Encouraging Leadership as Mediator on Supportive Work Atmosphere and Instructional Inventiveness of Teachers

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Abstract:- The current study aimed to evaluate whether encouraging leadership has significant mediating effect on the relationship between supportive work environment and instructional inventiveness of teachers. The 212 public elementary school teachers in Davao City's Central District were chosen by the researcher to participate in this study as study respondents. Using a stratified random sample technique, the respondents were chosen. A quantitative non-experimental study design with a descriptive-correlational methodology was utilized. The data collected were subjected to the following statistical tools: Mean, Pearson Moment Product Correlation, and Structural equation model using mediation analysis. Descriptive analysis showed that supportive work environment and instructional inventiveness of teachers were described as extensive, while encouraging leadership was rated as moderately extensive. Additionally, correlation analysis showed a strong connection between instructors' innovative teaching practices, school administrators' supportive leadership styles, and a positive work environment. It appears that the relationship between a supportive work environment and teachers' inventive teaching practices is mediated by the supportive leadership style of school administrators, as demonstrated by SEM utilizing mediation analysis. To put it another way, teachers' innovative teaching methods and the school climate in Davao Central District, Davao City, are significantly mediated by the supportive leadership styles of school heads.

Keywords:- *Educational Management, Supportive Work Environment, Instructional Inventiveness, Encouraging Leadership, Davao City, Philippines.*

I. INTRODUCTION

According to Shahab and Imran (2018), the inventiveness of educators in the classroom is regarded as the most valuable resource for giving school organizations across the globe an edge over their competitors. In line with this perspective, Mandula et al. (2012) found that teachers' inventiveness in the classroom empowers them to apply cutting-edge techniques and educational resources to the advantage of their pupils. Thus, teachers could bring about the change in settings that promote cooperation and transparency with increased instructional creativity (Westwood, 2013). Additionally, Parlar and Cansoy (2017) pointed out that educators have the capacity to grow professionally, create and execute innovative teaching strategies, and deliver classes in an efficient manner.

In the context of the Philippines, Albert et al. (2017) revealed that the country's the general ranking in the 2016 Global Innovation Index (GII) Report's innovation climate was 74th out of 128 economies. The investigation attributes the country's substandard performance in the GII to a number of factors, including low public spending on scientific and technological development (R&D), a shortage of research professionals and scholars, inadequate STI facilities, a culture of proprietary rights and STI fragility, stringent laws that impede research, and weakened connections between innovative firms and the government and academic institutions.

Previous studies indicated that there exists a relationship between supportive work atmosphere, encouraging leadership of immediate supervisor, and teacher's instructional inventiveness. However, most of those studies were conducted in foreign context. For example, Fidan and Oztürk's (2015) study found that a positive school climate fosters teachers' instructional inventiveness by providing a pleasant atmosphere at work, prospects for learning, equality, and well-treatment. This leads to the development of innovative teaching strategies, which present challenges for students' education. According to Morgan's (2015) research, the relationship between a teacher's innovative teaching practices and their leadership style is based on how well the leader fosters an environment of cooperation that includes parents, teachers, and other members of the school community.

Even though adopting and implementing advantageous concepts in teaching processes is greatly aided by teachers' inventiveness in the classroom, many educators remain devoid of the motivation to push boundaries in their profession (Izzati, 2017). As argued by Ebuenga-Amora (2020), teachers become less inventive to students' education and emotional, social, cognitive, physical, and spiritual well-being due to many other personal struggles that they face to equip themselves with drastic curricular changes like making adjustments with their teaching-learning activities to

establish teacher presence beside the adoption of modular learning. Teachers who have shortcomings in terms of instructional inventiveness, according to Yuan and Woodman (2010), hardly provide recommendations or come up with fresh concepts for improving the classroom. Moreover, Balkar (2015) noted that only a handful of these educators are unwilling to implement novel ideas that might improve school socialization.

The researcher therefore saw an obligation to close this research gap by employing a quantitative technique to undertake an investigation in the Philippine setting, specifically in Davao City. To gain a deeper comprehension of the mediating role that supportive leadership styles of school heads play in the connection between teachers' instructional inventiveness—which is found to be lacking—and a supportive work culture, the researcher employed a descriptive correlational approach. With relation to teachers' innovative practices in the landscape of Davao City Division instruction, the current study aims to add to the scant body of understanding already available.

II. THEORETICAL/CONCEPTUAL FRAMEWORK

The study is based on the idea put forth by Galimaka (2012), who states that fostering an innovative learning environment can directly increase student achievement. Additionally, Morgan's (2015) Schools Leadership as a Distributed Strategy Model, which holds leadership accountable for furnishing educators with resources and frameworks such as student evaluation information, evaluations of teachers, and grade discussions, lends credence to this research.

The study's conceptual framework, which is shown in Figure 1, assisted the researcher in condensing and stating the study's main idea. The independent variable is the supportive work atmosphere or the teacher's perceptions of the school's work environment. As per Galimaka (2012), the following are indicators of a supportive work environment: supervision and guidance, which measure how well teachers are realizing their full potential; communication, which is the ability to effectively express, transmit, understand, and interpret knowledge and ideas through verbal, written, non-verbal, or through listening; and decision-making, which is the capacity to reason and apply readily accessible data to solve issues within the workplace.

Conversely, the study's dependent variable is the inventiveness of the teacher's instruction, or the acts that go farther than what is required of their specified work. Idea generation, or the process of conceptualizing and figuring out solutions; idea promotion, or the exchange of creative thoughts on formal forums; and idea realization, or the actualization of concepts and turning them into reality, are the metrics by which Hsiao et al. (2011) quantify instructional inventiveness in teachers. The last mediating factor is supporting principles of leadership, or the capacity to acknowledge and value the efforts of others by expressing gratitude; cultivate and strengthen a sense of community by acknowledging and appreciating little successes.
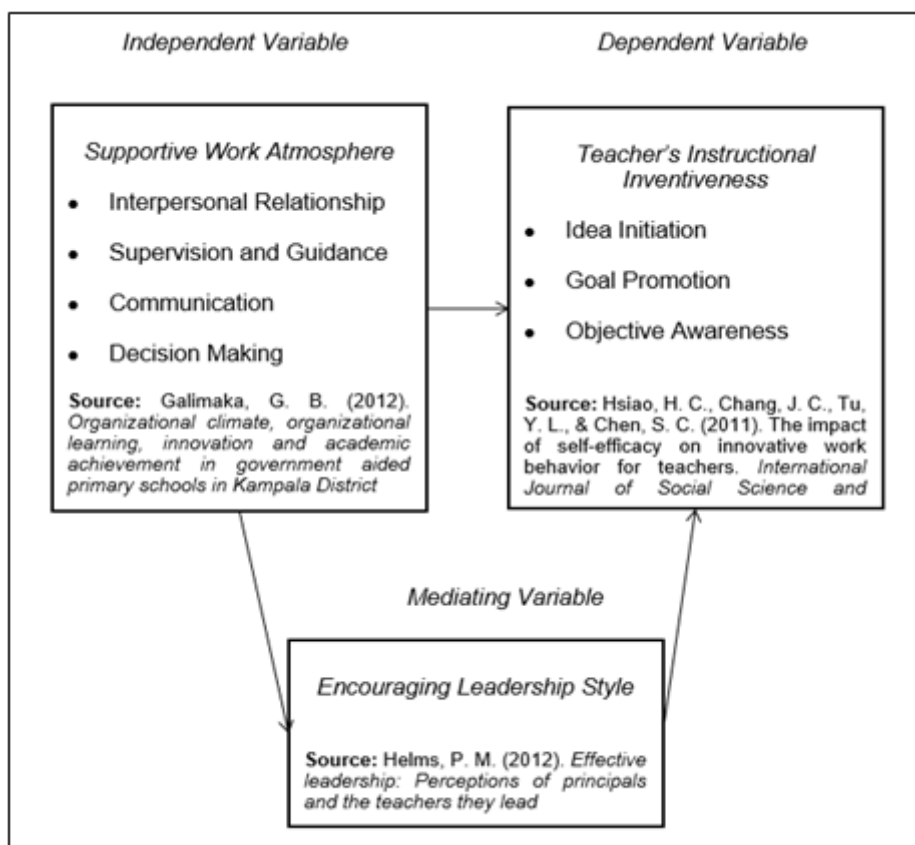

Fig. 1. The Conceptual Framework of the Study

III. STATEMENT OF THE PROBLEM

The primary aim of this study was to determine the mediating effect of encouraging leadership styles of school heads on the relationship between supportive work atmosphere and instructional inventiveness of the teachers in Davao Central District, Davao City. Specifically, this study sought to answer the following questions:

➢ What is the extent of supportive work atmosphere of the teachers in terms of:
- Interpersonal relationship;
- Supervision and guidance;
- Communication; and
- Decision making?

➢ What is the extent of instructional inventiveness of the teachers in terms of:
- Idea initiation;
- Goal promotion; and
- Objective awareness?

➢ What is the extent of encouraging leadership style of school head as perceived by the teacher in Davao Central District, Davao City?
➢ Is there significant relationship among supportive work atmosphere, teacher's instructional inventiveness, and encouraging leadership styles of school head in Davao Central District, Davao City?
➢ Do encouraging leadership have significant mediating effect on the relationship between supportive work atmosphere and instructional inventiveness of the teachers in Davao Central District, Davao City?

IV. HYPOTHESIS

The following null hypotheses were tested at 0.05 level of significance:

- H_{01}: There is no significant relationship among supportive work atmosphere, teacher's instructional inventiveness, and encouraging leadership styles of school head in Davao Central District, Davao City.

- H_{02}: Encouraging leadership does not have a significant mediating effect on the relationship between supportive work atmosphere and instructional inventiveness of the teachers in Davao Central District, Davao City.

V. METHOD

A. Research Design

The researcher employed quantitative non-experimental design utilizing correlational technique of research to gather data ideas, facts and information related to the study, the researcher. Quantitative research as described by Bhandari (2020) is a research strategy that focuses on quantifying the collection and analysis of data.

Meanwhile, mediation analysis is a statistical method used to quantify the causal sequence by which an antecedent variable causes a mediating variable that causes a dependent variable (Mackinnon, 2019). Thus, the interest of the study is to investigate whether encouraging leadership styles mediates the relationship between supportive work atmosphere and instructional inventiveness of the teachers in Davao Central District, Davao City.

B. Research Respondents

The elementary school teachers in Davao City's Central District were the study's respondents. The 200 respondents in this study were chosen using a stratified random selection procedure. Using a technique known as stratified random sampling, a population is divided into smaller subgroups called strata. Because the population in this study is heterogeneous and can be classified using supplementary data, stratified random sampling is appropriate. Furthermore, those who participated in the research were selected based on a set of inclusion criteria. The survey questionnaires were distributed only to permanent-regular teachers who willingly signed the ICF, were not involved in any unlawful activity or administrative issues. Furthermore, the study's scope was restricted to the subject matter of the problem as indicated by the research questions; as a result, the teachers' performance ratings were not taken into account.

C. Research Instrument

The study used questionnaires that were improved to fit the respondents' situations and adapted from other studies. There were three sections to the instrument. The instrument's first section addressed the encouraging work environment. This survey was modified based on Galimaka (2012). The modified instrument was developed using the following ranges of means and included a 5-point Likert scale:

Table 1 Interpretation Table for Supportive Work Atmosphere

Range	Descriptive Level	Interpretation
4.20-5.00	Very Extensive	The supportive work atmosphere of the teachers is always observed.
3.40-4.19	Extensive	The supportive work atmosphere of the teachers is oftentimes observed.
2.60-3.39	Moderately Extensive	. The supportive work atmosphere of the teachers is sometimes observed.
1.80-2.59	Less Extensive	The supportive work atmosphere of the teachers is rarely observed.
1.00-1.79	Not Extensive	The supportive work atmosphere of the teachers is never observed.

The teacher's inventive methods of instruction are the subject of the second section of the tool. A modified version of this survey was taken from Hsiao et al. (2011). From 5-Very Extensive to 1-Not Extensive, the tool is built. The dependability coefficient that was discovered was 0.890. The 5-point Likert scale used by the instrument was established using the mean ranges listed below:

Table 2 Interpretation Table for Instructional Inventiveness

Range	Descriptive Level	Interpretation
4.20-5.00	Very Extensive	The teacher's instructional inventiveness is always manifested.
3.40-4.19	Extensive	The teacher's instructional inventiveness is oftentimes manifested.
2.60-3.39	Moderately Extensive	The teacher's instructional inventiveness is sometimes manifested.
1.80-2.59	Less Extensive	The teacher's instructional inventiveness is rarely manifested.
1.00-1.79	Not Extensive	The teacher's instructional inventiveness is never manifested.

The school head's leadership style is covered in the third section of the tool. The Helms (2012) questionnaire was modified. From 5-Very Extensive to 1-Not Extensive, the tool is built. A 0.900 dependability coefficient was attained. The 5-point Likert scale used by the instrument was determined by looking at the following range of mean:

Table 3 Interpretation Table for Leadership Behavior of School Head

Range	Descriptive Level	Interpretation
4.20-5.00	Very Extensive	The encouraging leadership style of school head is always evident.
3.40-4.19	Extensive	The encouraging leadership style of school head is oftentimes evident.
2.60-3.39	Moderately Extensive	The encouraging leadership style of school head is sometimes evident.
1.80-2.59	Less Extensive	The encouraging leadership style of school head is rarely evident.
1.00-1.79	Not Extensive	The encouraging leadership style of school head is never evident.

D. Data Analysis

Mean was the first statistical instrument that the researcher employed. This helped to describe the innovative teaching practices of the teachers, the school head's leadership style, and the overall school climate. This served as the means of supplying the solution for goals 1 and 2. Pearson Product Moment Correlation comes in second. This research employed it to evaluate the noteworthy correlation between independent variables (a supportive work environment), dependent variables (teachers' inventiveness in the classroom), and mediating variables (encouraging leadership styles of school administrators). Typically, r is used to indicate it in a sample. Third, Mediation Analysis with Structural Equation Model. It was used to assess the moderating impact of the school head's supportive leadership styles on the connection between the teachers' imaginative teaching methods and the supportive work environment.

VI. RESULTS AND DISCUSSION

A. Supportive Work Atmosphere in Davao Central District, Davao City

➤ *Communication.*

With regard to the communication domain specifically, Table 4's results show that its category mean is 3.57, which is characterized as extensive. This indicates that the respondents frequently see this particular domain on a supportive work environment. The items' mean rating ranges from 3.39 to 3.79, as the table also indicates. With a mean rating of 3.39 and an interpretation of "moderately extensive," it is worth noting that the item "Teachers within the school setting are adequately informed" is not as common as the one with a mean rating of 3.79, "teachers are encouraged to communicate with the head teacher," which is extensive and frequently observed. According to the findings, the respondents frequently saw proficient knowledge and concept communication, delivery, comprehension, and interpretation in a classroom setting—whether through written, spoken, nonverbal, or auditory means.

This data bolsters the contention made by Lapiņa and Ščeulovs (2014) that effective communication is essential to being prepared for the workplace. This is due to the belief that graduates' social and professional development is greatly influenced by their communicative competence.

Table 4 Extent of Supportive Work Atmosphere in Terms of Communication

Statement	Mean	Descriptive Rating
Teachers within the school setting are adequately informed.	3.39	Moderately Extensive
Teachers are asked to participate in decisions making process in the school.	3.79	Extensive
Perceiving that the school head calls the attention of the teacher to the office for a discussion when there is a serious problem.	3.68	Extensive
School head provides adequate feedback to teachers.	3.45	Extensive
School head communicates with parents about students behavior.	3.54	Extensive
Mean	**3.57**	**Extensive**

➢ *Decision Making.*

With a category mean of 3.56, the instructors evaluated the domain of decision-making as extensive, interpreting it as something they frequently encountered in Davao City's Central District. The various goods have mean ratings ranging from 3.25 to 3.77. The item "There is a clear mechanism for decision making in the school" received a mean value of 3.25, indicating that it is a moderately extensive item that is occasionally observed. On the contrary, the item "Decisions about the running of the school are made by the school head" has a mean score of 3.77, which is considered extensive and indicates that the item is frequently observed. This research suggests that workplace problem-solving skills, such as reasoning and using available information, are frequently seen. This data corroborates Sanad's (2016) conclusion that employee perspective and job performance are strongly impacted by relationships within organizations with regards to employee wellbeing, minority priority, etc.

Table 5 Extent of Supportive Work Atmosphere in Terms of Decision Making

Statement	Mean	Descriptive Rating
Decisions about the running of the school are made by the school head.	3.77	Extensive
Teachers are asked to participate in decisions making process in the school.	3.72	Extensive
Many different points of view are shared freely within the school.	3.64	Extensive
Decisions can be made within the school without gaining the approval of the School Head.	3.44	Extensive
There is a clear mechanism for decision making in the school.	3.25	Moderately Extensive
Mean	**3.56**	**Extensive**

➢ *Interpersonal Relationship*

Table 6 indicates that the category of interpersonal connections has a extensive mean score of 3.56, suggesting that a supportive work culture is frequently observed in this domain. The average score of the different items varies between 3.24 and 3.81. The item "School head engages in teaching and discussions with teachers" has received a mean value of 3.24. This rating is considered moderately extensive and is interpreted as being sometimes observed. The item "Cooperation between the teacher and school head" has received a rating of 3.81, indicating a high level of collaboration. This item is frequently noted among teachers in the Davao Central District, Davao City. The findings suggest that the respondents frequently demonstrate the capacity to show respect and express gratitude towards others. This discovery corroborates the notion put forth by Ferris et al. (2012) that individuals possessing robust social aptitude also tend to receive higher evaluations of their work, more promotions, and more remuneration. Individuals who possess exceptional social skills are particularly adept at sustaining close, superior relationships and are more inclined to earn superior performance assessments from their superiors.

Table 6 Extent of Supportive Work Atmosphere in Terms of Interpersonal Relationship

Statement	Mean	Descriptive Rating
Cooperation between the teacher and school head is good.	3.81	Extensive
School head engages in teaching and discussions with teachers.	3.24	Moderately Extensive
Teachers share ideas and materials with others.	3.80	Extensive
Teachers are keen to learn from each other.	3.29	Moderately Extensive
Teachers accept others comments and reactions.	3.68	Extensive
Mean	**3.56**	**Extensive**

➢ *Supervision and Guidance.*

Table 7 indicates that the mean rating for the category of supervision and guidance is within the moderate extensive range, with a value of 3.38. This suggests that the presence of a supportive work atmosphere in this domain is occasionally noticed. The average rating of the various goods varies between 3.18 and 3.55. The item "Teachers make choices about their own work and process of completion" has received a mean value of 3.18. This number indicates that the item is relatively substantial and is sometimes seen. The item labeled "School head provides guidance to teachers in their official work" obtained a rating of 3.55. This

value indicates that the item is considered extensive and is frequently seen among instructors. This implies that the teacher occasionally recognized and achieved their maximum capability. This discovery corroborates the notion proposed by Abu and Kumari (2013) that in an organization characterized by a strong emphasis on humanistic relationships, collegiality, and engagement, instructional efficiency is elevated, hence increasing the total efficacy of learning.

Table 7 Extent of Supportive Work Atmosphere in Terms of Supervision and Guidance

Statement	Mean	Descriptive Rating
School head supervises teachers during working hours.	3.46	Extensive
School head provides guidance to teachers in their official work.	3.55	Extensive
School head supervises schemes of work and lesson plans prepared by teachers.	3.39	Moderately Extensive
Teachers make choices about their own work and process of completion.	3.18	Moderately Extensive
Teachers receive support and encouragement when presenting new ideas.	3.33	Moderately Extensive
Mean	**3.38**	**Moderately Extensive**

Finally, Table 8 summarizes the degree of a helpful work environment in Davao City's Central District. The school climate received an extended overall mean score of 3.52, as seen in the table. The mean score of 3.56 or extensive for interpersonal relationships, 3.38 or moderately extensive for supervision and direction, 3.57 or extensive for communication, and 3.56 or extensive for decision making was the basis for the given total mean score. The analysis's conclusion suggests that teachers typically have favorable opinions of their working conditions at the institution. This data backs up Thompson's (2010) theory that a pleasant work environment is a strategy used by organizational members to monitor and describe their immediate surroundings and circumstances in a way that is based on their values and attitudes. Furthermore, data supports Razi's (2010) assertion that the interactions between educators and administrators in schools affect the organizational climate. Administrators are responsible for establishing an environment in the workplace that fosters hard work, positive attitudes toward one another, and effective group and individual collaboration.

Table 8 Extent of Supportive Work Atmosphere in Terms of Supervision and Guidance

Indicators	Mean	Descriptive Rating
Internal Relationship	3.56	Extensive
Supervision and Guidance	3.38	Moderately Extensive
Communucation	3.57	Extensive
Decision Making	3.56	Extensive
Mean	**3.52**	**Extensive**

B. Instructional Inventiveness of the Teachers

➤ *Idea Realization*

As a result, with a category mean of 3.68, this dimension, as displayed in Table 9, is characterized as extensive. This indicates that respondents in Davao Central District, Davao City, frequently demonstrate the instructional inventiveness of the teachers in terms of concept implementation. The various commodities have mean ratings ranging from 3.50 to 3.88. With a mean grade of 3.50, the item "Applying innovativeness could help me identify learners' creativity in the learning process" is characterized as extensive and frequently displayed. Moreover, the item with a mean value of 3.88, which is extensive and perceived as frequently exhibited, is about using creative teaching techniques to discover and meet the various requirements of pupils.

It implies that educators frequently use concepts and turn them into reality in order to teach. This result is consistent with Kivunja's (2015) argument that inventive instruction refers to a teacher's capacity to involve students in the learning process, enhance students' capacity to learn, and recognize and respond to the various learning and personal needs of students through the use of methods. When it comes to the learning process, it assists the teachers in recognizing their own creative potential.

Table 9 Extent of Instructional Inventiveness of the Teachers in Terms of Idea Realization

Statement	Mean	Descriptive Rating
Finding transforming innovative ideas into useful applications in teaching processes as an easy for thing to do.	3.75	Extensive
Believing that introducing innovative ideas into the teaching environment in a systematic way is possible in my class.	3.77	Extensive
Evaluating the utility of innovative ideas before utilizing inside the classroom.	3.52	Moderately Extensive
Using innovative teaching processes to identify and address the different needs of students.	3.89	Moderately Extensive
Applying innovativeness could help me identify learners' creativity in the learning	3.50	Moderately Extensive

Statement	Mean	Descriptive Rating
process.		
Mean	**3.68**	**Moderately Extensive**

> *Idea Promotion*

According to Table 10, the teachers' extensive category means of 3.36 indicates that the respondents occasionally exhibit this particular domain of instructional innovation. Remarkably, the various things' mean evaluations span from 3.46 to 3.77 points. The table additionally discloses that the item "Encouraging other staff/colleagues in the school to be enthusiastic for innovative ideas" has received an average rating of 3.46, indicating that it is comprehensive and occasionally expressed. At the same time, the item "sharing my thought to co-teachers that innovation is the most important decision incentive not only for entrepreneurs but also for teachers" has a mean grade of 3.77, meaning that it is perceived as comprehensive and frequently demonstrated. It suggests that educators frequently share their thoughts on official forums. The results from the study of Messmann and Mulder (2011), who suggested that inventive educators should act in innovative ways, are supported by this result. They also went on to explain that acting in an inventive manner includes a variety of activities, such as observing, listening to, and adapting ideas, developing an action plan, evaluating through reflection and evaluation, modifying the innovation, and enlisting allies.

Table 10 Extent of Instructional Inventiveness of the Teachers in Terms of Idea Promotion

Statement	Mean	Descriptive Rating
Mobilizing support to different individuals in the organization for innovative ideas.	3.63	Extensive
Acquiring approval for innovative ideas in my field.	3.62	Extensive
Encouraging other staffs/colleagues in the school to be enthusiastic for innovative ideas.	3.46	Extensive
Sharing my thought to co-teachers that innovation is the most important decision incentive not only for entrepreneurs but also for teachers.	3.77	Extensive
Helping co-teacher in building a strategy of action for classroom activities.	3.70	Extensive
Mean	**3.63**	**Extensive**

> *Idea Generation.*

Table 11 illustrates that instructors' instructional inventiveness in terms of concept creation has a category mean of 3.56, which is classified as substantial. This indicates that teachers' innovativeness is frequently demonstrated in this particular domain. Furthermore, the various goods' mean ratings span from 3.25 to 3.77. With a mean grade of 3.25, the item "securing resources to make new ideas happen" is specifically identified as somewhat comprehensive and regarded as occasionally exhibited. With a mean grade of 3.77, the item "creating new ideas to address difficult issues" is characterized as extensive and viewed as frequently manifesting. This suggests that brainstorming and problem-solving were frequent activities for the responders.

This result confirms what was found of Parlar and Cansoy's (2017) study, which showed that creative educators can bring about changes in settings that promote transparency and collaboration by taking on more initiative and responsibility. When it comes to teaching pupils and enhancing the curriculum, they can take a different approach. They work hard to better themselves, have excellent classroom management skills, and create and apply innovative teaching strategies.

Table 11 Extent of Instructional Inventiveness of the Teachers in Terms of Idea Generation

Statement	Mean	Descriptive Rating
Creating new ideas to address difficult issues.	3.77	Extensive
Searching out for new teaching methods techniques or instruments to enhance teaching-learning processes.	3.72	Extensive
Generating original solutions for problems related to my class.	3.64	Extensive
Looking for new technologies appropriate in the class to enhance learning experiences of the learners.	3.44	Extensive
Securing resources to make new ideas happen.	3.25	Moderately Extensive
Mean	**3.56**	**Extensive**

Finally, a review of the level of instructional creativity exhibited by Davao Central District, Davao City teachers is provided in Table 12. The overall mean of teachers' innovativeness, as seen in the table, is 3.62, which is deemed extensive. It implies that instructors' ingenuity in the classroom is frequently noted. With regard to the mean ratings of 3.56 or extensive for idea generation, 3.63 or extensive for idea promotion, and 3.68 or extensive for concept realization, the given overall mean rating was the outcome.

The results highlight how frequently the respondents behave in ways that go beyond expected behaviors for their roles. This data backs up the theory put out by de Jong and Den Hartog (2010) that imaginative job conduct among employees involves the generation or acceptance of practical concepts and their execution. Moreover, the deliberate creation, advancement, and implementation of novel concepts inside a team, organization, or work function can be considered imaginative conduct. Similarly, this bolsters Smith's (2009) theory that a person, group, or community's impression of a concept, behavior, or item as novel.

Table 12 Extent of Supportive Work Atmosphere in Terms of Supervision and Guidance

Indicators	Mean	Descriptive Rating
Idea Generation	3.56	Extensive
Idea Promotion	3.63	Extensive
Idea Realization	3.68	Extensive
Mean	**3.62**	**Extensive**

C. Encouraging Leadership Style of School Heads

As indicated by the teachers' perceptions in Table 13, the school heads' inspiring leadership style has a mean value of 3.28, which is considered moderately extensive. The items have mean ratings ranging from 3.04 to 3.54. A mean value of 3.04 indicates that the item "School heads express confidence in teachers' abilities" is moderately extensive, meaning that the item is occasionally noticeable. With a mean grade of 3.54, the item "School heads find ways to celebrate accomplishments of the teachers" is regarded as extensive and frequently evident.

Table 13 Summary Table on the Extent of Encouraging Leadership of School Head in Davao Central District, Davao City

Statement	Mean	Descriptive Rating
Teachers were praised for a job well done.	3.23	Moderately Extensive
School heads express confidence in teachers' abilities.	3.04	Moderately Extensive
School heads creatively reward teachers for their contributions.	3.22	Moderately Extensive
School heads recognized teacher for commitment to shared values.	3.34	Moderately Extensive
School heads find ways to celebrate accomplishments of the teachers.	3.54	Extensive
School heads give appreciation and support.	3.23	Moderately
Mean	**3.28**	**Moderately Extensive**

Overall, the outcome indicates that school administrators can occasionally be seen recognizing the efforts of others by expressing gratitude and cultivating a sense of community by recognizing little accomplishments.

D. Relationship among Supportive Work Atmosphere, Instructional Inventiveness of Teachers, and Encouraging Leadership in Davao Central District, Davao City

The findings of the study on the relationship between teachers' innovative teaching practices, supportive work environments, and motivating leadership styles of school administrators in Davao Central District, Davao City, are given. The association between the variables was ascertained by bivariate correlation analysis employing Pearson product moment correlation.

Table 14 demonstrates a significant positive link between a supportive work environment and teachers' instructional inventiveness in Davao Central District, Davao City, with a p-value of .000, less than the two-tailed .05. (r = .660, p < 0.05). This indicates that instructors' originality in the classroom varies substantially along with how encouraging the work environment is. The results corroborate Chang et al. (2011)'s premise that inventive instruction occurs in schools when an innovative environment exists.

Table 14 Relationship among Supportive Work Atmosphere, Instructional Inventiveness of Teachers, and Encouraging Leadership in Davao Central District, Davao City

Variables	Commitment	Symbolic Leadership Orientation
Supportive Work Atmosphere	0.660** 0.000	0.739** 0.000
Instructional Inventiveness	1	0.701** 0.000

a.**Significant @ p<0.05*

On one hand, the result shows that supportive work atmosphere and encouraging leadership style of school head has a significant positive strong relationship with a p-value of .00 that is less than alpha set at .05 (r = 0.739 p < 0.05). This means that if the extent of supportive work atmosphere changes, the extent of encouraging leadership style of school head also significantly changes. This

leads to the rejection of null hypothesis of no significant relationship between supportive work atmosphere and encouraging leadership style of school head in Davao Central District, Davao City.

However, the association between teachers' inventive teaching methods and school heads' supportive leadership style is evident in the findings, with a p-value of.00 less than the alpha threshold of.05. (r = 0.701 p <.05). This implies that teachers' inventiveness in the classroom will also alter dramatically if the school head's level of support for a leadership style shift. As a result, the null hypothesis—that there is no meaningful correlation between the school head's supportive leadership style and the teachers' creative teaching methods in Davao Central District, Davao City—is rejected.

E. Relationship among Supportive Work Atmosphere, Instructional Inventiveness of Teachers, and Encouraging Leadership in Davao Central District, Davao City

Therefore, it may be concluded that there is no significant mediation influence of encouraging leadership on the relationship between the instructional inventiveness of teachers in Davao Central District, Davao City, and the supportive work environment. In other words, the null hypothesis is rejected.

Furthermore, the table presents the findings from the calculation of the effect size in the three-variable mediation test. The effect size quantifies the amount that the indirect path contributes to the positive impact of a supportive work environment on teachers' inventiveness in the classroom. As can be seen in the figure, the ratio index attains an index value of 0.864, meaning that approximately 13.60 percent of the overall impact is either direct or mediated by other variables that are not accounted for in the model, and approximately 86.40 percent of the overall impact caused by the independent variable on the dependent variable passes through the mediator variable.

Table 15 Mediating Effect of Encouraging Leadership Style on the Relationship Between Supportive Work Environment and Instructional Inventiveness of Teachers in Davao Central District, Davao City

Effect Type	Path	Estimate	Std. Error	z-value	p-value
Indirect Effect Components	SWE → ELS→ TII	0.831	0.052	16.281	0.000
Direct Effect	SWE → TII	0.131	0.052	2.390	0.000
Total Effect	SWE → TII	0.962	0.916	58.786	0.000
Ratio Index = 0.864					

[b.]*Legend: SWE– Supportive Work Environment; TII – Teachers' Instructional Inventiveness; ELS – Encouraging Leadership Style*

Through mediation analysis, the mediation model shown in Figure 2 was generated. The significant role of encouraging leadership as mediator in the relationship between supportive work environment and instructional inventiveness of teachers is contributed by the fact that there exists a relationship among these variables. It is emphasized in this study that encouraging leadership is an undeniable factor that has a positive relationship between supportive work environment and instructional inventiveness of teachers
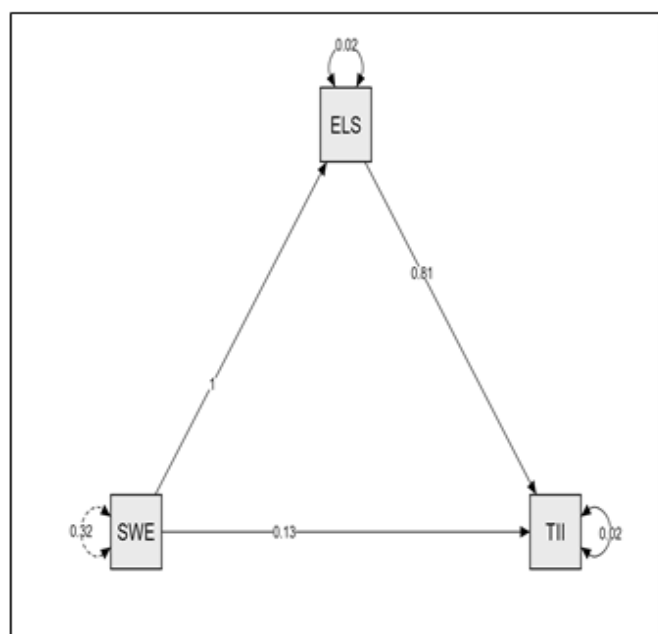

Fig. 2. *Mediation Model*

VII.   CONCLUSIONS AND RECOMMENDATIONS

A. Conclusions

Using non-experimental quantitative design and structural equation modeling through mediation analysis, the primary goal of this study was to ascertain the domains of the mediating effect of encouraging leadership on the relationship between instructional inventiveness of teachers and supportive work environment. The 212 elementary school teachers in Davao Central District, Davao City were chosen as the respondents by the researcher using the random sampling procedure. The researcher employed customized and improved survey questionnaires that were pilot tested at a nearby school to guarantee the instrument's internal consistency and reliability. In addition, the study's results led to the formation of numerous conclusions.

Firstly, the supportive work environment in Davao Central District, Davao City was rated as extensive. On one hand, supportive work environment in terms of interpersonal relationship, communication, and decision making was rated extensive. On the other hand, supportive work environment in terms of supervision and guidance belongs to moderately extensive rating. Secondly, the instructional inventiveness of teachers in Davao Central District, Davao City was rated as extensive. Moreover, instructional inventiveness of teachers in terms of idea generation, idea promotion, and idea realization belongs to extensive rating.

Thirdly, the encouraging leadership of the school head in Davao Central District, Davao City as perceived by teachers acquired extensive rating. Fourthly, the supportive work environment has a positive significant relationship with instructional inventiveness and encouraging leadership in Davao Central District, Davao City. Also, encouraging leadership has a positive significant relationship with instructional inventiveness of teachers in Davao Central District, Davao City.

Lastly, encouraging leadership has a significant mediating effect on the relationship between supportive work environment and instructional inventiveness of teachers in Davao Central District, Davao City.

B. Recommendations

The Department of Education should design programs that would help develop instructional inventiveness of teachers. This may enable teachers to develop their skills in organizing, instructing, teaching. As a result, this may help maximize the learning of the learners while minimizing the time spent by the teachers in delivering instruction.

School heads should provide teachers with the opportunities to develop their innovation by sending them to different professional development seminar workshops. This may enable teachers to exhibit innovativeness in teaching.

Teachers should cultivate reflecting on oneself during instruction in order to examine their teaching strategies, as this will enable them to ascertain the reasons and methods for their teaching style, as well as the responses of their students.

Reflective teaching is a method that educators can employ for examining and assessing their own teaching practices, thereby enabling them to concentrate on what is effective.

Finally, additional analysis should be conducted by researchers to investigate the factor that potentially influences the connection between a supportive work environment and the instructional inventiveness of teachers. This is necessary because only 52.79 percentage of the overall impact of the independent variable on the dependent variable is mediated by the mediator variable.

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