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Ethical Leadership, Professional Development, Organizational Commitment, and Workload

A Structural Equation Model of Teachers' Effectiveness

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Abstract

The research investigated the impact of ethical leadership, professional development, organizational commitment, and workload on teacher effectiveness in public secondary schools in Region XII, Philippines. Employing structural equation modeling (SEM) with data from 400 stratified randomly selected educators, the study identified elevated levels of ethical leadership, professional growth, and organizational commitment among participants. The investigation revealed that professional development and organizational commitment exert direct, significant influences on teacher effectiveness, whereas ethical leadership and workload affect effectiveness indirectly. Essential components of teacher success encompassed preparation, classroom management, subject expertise, and interpersonal relations, whereas ethical leadership was defined by transparency, integrity, and ethical role modeling. The study underscores the necessity for policy reforms to augment professional development opportunities, fortify organizational commitment, and tackle workload concerns, with the goal of enhancing teacher efficacy. These findings endorse the United Nations Sustainable Development Goals pertaining to quality education, gender equality, well-being, decent work, and robust institutions, hence advocating for inclusive and high-quality education.

Keywords

ethical leadership, professional development, organizational commitment, workload, teacher effectiveness, structural equation modeling

INTRODUCTION

The effectiveness of teachers is a significant issue in educational research because of its direct influence on student success and overall school performance. Empirical data increasingly acknowledge that teacher effectiveness is a complex construct shaped by human competencies and systemic circumstances (Maquidato & Bayani, 2024; Prakash, Chandra, & Chandrashekar, 2024). Despite its importance, ongoing issues such as inadequate instructional quality, teacher fatigue, and variable professional standards persistently hinder effective teaching practices globally (Fernandes, Araújo, Miguel, & Abelha, 2023). Deficiencies in leadership and school atmosphere have been emphasized as factors that reduce teacher effectiveness, thereby exacerbating educational disparities. Recent meta-analyses by Maquidato and Bayani (2024) highlight the importance of incorporating organizational dynamics to enhance understanding of disparities in teacher effectiveness, bridging the divide between individual-level studies and holistic institutional perspectives.

Furthermore, Danielson (1996) emphasizes instructional preparation and planning, classroom management, subject matter expertise, teacher attributes, and interpersonal relationships. The results showed that teachers primarily excelled in preparation, planning, and subject matter understanding, although they exhibited modest effectiveness in classroom management and interpersonal interactions. These patterns corroborate Danielson's claim that teacher effectiveness is complex and shaped by continuous professional development, highlighting the necessity of focused professional development and mentoring initiatives to tackle recognized areas for enhancement.

Additionally, assessing teacher effectiveness is crucial since it embodies the primary role of educational institutions: promoting the best student learning experiences and results. Modern educational reforms increasingly emphasize the enhancement of teacher quality as a strategic mechanism for systemic change (Fernandes et al., 2020). Teacher effectiveness functions as a fundamental criterion for policy formation, professional advancement initiatives, and resource distribution decisions (Prakash et al., 2024). It is essential to examine the interplay of external elements, including leadership ethics, professional development, organizational commitment, and workload, in shaping teacher effectiveness (Maquidato & Bayani, 2024). Understanding these connections allows educational leaders and policymakers to devise interventions that foster sustainable teacher performance and, subsequently, enhance student achievement (Khan & Javed, 2018; Fernandes et al., 2020).

On the other hand, professional development significantly enhances teacher effectiveness within the structural equation model, indicating that educators who participate in ongoing learning opportunities display greater instructional competence, classroom management abilities, and student engagement. Empirical data substantiates this association, as professional development augments pedagogical knowledge, instructional innovation, and reflective practice, which are vital elements of effective teaching. In accordance with the findings of Maquidato and Bayani (2024), supportive leadership environments that mitigate professional stress and foster psychological safety facilitate conditions that allow teachers to maximize the advantages of professional growth initiatives, thereby enhancing their engagement and efficacy. Fernandes et al. (2020) asserted that ethical and collaborative school environments promote significant professional development opportunities, enhancing instructional quality and overall teacher efficacy. These findings indicate that professional development functions not only as an auxiliary mechanism but also as a crucial catalyst for teacher effectiveness, underscoring the necessity of ongoing, organized, and context-sensitive training programs in improving educational outcomes. (Guskey, 2002).

Concurrently, professional development is a vital factor in teacher effectiveness, providing educators with contemporary pedagogical skills and promoting innovation. Empirical research indicates that ongoing, pertinent training improves instructors' teaching techniques and classroom management skills (Gastanes and Guhao, 2024). Furthermore, focused professional development enhances teachers' self-efficacy and job satisfaction, which are favorably associated with enhanced student results (Maquidato & Bayani, 2024). Emphasized the significance of mentorship and collaborative learning as essential elements that enhance enduring instructional efficacy, as they provide support and resources that contribute to teachers' professional growth and effectiveness in the classroom.

Next, organizational commitment significantly enhances teacher effectiveness by reinforcing educators' alignment with institutional objectives and promoting sustained work engagement. According to Alam's (2011) multidimensional paradigm of commitment, teachers with high levels of affective and normative commitment display enhanced persistence, instructional dedication, and performance consistency. This relationship can be elucidated through social exchange theory (Do, Chang, & Frederick, 2024), which asserts that when educators sense institutional support and equity, they respond with more effort and professional accountability. Furthermore, Becker's (1994) human capital theory emphasizes that dedicated educators are more inclined to enhance their professional skills, thereby elevating instructional quality and classroom results. Nonetheless, the beneficial impact of commitment may be limited by excessive job demands; the Job Demands–Resources model proposed by Bakker and Demerouti (2007) elucidates that overwhelming workload pressures deplete teachers' psychological resources, resulting in burnout and diminished effectiveness. In alignment with this viewpoint, Maquidato and Bayani (2024) discovered that heightened workload adversely impacts work engagement, thereby reducing overall teacher effectiveness. These findings indicate that organizational commitment improves teacher effectiveness, with its advantages maximized when institutional goals are aligned with sufficient professional support.

Further, the workload profoundly impacts teacher effectiveness, as excessive job demands directly hinder educators' ability to maintain excellent instructional performance. Based on the Job Demands–Resources (JD-R) model by Karasek (1979) and the Job Demand-Control Model, focusing on responsibilities, energy, time, and job engagement elements, including vigor, devotion, and absorption. The research revealed that educators encountered considerable demands on their time and energy, particularly due to administrative tasks and extracurricular obligations. Individuals who indicated increased autonomy and control over their work schedules exhibited elevated engagement levels and less work-related stress. Bakker and Demerouti (2007) found that substantial administrative duties, prolonged teaching hours, and numerous role expectations exhaust teachers' physical and psychological resources, which leads to fatigue, decreased engagement, and compromised instructional quality.

Empirical research from Maquidato and Bayani (2019) substantiates this viewpoint, demonstrating that heightened workload adversely impacts work engagement, a vital precondition to effective teaching. Furthermore, Social Exchange Theory (Do, Chang, & Frederick, 2024) asserts that when educators perceive workload demands as inequitable or insufficiently supported, their reciprocal commitment and discretionary effort wane, consequently impairing performance outcomes. Although a moderate workload can enhance productivity and accountability, prolonged overload hinders classroom preparation, student engagement, and evaluation methodologies. Thus, workload serves as a crucial factor in teacher effectiveness, with its influence dependent on the equilibrium between institutional requirements and the provision of supportive resources. This supports Karasek's model and shows that teachers need more freedom and that non-teaching tasks need to be made easier in order to improve their health and productivity.

Additionally, ethical leadership affects teacher effectiveness within the structural equation model, evaluated through indicators of integrity, fairness, transparency, and role modeling, whereas teacher effectiveness was measured in

terms of instructional competence, classroom management, and learner engagement. Recent empirical research offers robust evidence for this correlation. Fernandes et al. (2023) discovered that supportive and ethically sound leadership contexts foster instructors' pedagogical development and instructional confidence, resulting in enhanced teaching practices. Gastanes and Guhao (2024) utilized structural equation modeling to demonstrate that leadership behaviors characterized by empowerment and moral guidance significantly predict teachers' professional development efforts, an essential element for instructional success. The findings indicate that ethical leadership fosters organizational settings that directly enhance teachers' ability to execute effectively.

Moreover, the outcomes of the current model correspond with modern theoretical and empirical viewpoints. Brown, Treviño, and Harrison (2005) defined ethical leadership as a social learning process wherein leaders exemplify normatively proper behavior that followers imitate, thereby influencing performance results. Khan and Javed's (2018) latest scale refinements underscore that ethical leaders foster accountability and trust, which are associated with enhanced workplace engagement. In alignment with these theories and bolstered by current empirical research, ethical leadership promotes psychological safety, a collaborative culture, and professional drive, all of which enhance teacher effectiveness. Consequently, in the structural model, ethical leadership serves as a crucial predictor of instructional effectiveness by fostering a principled and supportive educational environment.

Furthermore, professional development was influencing teacher effectiveness in the structural equation model, with indicators including participation in pedagogical training, collaborative learning, mentoring, and skills enhancement programs, while teacher effectiveness was assessed through instructional quality, classroom management, and learner engagement. Recent empirical research corroborates this association. Fernandes et al. (2023) found that structured pedagogical training significantly boosts teachers' teaching skills and confidence, leading to better classroom practices. Yangambi (2021) similarly reported that ongoing professional development activities positively affect teaching performance and student accomplishment in underdeveloped countries. In addition to these findings, Gastanes and Guhao (2024) revealed via SEM analysis that leadership-endorsed professional learning initiatives significantly forecast teachers' individual professional development, which subsequently enhances instructional efficacy.

MATERIALS AND METHODS

The method section of this study explains the research design, participant demographics, sampling methods, research instruments, and data analysis techniques used to investigate correlations among ethical leadership, professional development, organizational commitment, workload, and teacher effectiveness. The text describes the criteria for selecting the survey location and participant participation, ensuring the representativeness of public secondary high school teachers of Region 12, Philippines. This section sets the operationalization and measurement of each variable, encompassing the constructs and indicators employed for the structural equation model (SEM). Furthermore, it outlines the protocols for data collection, validation, and ethical issues, followed by an exposition of the statistical techniques employed to evaluate reliability, validity, and the proposed correlations among the variables. This part guarantees transparency and replicability, establishing the basis for the study's empirical analysis and conclusions.

Research Respondents

This study included 400 public secondary school teachers selected from Region XII (SOCCSKSARGEN) in the southern Philippines. The region comprises the provinces of South Cotabato, Sultan Kudarat, and Sarangani, along with the cities of General Santos, Koronadal, Isulan, and Tacurong. According to recent educational statistics, Region XII comprises 456 public secondary schools, employing 23,569 public secondary school teachers. The research sample size was calculated using Cochran's method for a finite population, employing a 95% confidence level and a 5% margin of error, along with standard educational research criteria (Creswell, 2012). This guaranteed that the outcomes would be both representative and generalizable.

The study concentrated on public secondary school teachers engaged in classroom instruction, selected from various teaching backgrounds and subject specializations. All participants were mandated to possess a minimum of five years of teaching experience to guarantee familiarity with institutional structures and professional standards. Teachers were allocated proportionally across the five principal school divisions in Region XII, with the following distribution: 85 respondents from General Santos City (4.96% of its 1,712 public secondary teachers), 100 from Sarangani (4.94% of 2,026 teachers), 75 from Koronadal (12.50% of 600 teachers), 100 from Sultan Kudarat (5.13% of 1,950 teachers), and 40 from Tacurong City (14.29% of 350 teachers). This stratified random sampling method ensured enough representation of each division's teacher population, as advised by Fraenkel, Wallen, and Hyun (2019), thus improving the accuracy and dependability of the results. Public national high schools in each division were included without additional classification, and participants were randomly chosen from these institutions to guarantee an impartial and representative sample.

Participation eligibility was restricted to full-time public secondary school teachers possessing at least five years of teaching experience. Non-teaching personnel, part-time teachers, teachers on leave during data collection, and individuals employed in institutions providing specific curriculum programs were excluded from the sample to ensure curricular consistency. In compliance with ethical guidelines for research involving human subjects, all participants were informed of their right to withdraw from the study at any time, as mandated by the ethics board committee. This procedure ensured voluntary involvement and upheld the rights of all respondents.

Materials and Instruments

The researcher employed adapted but modified survey questionnaires, consisting of five sets of instruments, to gather the requisite data for this investigation. The instrument for ethical leadership was modified from the Ethical Leadership Scale (ELS) developed by Brown et al. (2005). This instrument has 25 statements that evaluate leaders' ethical behavior across dimensions, including people orientation, transparency and accountability, integrity, fairness, and role modeling. Meanwhile, an instrument based on Yangambi (2021) was employed to assess professional development. This questionnaire has 25 items covering topics such as professional development, teaching experience, challenges and difficulties in implementing pedagogical changes, and perceived changes in pedagogical conceptions. Organizational commitment was assessed with a 10-item scale developed by Meyer and Allen (1991), which differentiates between emotional commitment and continuance commitment.

The workload variable was evaluated using indicators modified from the Teacher Workload Survey by Maquidato & Bayani (2024). This measure consists of 30 statements addressing duties and obligations, energy, time, and work engagement in terms of vigor, dedication, and absorption. Ultimately, teacher effectiveness was assessed utilizing a context-specific tool adapted from Prakash, Chandra, & Chandrashekar (2024). This instrument has 25 statements of instructional preparation and lesson planning, classroom management, knowledge of the subject matter, teacher characteristics, and interpersonal relations.

The instruments were rated based on the respondents' level of agreement and disagreement, which ranged from strong agreement to strong disagreement. The rating scale used in this study assigned a value of five (5) to Strongly Agree (SA), indicating that the statement is observed at all times. A value of 4) was assigned to Agree (A), indicating that the statement is observed most of the time. Three (3) times the statement is Moderately Agree (MO), indicating that the statement is sometimes observed. Disagree (D) was assigned a value of two (2), indicating that the statement is seldom observed. Finally, Strongly Disagree (SD) was assigned a value of 1), indicating that the statement was not observed. The modification of established instruments, supported by empirical literature, guaranteed the validity and relevance of the inquiries to the teaching profession and educational leadership context in Region XII.

All data gathered across variables are to be analyzed using a standardized Likert scale to maintain uniformity in interpretation. The interpretation was as follows: 4.20–5.00 = Very High (Strongly Agree), 3.40–4.19 = High (Agree), 2.60–3.39 = Moderate (Neutral), 1.80–2.59 = Low (Disagree), and 1.00–1.79 = Very Low (Strongly Disagree). This interpretative framework enabled significant comparisons among several constructs and promoted precise data classification throughout analysis and presentation.

Additionally, a pilot test was administered to 50 public high school teachers from institutions excluded from the primary study group. Pilot test data were evaluated for reliability using Cronbach's alpha. The results assessed the study instrument's statistical properties, including acceptability and internal consistency. Cronbach's alpha, which gauges how closely items on a scale are related and consistently measure the same concept, was used to evaluate reliability. According to Gliem & Gliem (2003), a Cronbach's alpha value approaching 1.0 indicates higher internal consistency among the scale's items. 1.0 indicates higher internal consistency among the scale's items. Furthermore, Bonett and Wright (2014) stated that an acceptable reliability rating is contingent upon the nature of the application. The emphasis should be on the population dependability value rather than the sample reliability value.

According to Nunnally and Bernstein, the lowest acceptable level for exploratory research is a Cronbach's alpha of .70; values of .80 signify reasonable reliability, and coefficients of .90 and higher imply outstanding internal consistency. The following general guideline was also put forth by George and Mallery: $\alpha \geq .90$ (Excellent), $\alpha \geq .80$ (Good), $\alpha \geq .70$ (Acceptable), $\alpha \geq .60$ (Questionable), $\alpha \geq .50$ (Poor), and $\alpha < .50$ (Unacceptable).

The Ethical Leadership scale's Cronbach's alpha of .975 (25 items) in the pilot test indicated a very high degree of inter-item correlation and strong reliability. The Professional Development scale (25 items) had an alpha of .882, falling into the "good" reliability category. Organizational Commitment showed excellent internal consistency, with an alpha of .863 (30 items). The Workload construct demonstrated excellent dependability, with an alpha coefficient of .863 (30 items). Lastly, the Teacher Effectiveness measure, which consists of 25 items, has an alpha coefficient of .958, indicating excellent reliability. 958 was classified as having excellent reliability. The instrument's statistical acceptability was confirmed when all calculated coefficients significantly surpassed the threshold. 70 criterions.

Cronbach's alpha is calculated as the average inter-item covariance relative to the overall scale variance. High alpha values indicate that the variance of the total score is largely attributable to shared covariance among items rather than random measurement error. Tavakol and Dennick have observed that a scale's Cronbach's alpha can be inflated by adding more items; hence, the extremely high coefficients for teacher effectiveness and ethical leadership.

Strong internal consistency supports construct validity by showing that items logically match the theoretical domain of each variable. The excellent reliability coefficients found in the pilot test support the instrument's construct validity and applicability for large-scale quantitative analysis. The instrument is statistically acceptable, psychometrically reliable, and shows evidence supporting construct validity, according to the results of the pilot test. These findings justify its utilization for the main study and subsequent inferential statistical procedures.

Design and Procedure

This study used a quantitative non-experimental research design, utilizing a Structural Equation Model (SEM) to develop the best model. Quantitative non-experimental research design refers to studies that do not involve the random assignment of participants to different conditions or treatments; the relationships between variables are observed without active manipulation or control (Gopalan et al., 2020). The focus is on clarifying and examining the relationship between variables rather than determining causation (Mohajan, 2020).

The structural equation model incorporates both continuous and categorical variables, including ordered and dichotomous indicators. This method provides large-sample chi-square fit tests and standard errors of estimates for previously unexamined scenarios (Taherdoost, 2022). The study employed structural equation modeling (SEM) as the principal analytical method to examine the interrelations among the constructs and evaluate the proposed model. Structural Equation Modeling (SEM) is a comprehensive multivariate statistical technique that simultaneously analyzes multiple regression equations to assess both direct and indirect effects among variables (Kline, 2016). Its incorporation was crucial in evaluating the theoretical framework connecting ethical leadership, professional development, organizational commitment, and workload to teacher effectiveness. Structural Equation Modeling (SEM) offers both confirmatory and exploratory insights, facilitating the validation of latent components and the examination of intricate mediation interactions. The utilization of SEM corresponds with the study's aim to comprehend not only correlations but also the structural patterns and connections among the variables.

Logical steps were undertaken, and the collection of data follows a methodical set of protocols. Initially, legal authorization to do the study is secured from the Regional Office and from the Schools Division Superintendents of the designated divisions in Region XII. Subsequently, individual school principals will be informed to obtain clearance and facilitate survey administration. The researcher provided instructions to the respondents, translated the questions into the vernacular where appropriate, and addressed their inquiries to ensure a comprehensive understanding of the survey. The acquisition of the Questionnaires were administered a minimum of two weeks following distribution. The data were compiled and submitted to the statistician for analysis. The data collection commenced in the final week of February 2026 and concluded in the final week of March 2026.

The evaluation and analysis of ethical leadership, professional development, organizational commitment, workload, and teachers' effectiveness were conducted by calculating the mean. Subsequently, Pearson's r was employed to determine the existence of significant correlations among the variables. A system of variable-influenced patterns was analyzed by route analysis. In assessing the models' goodness of fit, the following indices were calculated and must satisfy the specified criteria: CMIN/DF should be <2 with a p -value >0.05 (Tabachnick & Fidell, 2007); Tucker-Lewis Index (TLI) should exceed 0.95; Comparative Fit Index (CFI) should exceed 0.95; Goodness of Fit Index (GFI) should exceed 0.95; Normative Fit Index (NFI) should exceed 0.95; and Root Mean Square Error of Approximation (RMSEA) should be <0.05 with a P of Close Fit (PCLOSE) >0.05 . The researcher consistently complied with ethical standards during the study by adhering to the procedural assessments and criteria set forth by the University of Mindanao Ethics Review Center (UMERC). Moreover, in compliance with the Data Privacy Act of 2012, the researcher guaranteed the confidentiality of the respondents' personal information.

Additionally, the Structural Equation Modeling (Maximum Likelihood Estimation). This multivariate procedure, integrating multiple regression and factor analysis, was employed to concurrently estimate a series of interdependent connections of dependency (Hair, Ringle & Sarstedt, 2013). The purpose was to evaluate the proposed model and identify the best one for the quality of employment relationships among instructors. To assess the adequacy of the proposed models, the following indices were utilized: Chi-square/degrees of freedom (χ^2/df), Goodness of Fit Index (GFI), Normed Fit Index (NFI), Tucker-Lewis Index (TLI), Comparative Fit Index (CFI), and Root Mean Square Error of Approximation (RMSEA). The fundamental purpose of the test, as articulated by Jamil and Rue (2026), is to guarantee the exclusion of characteristics exhibiting weak correlations with the attributes of other latent variables in the final Structural Equation Model (SEM).

RESULTS AND DISCUSSIONS

This chapter presents statistics and findings derived from participants' replies concerning the factors affecting teacher effectiveness among public secondary school teachers in Region 12, Philippines. The discussions are structured under the following subheadings: ethical leadership level, professional development level, organizational commitment level, and perceived workload level, along with the correlations between ethical leadership and teacher effectiveness, professional development and teacher effectiveness, organizational commitment and teacher effectiveness, and workload and teacher effectiveness, as examined through the use of structural equation modeling.

Ethical Leadership

Table 1 displays an overall mean score of 4.44 for Ethical Leadership, signifying a *very high*. The standard deviation (SD) for this metric is 0.504. The indicator "Ethical Guidance and Role Modeling" received the highest mean rating of 4.50, categorized as *very high*. On the other hand, the "fairness" indication had the lowest value of 4.40, categorized as *very high*.

Table 1 Level of Ethical Leadership

Indicator	SD	Mean	D.E.
People Orientation	0.550	4.41	Very High
Transparency and Accountability	0.599	4.46	Very High
Integrity	0.560	4.44	Very High
Fairness	0.557	4.40	Very High
Ethical Guidance and Role Modeling	0.519	4.50	Very High
Overall	0.504	4.44	Very High

The results indicated that the leaders in the study consistently exhibited remarkably high standards of ethical leadership across all assessed indicators. The indication pertaining to ethical guidance and role modeling got the highest marks among all evaluated qualities. The "Very High" grade indicates that participants predominantly view their leaders as exceptional ethical role models inside the organization. Leaders are viewed as cultivating a culture of integrity by integrating ethical principles into organizational policy and establishing explicit expectations and moral standards for conduct. These findings corroborate previous research that highlights the essential function of ethical leadership in educational settings (Brown & Treviño, 2006; Northouse, 2021). When employees perceive their leaders as demonstrating integrity and fairness and offering ethical guidance and role modeling, it fortifies collective adherence to ethical norms while augmenting motivation and engagement among team members. This reinforces the notion that ethical leadership, akin to empowering leadership, is crucial for fostering an environment in which individuals feel esteemed, driven, and inspired to make significant contributions (Cheong, 2019).

Professional Development

Table 2 presents the level of professional development. The overall mean for this variable is 4.57, described as very high, with a standard deviation (SD) of 0.337. "Professional Development" has a mean rating of 4.70, described as very high, the highest-rated indicator. Contrary to this, the indicator "Challenges and Difficulties in the Implementation of Pedagogical Changes" showed the lowest rating with a mean of 4.24, described as very high.

Table 2 Level of Professional Development

Indicators	SD	Mean	D.E.
Professional Development	0.403	4.70	Very High
Teaching Experience	0.413	4.64	Very High
Challenges and Difficulties in the Implementation of Pedagogical Changes	0.653	4.24	Very High
Perceived Changes in Pedagogical Practices and Conceptions	0.434	4.58	Very High
Willingness to Change	0.414	4.68	Very High
Overall	0.337	4.57	Very High

The results show that educators actively participate in learning through daily experiences, informal discussions, and reflective practices with their colleagues. This initiative facilitates the implementation of innovative instructional practices, resulting in enhanced academic performance, particularly in areas such as student engagement, critical thinking, and overall learning outcomes. These findings correspond with Holmgren and Sjoberg (2022), who highlighted that educators' engagement in professional discourse and receptiveness to educational innovations are interdependent and dynamic. Tang et al. (2023) observed that educators' drive to improve their work frequently stems from everyday contacts with peers, supervisors, and participation in educational events. Moreover, these observations align with Kolb's (1984) experiential learning theory, which posits that despite its lack of structure, informal learning remains a crucial avenue for educators to modify and use effective tactics in their practice. Moreover, engaging in formal educational training programs or workshops is emphasized as an effective method for enhancing teaching competency, as these programs provide structured opportunities for educators to learn new strategies, collaborate with peers, and receive feedback on their teaching practices.

Organizational Commitment

Presented in Table 3 is the level of Organizational Commitment, which shows that overall, it has a rating of 4.50 with a descriptive equivalent of very high and a standard deviation (SD) of 0.424

Table 3 Level of Organizational Commitment

Indicators	SD	Mean	D.E.
Affective Commitment	0.448	4.52	Very High
Continuance Commitment	0.459	4.48	Very High
Overall	0.424	4.50	Very High

The significant organizational commitment reported among educators is mostly due to pronounced emotional and continuance commitment, both of which demonstrate high mean values. This indicates that educators possess a profound emotional bond and sense of duty to their school, aligning with its objectives and principles while also exhibiting a strong inclination to remain associated with it. These findings align with Meyer and Allen's (1991) three-component model of organizational commitment, which emphasizes the significance of emotional (affective) and continuous (continuance) commitment in promoting favorable work attitudes and enhanced performance, especially in educational settings. The continuously elevated evaluations across all subdimensions indicate a school climate seen as nurturing and conducive to both personal and professional levels. This culture is defined by transparent communication, common ideals, and cooperative objectives—elements empirically demonstrated to improve corporate commitment. Bada et al. (2020) emphasized the crucial need for explicitly defining school objectives to enhance staff commitment and involvement. Punzalan (2024) acknowledged that articulating and conveying a clear school mission is a fundamental aspect of effective instructional leadership. These studies collectively confirm the essential function of schools in influencing instructors' dedication on personal and professional levels.

Workload

Table 4 displays the level of workload, exhibiting an overall mean of 4.38, categorized as very high, with a standard deviation (SD) of 0.410. Thus, the elevated degree of workload is attributable to the exceptionally high levels of most variables. "Dedication" is ranked the highest, with a mean score of 4.54, classified as very high. Conversely, the indication with the lowest rating is "Time," which has a mean score of 4.22, categorized as very high.

Table 4 Level of Workload

Indicators	SD	Mean	D.E.
Duties and Obligations	0.559	4.28	Very High
Energy	0.587	4.32	Very High
Time	0.607	4.22	Very High
Vigor	0.456	4.51	Very High
Dedication	0.460	4.54	Very High
Absorption	0.485	4.39	Very High
Overall	0.410	4.38	Very High

The consistently elevated evaluations across all workload aspects, as illustrated in Table 4, demonstrate educators' exceptional dedication and vigor toward their professional responsibilities, underscoring a profound sense of engagement and enthusiasm in their teaching professions. This degree of commitment is supported by research highlighting the critical impact of personal and job-related resources such as resilience, adaptability, self-efficacy, and collective efficacy on teacher effectiveness, especially in challenging settings (Sheridan et al., 2025; Skaalvik, 2018). The study discovered that educators who possess high levels of self-efficacy and collective efficacy are more likely to demonstrate lasting enthusiasm and perseverance when faced with substantial workloads. Likewise, resilient educators possess superior capabilities to manage work pressures while sustaining elevated motivation as well as performance levels (Beltman et al., 2011). These findings highlight the fervor and commitment educators exhibit in their profession, as they frequently go beyond the expectations associated with their positions. The elevated workload ratings identified in this study underscore educators' personal motivation and dedication as a significant influence on their students' academic experiences.

Teachers Effectiveness

Table 5 presents the degree of teachers' effectiveness, indicating that the respondents' overall level of personal professional development is 4.66, classified as very high, with a standard deviation of 0.390. The majority of the indicators are associated with the elevated level of the variable. The indication "Teachers' Characteristics" has a mean score of 4.20, categorized as very high. Nevertheless, the indicator "Preparation for Teaching and Planning" had the lowest grade, averaging 4.64, which is categorized as very high.

Table 5 Level of Teachers' Effectiveness

Indicators	SD	Mean	D.E.
Preparation for Teaching and Planning	0.448	4.64	Very High
Classroom Management	0.421	4.67	Very High
Knowledge of Subject Matter	0.446	4.65	Very High
Teachers Characteristics	0.409	4.69	Very High
Interpersonal Relations	0.428	4.68	Very High
Overall	0.390	4.66	Very High

The findings indicate that, regarding teachers' effectiveness, significant strengths are seen in the areas of teacher qualities and interpersonal relations. This emphasizes that effective teaching encompasses not only knowledge of the subject-matter proficiency but also adept classroom management, teachers' characteristics, and interpersonal relations improve students' performance. (Stronge et al., 2011). Empirical research has demonstrated the value of these practices. Linde,

Sarva, and Daniela (2023) found that teachers who took part in professional development were better at creating supportive learning environments. They often did this by giving constructive feedback, showing real concern, and encouraging collaborative learning. In a synthesis of 115 OTPD studies, Stavermann (2024) found that teachers who took part in professional development improved their teaching methods and became better at showing positive interpersonal behaviors, such as praise, encouragement, and inclusive questioning techniques, which make the classroom a more welcoming place. These findings collectively point out the importance of kind and praiseworthy actions in effective teaching, as such behaviors foster a supportive and motivated environment conducive to both academic success and personal development for students.

Relationship between Levels of Ethical Leadership and Teachers' Effectiveness

Table 6 presents the significance of the relationship between ethical leadership and personal professional development across different dimensions. This research tested the significance of the relationship at the 0.05 level. The table shows that the overall r-value is 0.451, with a p-value less than 0.05.

Table 6 Significance of the Relationship between Levels of Ethical Leadership and Teachers' Effectiveness

Ethical Leadership	Teachers' Effectiveness					
	Preparation for Teaching and Planning	Classroom Management	Knowledge of Subject Matter	Teacher Characteristics	Interpersonal Relations	Overall
People Orientation	.368* (0.000)	.302* (0.000)	.359* (0.000)	.346* (0.000)	.315* (0.000)	.373* (0.000)
Transparency and Accountability	.344* (0.000)	.300* (0.000)	.344* (0.000)	.326* (0.000)	.285* (0.000)	.353* (0.000)
Integrity	.411* (0.000)	.387* (0.000)	.406* (0.000)	.370* (0.000)	.342* (0.000)	.424* (0.000)
Fairness	.413* (0.000)	.391* (0.000)	.411* (0.000)	.403* (0.000)	.359* (0.000)	.436* (0.000)
Ethical Guidance and Role Modeling	.412* (0.000)	.428* (0.000)	.415* (0.000)	.444* (0.000)	.382* (0.000)	.459* (0.000)
Overall	.430* (0.000)	.398* (0.000)	.427* (0.000)	.416* (0.000)	.371* (0.000)	.451* (0.000)

*Significant at 0.05 significance level

The results revealed that all aspects of ethical leadership exhibited statistically significant connections with the different indicators of teachers' effectiveness. All p-values were below 0.05, and r-values varied from 0.285 to 0.459, indicating moderate to strong positive correlations. The components of ethical leadership, including integrity, fairness, and moral guidance and role modeling, exhibited the strongest associations with overall teacher effectiveness and teacher qualities, achieving r-values of 0.459 and 0.444, respectively. The findings indicate that elevated judgments of ethical leadership are consistently linked to enhanced teacher performance in lesson preparation, classroom management, subject matter expertise, and interpersonal interactions.

These findings substantiate the premise that ethical leadership cultivates a supportive and high-performing school environment by exemplifying integrity, fairness, and professionalism. This corresponds with the findings of recent research by Wang et al. (2024), which demonstrated that ethical leadership directly improves teacher self-efficacy and instructional quality. Buil and Matute (2019) revealed that leaders who display justice and serve as role models markedly enhance teacher engagement and work satisfaction. Moreover, Çoğaltay and Boz (2023) stressed that ethical guidance in educational institutions enhances collective efficacy and staff morale. This study validates the perspective that ethical leadership is a vital determinant of teacher effectiveness and the overall efficacy of educational institutions.

Relationship between Levels of Professional Development and Teachers' Effectiveness

Presented in Table 7 is the relationship between levels of professional development and teachers' effectiveness. The results show that overall, there is a strong, positive, and significant relationship between professional development and teachers' effectiveness, as evident in the correlational coefficient value (r-value) of 0.636 and a p-value less than 0.05.

This study investigated the correlation between many facets of professional development and several indicators of teacher effectiveness. The findings indicated that all indicators of professional development, namely direct involvement, teaching experience, challenges and difficulties in pedagogical changes, and perceived changes in pedagogical practices and conceptions, were strongly associated with teacher effectiveness outcomes. Significantly, the most robust correlations were identified between willingness to change in pedagogical practices and overall teacher effectiveness ($r = 0.624$), as well as between comprehensive professional development participation and teacher effectiveness ($r = 0.636$), both yielding p-values below 0.05. These findings point out the importance of continuous professional development and adaptable methodologies in promoting effective instruction.

Table 7 Significance of the Relationship between Levels of Professional Development and Teachers' Effectiveness

Professional Development	Teachers' Effectiveness					
	Preparation for Teaching and Planning	Classroom Management	Knowledge of Subject Matter	Teacher Characteristics	Interpersonal Relations	Overall
Professional Development	.504* (0.000)	.536* (0.000)	.511* (0.000)	.543* (0.000)	.516* (0.000)	.575* (0.000)
Teaching Experience	.504* (0.000)	.456* (0.000)	.511* (0.000)	.458* (0.000)	.437* (0.000)	.523* (0.000)
Challenges and Difficulties in the Implementation of Pedagogical Changes	.127* (0.011)	.198* (0.000)	.117* (0.020)	.183* (0.000)	.168* (0.001)	.174* (0.000)
Perceived Changes in Pedagogical Practices and Conceptions	.606* (0.000)	.616* (0.000)	.606* (0.000)	.514* (0.000)	.482* (0.000)	.624* (0.000)
Willingness to Change	.530* (0.000)	.576* (0.000)	.537* (0.000)	.496* (0.000)	.482* (0.000)	.578* (0.000)
Overall	.579* (0.000)	.617* (0.000)	.581* (0.000)	.567* (0.000)	.538* (0.000)	.636* (0.000)

*Significant at 0.05 significance level.

The observed connections prove the claim that teachers who participate in professional development enhance their subject-matter proficiency and classroom management abilities, while also demonstrating greater adaptability and readiness to adopt innovative instructional methods. This corresponds with recent research by Dheeraj and Kumari (2024), which indicated that ongoing professional development is a crucial factor influencing teacher effectiveness and student success. Additionally, it was highlighted that adaptive, needs-based professional development programs significantly enhance instructors' instructional efficacy and their capacity to engage students meaningfully in the learning process.

The correlation between problems in implementing pedagogical modifications and teacher effectiveness was substantial but weaker ($r = 0.117$ to 0.198). This indicates that, while surmounting obstacles is essential for professional development, it is the readiness to adapt and the perceived efficacy of new methodologies that most significantly enhance teaching effectiveness. Darling-Hammond (2019) affirmed that educators' receptiveness to innovation and reflective practice is crucial for ongoing professional development and instructional superiority.

These results emphasize the significance of cultivating a culture of professional development, adaptation, and reflective practice in educational environments. Educational institutions and governments must prioritize professional development programs that address teachers' changing requirements, foster collaboration, and facilitate the incorporation of innovative teaching methods such as Professional Learning Communities (PLCs), wherein educators convene in small groups to exchange experiences, deliberate on lesson ideas, and cooperatively address instructional issues. Peer observation and coaching projects enable teachers to observe one another's classes, provide feedback, and participate in reflective discussions regarding pedagogical practices. Initiatives such as instructional rounds, wherein educators collaboratively observe classroom practices and exchange views, can enhance instructional progress. Moreover, action research initiatives enable educators to examine classroom challenges, experiment with innovative strategies, and disseminate results among peers. Public secondary schools may establish mentorship programs that connect rookie educators with seasoned mentors for continuous assistance and guidance. Workshops on innovative pedagogy, including differentiated instruction and technological integration, ensure that educators remain informed about contemporary educational trends. Access to online professional development courses and reflective journaling projects enhances continual learning and self-assessment, ensuring instructors remain adaptable and effective in their practice.

Relationship between Levels of Organizational Commitment and Teachers' Effectiveness

Table 8 shows the statistical significance of the correlation between organizational commitment and teacher effectiveness, which exhibited a substantial correlation, evidenced by an r -value of 0.620 and a p -value below 0.05 . The analysis of each domain of organizational commitment to overall teachers' effectiveness indicated correlation coefficient values between 0.624 and 0.534 . All categories of organizational commitment exhibit a positive and significant correlation with teachers' effectiveness.

The results demonstrate that the indicators of organizational commitment, both affective and continuance, show significant correlations with various elements of teacher effectiveness, encompassing teaching preparation and planning, classroom management, knowledge of the subject matter, teacher characteristics, interpersonal relations, and overall effectiveness. All correlation coefficients (r -values) varied between $.465$ and $.624$, with p -values below 0.05 , indicating statistical significance.

Table 8 Significance of the Relationship between Levels of Organizational Commitment and Teachers' Effectiveness

Organizational Commitment	Teachers' Effectiveness					
	Preparation for Teaching and Planning	Classroom Management	Knowledge of Subject Matter	Teacher Characteristics	Interpersonal Relations	Overall
Affective Commitment	.536* (0.000)	.570* (0.000)	.561* (0.000)	.582* (0.000)	.579* (0.000)	.624* (0.000)
Continuance Commitment	.486* (0.000)	.503* (0.000)	.485* (0.000)	.484* (0.000)	.465* (0.000)	.534* (0.000)
Overall	.547* (0.000)	.574* (0.000)	.560* (0.000)	.571* (0.000)	.559* (0.000)	.620* (0.000)

*Significant at 0.05 significance level

Affective commitment had moderate to high positive associations with all dimensions of teacher effectiveness, with r-values between .536 and .624 and p-values of .000. Continuance commitment had significant positive correlations with all markers, with r-values ranging from .465 to .534 and p-values continuously at .000. In the context of overall organizational commitment, correlations were consistently strong, with r-values ranging from .547 to .620 and p-values at .000.

The findings indicate that higher organizational commitment among teachers correlates with higher efficacy in several teaching competencies. The strong relationships illustrate the necessity of cultivating organizational commitment to improve instructional methods and professional relationships in educational environments.

The findings correspond with the research of Hattie (2017) and Darling-Hammond (2019), emphasizing that organizational characteristics like dedication and support profoundly influence teacher effectiveness and student outcomes. Moreover, the findings align with Fullan's (2018) claim that organizational commitment and a supportive school environment are essential for maintaining effective teaching methods and continuous professional development.

Relationship between Levels of Workload and Teachers' Effectiveness

Table 9 illustrates substantial positive relationships between workload factors and teacher effectiveness (overall $r = .591$, $p < .05$), particularly with dedication ($r = .660$) and vigor ($r = .607$). Though a heavy workload is frequently linked to stress, the favorable relationships present may indicate an environment where high engagement and commitment are valued and enhance effectiveness.

Table 9 Significance of the Relationship between Levels of Workload and Teachers' Effectiveness

Teachers' Effectiveness	Teachers' Effectiveness					
	Preparation for Teaching and Planning	Classroom Management	Knowledge of Subject Matter	Teacher Characteristics	Interpersonal Relations	Overall
Duties and Obligations	.312* (0.000)	.391* (0.000)	.318* (0.000)	.402* (0.000)	.366* (0.000)	.393* (0.000)
Energy	.297* (0.000)	.424* (0.000)	.291* (0.000)	.322* (0.000)	.274* (0.000)	.354* (0.000)
Time	.211* (0.000)	.299* (0.000)	.218* (0.000)	.294* (0.000)	.218* (0.000)	.272* (0.000)
Vigor	.555* (0.000)	.561* (0.000)	.550* (0.000)	.566* (0.000)	.521* (0.000)	.607* (0.000)
Dedication	.616* (0.000)	.635* (0.000)	.617* (0.000)	.607* (0.000)	.515* (0.000)	.660* (0.000)
Absorption	.521* (0.000)	.567* (0.000)	.523* (0.000)	.520* (0.000)	.477* (0.000)	.575* (0.000)
Overall	.516* (0.000)	.599* (0.000)	.517* (0.000)	.562* (0.000)	.490* (0.000)	.591* (0.000)

*Significant at 0.05 significance level

The results demonstrated that the indicators of work engagement, duties and obligations, energy, time, vigor, dedication, and absorption showed strong connections with the measures of instructors' effectiveness. All correlations had p-values below 0.05, with r-values ranging from 0.211 to 0.660. All measures had significant connections, especially dedication and vigor, which demonstrated the strongest associations with overall teacher effectiveness. Moreover, the metrics of absorption and vigor showed a distinct correlation with all dimensions of instructional efficacy, with r-values between 0.477 and 0.607 and p-values under 0.05. All indicators demonstrated a significant association.

The findings suggest that highly dedicated and active teachers can efficiently manage many teaching tasks, including lesson planning, classroom management, and fostering interpersonal relationships. Teachers are working hard to meet their professional obligations, keep their energy levels up, and manage their time well, which makes them more effective overall. School leaders are urged to acknowledge and bolster these constructive practices to enhance teacher

engagement and efficacy. These findings align with the research of Hattie (2017) and Darling-Hammond (2019), demonstrating that elevated work engagement, marked by vigor and dedication, correlates with improved teaching outcomes and professional achievement. The findings are corroborated by Fisher and Frey (2020), who highlighted the significance of teacher engagement and vitality in sustaining excellent classroom practices. Moreover, Fullan (2018) emphasized that committed educators are more adept at navigating the intricacies of the teaching profession, resulting in enhanced educational outcomes. The study's findings align with other research, revealing strong positive correlations between work engagement markers and multiple dimensions of teaching effectiveness.

Fig. 1 illustrates Structural Equation Model 1, representing the preliminary hypothesized correlations among ethical leadership, professional development, organizational commitment, workload, and teachers' effectiveness in standardized solution format. Fig. 1 illustrates that all latent constructs were permitted to directly impact teacher effectiveness. Nevertheless, the model failed to attain a satisfactory fit according to conventional indices.

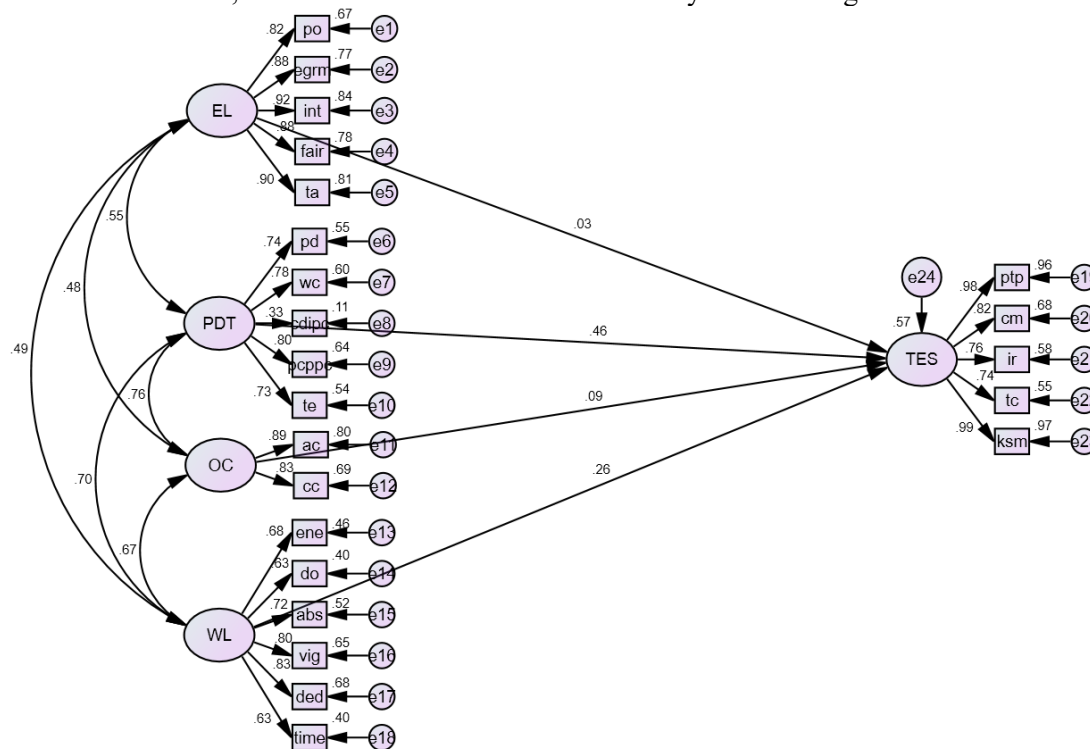


Fig. 1 Structural Equation Model 1 in Standardized Solution

Legend: : po – People Orientation
 ta – Transparency and Accountability
 int – Integrity
 fair – Fairness
 egrm – Ethical Guidance and Role Modeling
 EL – Ethical Leadership
 pd – Professional Development
 te – Teaching Experience
 cdipc – Challenges and Difficulties in the Implementation of Pedagogical Changes
 pcppc – Perceive Changes in Pedagogical Practices and Conceptions
 wc – Willingness to Change
 PDT – Professional Development
 ac – Affective Commitment
 cc – Continuance Commitment
 OC – Organizational Commitment
 do – Duties and Obligations
 ene – Energy
 time – Time
 vig – Vigor
 ded – Dedication
 abs – Absorption
 WL – Workload
 ptp – Preparation for Teaching and Planning
 cm – Classroom Management
 ksm – Knowledge of the Subject Matter
 tc – Teacher Characteristics
 ir – Interpersonal Relations
 TES – Teachers' Effectiveness

Goodness of Fit Measures of Structural Equation Model 1

Table 10 presents the goodness-of-fit measures for structural equation model 1, which includes the variables of ethical leadership, professional development, organizational commitment, workload, and teachers' effectiveness.

Table 10 Goodness of Fit Measures of Structural Equation Model 1

Index	Criterion	Model Fit Value
P-Close	> 0.05	.000
CMIN/DF	0 < value < 2	7.320
P-value	> 0.05	.000
GFI	> 0.95	.728
CFI	> 0.95	.831
NFI	> 0.95	.810
TLI	> 0.95	.806
RMSEA	< 0.05	.126

The results show that Models 1 failed to satisfy the specified requirements for adequate model fit, namely, RMSEA < 0.05, CFI > 0.95, and GFI > 0.95. Both models demonstrated RMSEA values exceeding the acceptable level (.126 and .122) and CFI values below the suggested limit (.831 and .877), indicating an inadequate fit. Notwithstanding substantial predicted connections, these indices indicate that the structural models are insufficient and may necessitate revision or additional specification (Kline, 2016). This inadequacy stresses potential problems with the model structure, as neither model met the criteria for a satisfactory fit.

Legend:

CMIN/DF	-	Chi-Square/Degrees of Freedom
NFI	-	Normed Fit Index
TLI	-	Tucker-Lewis Index
CFI	-	Comparative Fit Index
GFI	-	Goodness of Fit Index
RMSEA	-	Root Mean Square of Error Approximation
Pclose	-	P of Close Fit
P-value	-	Probability Level

Fig. 2 illustrates Structural Equation Model 2, which includes adjustments to enhance fit by recalibrating the relationships among the latent variables. As depicted in Fig. 2, this alternative model did not meet the prescribed requirements for model fit.

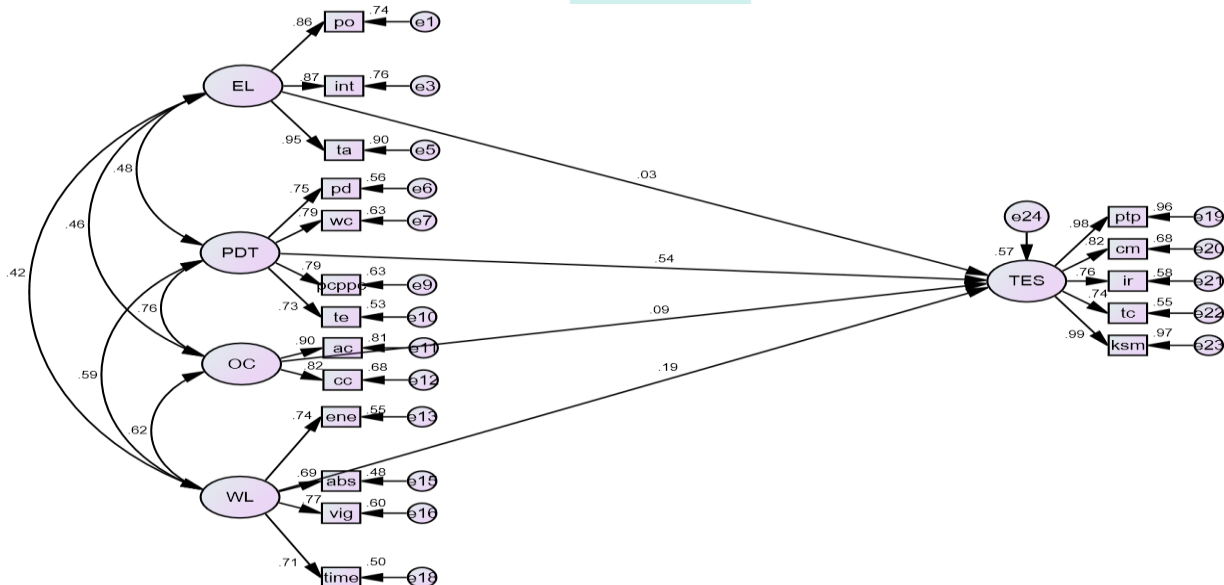


Fig. 2 Structural Equation Model 2 in Standardized Solution

Legend: po – People Orientation
 ta – Transparency and Accountability
 int – Integrity
 fair – Fairness
 egrm – Ethical Guidance and Role Modeling
 EL – Ethical Leadership
 pd – Professional Development
 te – Teaching Experience
 cdipc – Challenges and Difficulties in the Implementation of Pedagogical Changes
 pcpc – Perceive Changes in Pedagogical Practices and Conceptions

wc – Willingness to Change
 PDT – Professional Development
 ac – Affective Commitment
 cc – Continuance Commitment
 OC – Organizational Commitment
 do – Duties and Obligations
 ene – Energy
 time – Time
 vig – Vigor
 ded – Dedication
 abs – Absorption
 WL – Workload
 ptp – Preparation for Teaching and Planning
 cm – Classroom Management
 ksm – Knowledge of the Subject Matter
 tc – Teacher Characteristics
 ir – Interpersonal Relations
 TES – Teachers’ Effectiveness

Goodness of Fit Measures of Structural Equation Model 2

Presented in Table 11 are the goodness-of-fit measures of structural equation model 2 for the variables’ ethical leadership, professional development, organizational commitment, workload, and a structural equation model on teachers’ effectiveness.

Table 11 findings suggest that the model 2 fails to satisfy the established criteria for an adequate fit. The Chi-Square/Degrees of Freedom (CMIN/DF) ratio is 6.949, beyond the advised threshold of less than 2, indicating an insignificant fit. The Root Mean Square Error of Approximation (RMSEA) is .122, significantly over the permissible threshold of 0.05, signifying a considerable divergence between the proposed model and the actual data. The absolute fit indices, comprising the Goodness of Fit Index (GFI = .799), Comparative Fit Index (CFI = .877), Normed Fit Index (NFI = .860), and Tucker-Lewis Index (TLI = .850), all remain below the suggested threshold of 0.95, hence substantiating the indication of insufficient model fit. Furthermore, both the P-value and P-close value are .000, which are below the permissible threshold (> 0.05), indicating that the model’s covariance structure considerably diverges from the observed data (Byrne, 2016; Kline, 2016).

Table 11 Goodness of Fit Measures of Structural Equation Model 2

Index	Criterion	Model Fit Value
P-Close	> 0.05	.000
CMIN/DF	$0 < \text{value} < 2$	6.949
P-value	> 0.05	.000
GFI	> 0.95	.799
CFI	> 0.95	.877
NFI	> 0.95	.860
TLI	> 0.95	.850
RMSEA	< 0.05	.122

Legend:

CMIN/DF	-	Chi-Square/Degrees of Freedom
NFI	-	Normed Fit Index
TLI	-	Tucker-Lewis Index
CFI	-	Comparative Fit Index
GFI	-	Goodness of Fit Index
RMSEA	-	Root Mean Square of Error Approximation
Pclose	-	P of Close Fit
P-value	-	Probability Level

Fig. 3 illustrates Structural Equation Model 3, the best and ideal model, which shows significant enhancements in the fit indices and elucidates the direct and indirect influences of the variables on teacher effectiveness. As illustrated in Fig. 3, professional development and organizational commitment have direct benefits, whereas ethical leadership and workload impose indirect influences.

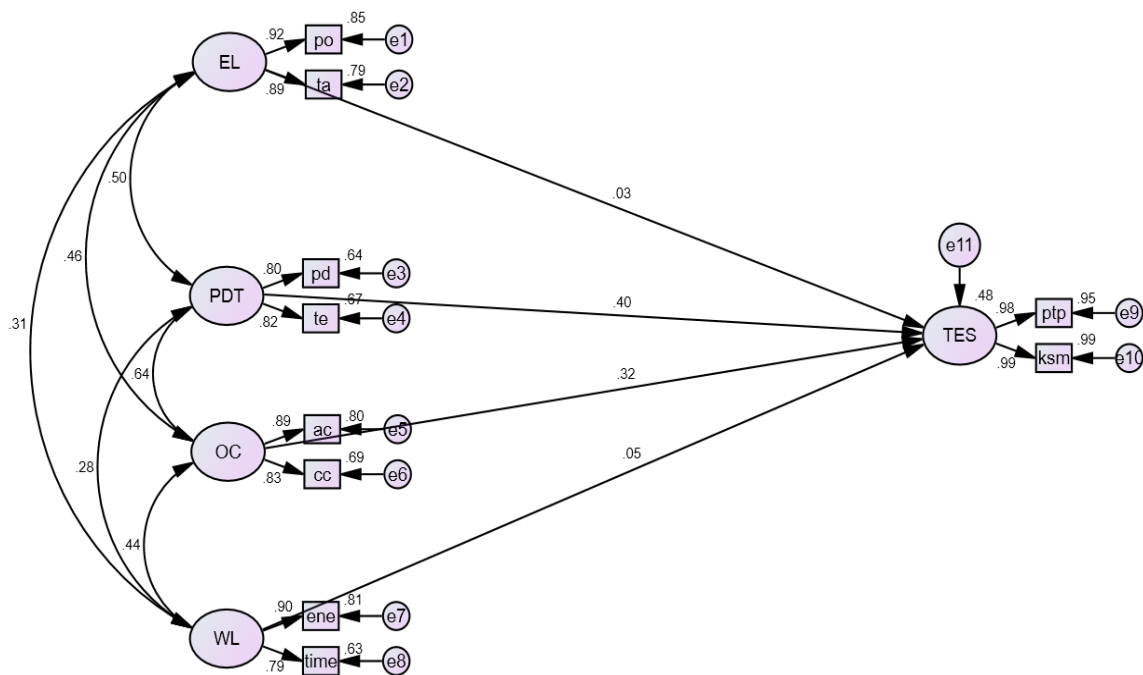


Fig. 3 Structural Equation Model 3 in Standardized Solution

Legend: po – People Orientation
 ta – Transparency and Accountability
 EL – Ethical Leadership
 pd – Professional Development
 te – Teaching Experience
 PDT – Professional Development of Teachers
 ac – Affective Commitment
 cc – Continuance Commitment
 OC – Organizational Commitment
 ene – Energy
 time – Time
 WL – Workload
 ptp – Preparation for Teaching and Planning
 ksm – Knowledge of the Subject Matter
 TES – Teachers' Effectiveness

The final model findings (Fig. 3) indicate that professional development has the most significant impact on teacher effectiveness relative to other variables. This indicates that educators who participate in continuous professional development and skill refinement are more likely to excel in their positions.

The results demonstrate that ethical leadership and workload do not exert a substantial direct impact on teacher performance in this situation. One explanation is that although ethical leadership and workload influence the overall work environment, their effects on individual teacher performance are frequently indirect mediated by factors such as morale, organizational culture, or resource availability rather than directly affecting classroom efficacy.

Comparative analysis indicates that professional development exerts a more significant influence on teacher effectiveness than dedication. Scientifically, this is elucidated by the provision of concrete skills, updated knowledge, and innovative methodologies through professional development, which can be promptly implemented in classroom practice. On the other hand, although organizational commitment signifies a teacher's passion and loyalty, it does not inherently result in enhanced instructional practices or student outcomes unless accompanied with opportunities for development and learning.

Research substantiates this differentiation: investigations indicate that ongoing professional development results in elevated instructional quality, increased adaptability, and enhanced student performance. Therefore, emphasizing professional development programs can directly and measurably enhance teaching effectiveness, while organizational commitment acts as a crucial foundation that fosters involvement in these developmental activities.

Goodness of Fit Measures of Structural Equation Model 3

Presented in Table 12 are the goodness-of-fit measures of path analysis model 3 for the variables' ethical leadership, professional development, organizational commitment, workload, and a structural equation model on teachers' effectiveness.

Table 12 demonstrated a significant enhancement in fit, with all indices meeting or surpassing the suggested thresholds (CMIN/DF = 1.438, RMSEA = .033, CFI = .996, TLI = .993, NFI = .988, GFI = .982, P-Close = .881). This

indicates that the modified path model more precisely reflects the empirical data, corroborating the theoretical constructions and their interconnections.

Table 12 Goodness of Fit Measures of Structural Equation Model 3

Index	Criterion	Model Fit Value
P-Close	> 0.05	.881
CMIN/DF	0 < value < 2	1.438
P-value	> 0.05	.073
GFI	> 0.95	.982
CFI	> 0.95	.996
NFI	> 0.95	.988
TLI	> 0.95	.993
RMSEA	< 0.05	.033

Legend:

CMIN/DF	-	Chi-Square/Degrees of Freedom
NFI	-	Normed Fit Index
TLI	-	Tucker-Lewis Index
CFI	-	Comparative Fit Index
GFI	-	Goodness of Fit Index
RMSEA	-	Root Mean Square of Error Approximation
Pclose	-	P of Close Fit
P-value	-	Probability Level

Table 13 presents a significant percentage of explained variance for critical endogenous variables, including Knowledge of Subject Matter (KSM = .987), Preparation for Teaching and Planning (PTP = .952), and Teachers' Effectiveness (TES = .480).

Table 13 Squared Multiple Correlations: (Group number 1 - Default model 3)

	Estimate
TES	.480
ksm	.987
ptp	.952
time	.632
ene	.810
cc	.691
ac	.798
te	.666
pd	.643
ta	.788
po	.852

Table 13 shows the squared multiple correlations for essential endogenous variables in the model, encompassing Teachers' Effectiveness (TES), Knowledge of Subject Matter (ksm), Preparation for Teaching and Planning (ptp), Time Management (time), Engagement (ene), Classroom Climate (cc), Assessment Competence (ac), Teaching Effectiveness (te), Professional Development (pd), Teaching Activities (ta), and Professional Orientation (po). The findings reveal a significant percentage of explained variance for several key variables, specifically Knowledge of Subject Matter (KSM = .987), Preparation for Teaching and Planning (PTP = .952), and Teachers' Effectiveness (TES = .480).

These findings emphasize the significance of prioritizing subject matter expertise and meticulous preparation in teacher development initiatives. By fortifying these dimensions, educational leaders and policymakers can achieve substantial improvements in teacher effectiveness and, subsequently, student learning results.

Variable Regression Weights in Structural Equation Model 3

Table 14 presents the standardized and unstandardized regression coefficients, standard errors, critical ratios, and significance levels for the relationships defined in Structural Equation Model 3. This model evaluates the direct effects of ethical leadership, professional development, organizational commitment, and workload on teacher effectiveness, as well as the factor loadings of the observed variables on their corresponding latent constructs. The findings demonstrate that organizational commitment and professional development have significant positive impacts on teacher effectiveness, but workload and ethical leadership do not exhibit statistically significant direct effects in this model. The results further affirm the trustworthiness and validity of the measuring devices, as the model exhibits an acceptable match to the observed data.

Table 14 Estimates of Variable Regression Weights in Structural Equation Model 3

			B	S.E.	C.R.	BETA	P
TES	<---	OC	.350	.075	4.687	.321	***
TES	<---	WL	.045	.040	1.118	.054	.264
TES	<---	EL	.022	.044	.511	.026	.610
TES	<---	PDT	.543	.095	5.705	.402	***
po	<---	EL	1.000			.923	
ta	<---	EL	1.047	.067	15.718	.888	***
pd	<---	PDT	1.000			.802	
te	<---	PDT	1.042	.074	14.036	.816	***
ac	<---	OC	1.000			.893	
cc	<---	OC	.953	.056	17.060	.831	***
ene	<---	WL	1.000			.900	
time	<---	WL	.913	.095	9.614	.795	***
ptp	<---	TES	1.000			.976	
ksm	<---	TES	1.013	.019	52.072	.993	***

Chi-square = 35.938

Degrees of freedom =25

Probability level = .073

Table 14 displays the standardized and unstandardized regression coefficients, standard errors, critical ratios, and statistical significance for the proposed relationships in Structural Equation Model 3. This model examines the direct impacts of organizational commitment (OC), workload (WL), ethical leadership (EL), and professional development (PDT) on teacher effectiveness (TES), as well as the loadings of observed variables onto their corresponding latent components. The results demonstrate that organizational commitment (OC) and professional development (PDT) exert significant positive influences on teacher effectiveness (TES), with standardized coefficients (BETA) of 0.321 for OC and 0.402 for PDT. The correlations are statistically significant ($p < .001$), demonstrated by elevated critical ratios (C.R. = 4.687 for OC; C.R. = 5.705 for PDT). These findings validate the research of Meyer and Allen (1991), who demonstrated the significance of organizational commitment, and also support the studies of Guskey (2002) and Desimone (2009), which accentuate the essential role of ongoing professional development in improving teacher engagement and efficacy.

In contrast, workload (WL) and ethical leadership (EL) do not have statistically significant direct impacts on TES within this model (BETA = 0.054, $p = 0.264$ for WL; BETA = 0.026, $p = 0.610$ for EL). Although current literature indicates that excessive workload adversely affects teacher well-being and performance and that effective ethical leadership correlates with enhanced educational outcomes, the present findings imply that, within this sample, the direct effects of workload and ethical leadership on teacher effectiveness are constrained. This may suggest the existence of mediating or moderating variables or that their impact is manifested indirectly through other organizational elements. The measurement model exhibits significant standardized factor loadings for observed variables, including "ksm" on TES (BETA = 0.993, C.R. = 52.072, $p < .001$) and "ta" on EL (BETA = 0.888, C.R. = 15.718, $p < .001$), thus affirming the reliability and validity of the measurement instruments in accordance with established practices in structural equation modeling. The model fit is satisfactory, as evidenced by the chi-square value ($\chi^2 = 35.938$, $df = 25$, $p = 0.073$). The non-significant p-value indicates that the model sufficiently aligns with the observed data, adhering to established thresholds. (Kline, 2016; Byrne, 2016). These findings highlight the critical necessity of establishing a supportive organizational environment and committing to ongoing investments in professional development to improve the effectiveness of teachers. The evidence indicates that professional development significantly influences teacher performance, providing educators with the necessary skills, knowledge, and adaptive techniques for effective classroom practice. The minimal direct effects of workload and ethical leadership indicate that their impact on teacher effectiveness is more complex, likely functioning through indirect pathways such as influencing teacher morale, enhancing organizational commitment, or promoting participation in professional development opportunities. To address these complications, educational leaders must prioritize the establishment of a work environment that fosters collaboration, recognition, and well-being, so indirectly enhancing teacher effectiveness. Collaborative professional learning communities, the implementation of evidence-based mentorship and coaching programs, and the regular solicitation of teacher feedback to guide workload management and ethical leadership practices. Moreover, educational institutions ought to allocate resources towards research that investigates the indirect connections between ethical leadership and workload in relation to academic achievement, facilitating the development of more comprehensive and context-sensitive techniques for educational enhancement.

CONCLUSIONS AND RECOMMENDATIONS

From all the results and inferences drawn from the results of this research in determining the best fit model that predicts teachers' effectiveness to organizational change in the Department of Education in Region XII, the following conclusions were drawn and recommendations for the intended beneficiaries

The ethical leadership of school leaders is regularly exhibited at a high level, as seen by the higher ratings across all categories, including people orientation, transparency, accountability, integrity, fairness, and ethical guidance and role modeling. The strong presence of ethical leadership in an educational setting cultivates a supportive and trustworthy culture, enhancing teacher motivation, engagement, and professional connections. To sustain and enhance this favorable environment, school leaders may routinely organize seminars and training sessions focused on ethical decision-making, transparency, and role modeling, ensuring that ethical norms remain paramount in institutional practices.

Teachers actively participated in both official and informal learning opportunities, resulting in exceptionally high professional development. This strong culture of professional development promotes the implementation of novel teaching methods and fosters teachers' readiness to embrace educational advances. Administrators are encouraged to sustain and augment these opportunities by instituting continuous professional learning communities, supporting digital learning initiatives, and fostering reflective practices through regular communication and peer collaboration.

Further, a Structural Model 3 was identified as the most appropriate model as evidenced by the goodness of fit summary, which met all indices for a structural equation model concerning ethical leadership, professional development, organizational commitment, in relation to teachers' effectiveness, as indicated by the structural modifications. The findings corroborated Lewin's three-stage Change Model of organizational change in schools (1951), emphasizing the necessity of teacher preparedness for such transformations. Therefore, it indicates that schools should prioritize strategic planning and training improvement initiatives centered on change orientation for all educators in public primary schools as a component of their staff development program.

The results indicated that teachers had a high level of organizational commitment, characterized by significant affective and continuance commitments. This illustrates that teachers profoundly align with the objectives and principles of their schools and are committed to their responsibilities. To enhance this commitment, school leaders may advocate for shared governance, acknowledge teachers' efforts, and foster collaborative goal setting. Likewise, cultivating collaborations with parents and the community can enhance the creation of a more inclusive and supportive educational atmosphere, which in turn can alleviate some of the teachers' concerns by providing additional resources and support.

Workload levels were also assessed as very high, especially regarding commitment and energy. Although strong engagement is praiseworthy, school administrators may oversee teacher workload to prevent stress and burnout, which can negatively impact both teacher effectiveness and student outcomes if not managed properly. Employing measures such as equitable task allocation, time management seminars, and well-being support systems can enhance sustained high performance and job satisfaction among educators.

The findings revealed that strengths in teacher attributes, interpersonal relationships, and subject matter expertise significantly contribute to the observed very high levels of teacher effectiveness. Promoting continuous engagement in professional development programs, especially those that utilize digital forms and collaborative efforts, can sustain and enhance teaching quality.

The research identified significant correlations among ethical leadership, professional development, and organizational commitment, indicating that these factors collectively influence teacher effectiveness and the overall educational environment. Consequently, school leaders and governments are urged to focus investments in leadership development and teacher support initiatives. They may also investigate innovative frameworks for professional development and task management to guarantee that educators remain motivated, efficient, and adequately supported, such as mentorship programs, collaborative teaching models, and flexible scheduling that accommodates teachers' needs. Future studies are commended to explore the indirect and mediating influences of ethical leadership and workload on teacher effectiveness, as well as to validate and modify structural models across various educational contexts. These initiatives will enhance interventions and maintain quality in education across schools.

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