teacher collegiality, and the path between teacher collegiality and professional development of teachers. The findings confirmed the positive relationship between instructional leadership and professional development of teachers corresponding to one author Angura (2020) who declared that building relationships, taking into consideration teaching and learning in the classroom, encouraging collegiality and collaboration, establishing teacher support techniques, adhering to district policies, and focusing on students' learning are all priorities for new principals. It is deemed necessary by many researchers to account for teacher performance, monitoring and implementing school plans, and account for monitoring and implementing teacher performance. Acknowledging that the responsibility of the school principle for the majority of school leadership duties aimed at ensuring successful teaching and learning in schools was

emphasized. Thus, instructional leadership expresses good teacher collegiality and professional development of teachers.

5. Recommendations

The researcher came up with recommendations based on the results of the study. On the very high ratings of teacher collegiality, instructional leadership and professional development, the researcher recommend that the school management may continue to implement the school plans and programs as mandated in the vision, mission and goals of the school. Considering the performance of the school as shown by the teachers' support and cooperation, first the school may conduct an evaluation on the school's plans and programs versus its level of implementation. Also, a peer performance evaluation for teachers and teacher performance evaluation to be done by the students may be a regular annual activity. The conduct of orientation (for new teachers/staff) and re-orientation for existing teachers may be conducted with emphasis on the school's direction and mandate. This is a good action as this will enable everybody to be always aware of its commitment to the school, to the students and even to the parents and to the community as a whole. The best practices of the school maybe continued and if there are some deficiencies and inadequacies, then those areas may be improved or there may be rooms for continuing quality improvement.

Furthermore, the teachers may be provided with chances to continue their schooling for professional development, re-tooling for updates of latest teaching strategies and attendance to seminar and trainings which may allow the teachers to improve their communication skills, ICT skills, critical thinking and maybe seminar on teachers' mental well-being like Mental Awareness, Stress Management or Anger Management. There may be an annual get-together activity in school or an annual conduct of spiritual activity (ecumenical) like retreats or recollection may be added to ensure that everybody in the school continues to exercise his/her strong faith in God Almighty. With the intention to maintain good rapport with the students, there may be a conduct of regular dialogue or focus group discussion between teachers and students to address some concerns in class, subject or even the teachers and that there may always be an open communication among themselves.

On the results of full mediating effect of teacher collegiality on the relationship between instructional leadership and professional development, the researcher recommends that there may be always be a policy open communication in school. The school management may always respect the teachers' academic freedom and that school management may always listen to the sides of the teachers before any drastic action may be taken in case of some problems and issues among teachers or teachers and students relationships. The school may always instill in the minds of the school staff and teachers that sincerity, commitment and dedication of everybody counts most and that everybody is always willing to extend a helping hand to those who are in need and that what matter most is the education of the students.

6. Conclusion

With considerations on the findings of the study, conclusions are drawn in this section. There is very high level of teacher collegiality, a very high level of instructional leadership and a very high level of professional development of teachers. There is a significant relationship between instructional leadership and professional development of teachers. There is also a significant relationship between instructional leadership and teacher collegiality, and a significant relationship between teacher collegiality and professional development of teachers. The findings of the study clearly confirm the notion about the mediating effect of teacher collegiality on the relationship between instructional leadership and professional development of teachers. In addition, there is also a full mediation on the effect of teacher collegiality on the relationship between instructional leadership and professional development of teachers.

The findings are supported by the Action Theory by Leithwood and Jantzi (1990) which described beliefs about people and their motivations, suggesting that open sharing of information can enhance interpersonal relationships, encourage professional development, and stimulate organizational effectiveness. The theory highlighted trust, collaboration, and effective problem solving as the core of collegial school cultures. The findings were interpreted as a general acceptance of the hypothesis.

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Conflict of Interest Statement

The authors declare no conflicts of interest.

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