European Journal of Education Studies
ISSN: 2501 - 1111
ISSN-L: 2501 - 1111
Available online at: www.oapub.org/edu

DOI: 10.46827/ejes.v12i2.5841 Volume 12 | Issue 2 | 2025

INSTRUCTIONAL LEADERSHIP OF SCHOOL HEADS, WORKPLACE SPIRITUALITY AND SCHOOL CLIMATE: A CAUSAL MODEL ON TEACHER ENGAGEMENT IN PUBLIC SCHOOLS

Merlyn M. Adlawan[1i],
Lyndon A. Quines[2]
[1]Doctor of Education,
Major in Educational Management,
University of Mindanao Professional Schools,
Davao City, Philippines
Teacher III,
Upper Tambler Elementary School II,
Zone 7, Barangay Fatima,
General Santos City,
Philippines
[2]EdD,
University Professor,
University of Mindanao Professional Schools,
Davao City, Philippines

Abstract:
This study aimed to determine the best-fit structural model predicting teacher engagement in public elementary schools in Region XII. The research utilized a non-experimental, descriptive-correlational design, using Raosoft sample size calculator. Mean, Pearson r, with structural equation modeling to analyze relationships among instructional leadership, workplace spirituality, school climate, and teacher engagement. A total of 400 public elementary teachers served as respondents from Sarangani, General Santos, Koronadal, and South Cotabato divisions who comprised the sample utilizing validated survey instruments. The findings revealed that teacher engagement and school climate achieved very high results, with instructional innovation and collaboration as strong indicators of the model. However, workplace spirituality scored lower, particularly in compassion, due to inconsistencies in its application, suggesting a need for further development in creating a compassionate work environment. The best-fit model demonstrated a significant causal relationship between school climate and teacher engagement, with instructional innovation and decision-making serving as vital indicators The implications of these results highlight the importance of fostering strong leadership and supportive school climates to enhance teacher engagement, ultimately leading to improved student outcomes.

[i] Correspondence: email merlyn.adlawan@deped.gov.ph, m.adlawan.525535@umindanao.edu.ph

SDG Indicator: #**4** Quality Education

Keywords: educational management, instructional leadership, workplace spirituality, school climate, teacher engagement, structural equation modeling, Region XII, Philippines

1. Introduction

Engaged teachers play a crucial role in delivering effective education. Yet, the issue of teacher disengagement—a widespread problem that significantly affects student success and the overall quality of education—has become a pressing global issue. Tackling the challenge of unmotivated teachers (Gobbi, Maltagliati, Sarrazin, Di Fronso, Colangelo, Cheval & Carraro, 2020) requires us to confront systemic problems like overwhelming workloads, lack of support, inadequate resources, and limited opportunities for professional growth (Blas & Guhao, 2023; Carver-Thomas & Darling-Hammond, 2019; Gobbi, 2023). This disengagement is evident in lower job satisfaction, increased absenteeism, and diminished productivity (Ferrando & Guhao *et al.*, 2024), highlighting the need for a holistic strategy that addresses the individual needs of teachers.

In this regard, teacher engagement plays a vital role in educational settings, driving positive organizational outcomes. When engagement is sustained, it leads to improved institutional productivity and effectiveness (Ferrando & Guhao, 2024; Deligero & Laguador, 2014). Additionally, teacher engagement is fundamental to the success of schools, as it reflects a positive psychological state where teachers show emotional, cognitive, and physical involvement in their work. Furthermore, highly engaged teachers are able to channel their enthusiasm into productive results, thereby boosting both individual performance and overall school efficiency through their committed involvement in professional responsibilities (Bakker *et al.*, 2020; Sudibjo & Riantini, 2023). Research consistently shows a positive relationship between instructional leadership and teacher engagement. Studies by Nogadas and Apostol (2024) and Zahed-Babelan and Koulaei (2023) highlight how instructional leadership promotes teacher engagement by creating a positive school environment and empowering educators. Sagnak (2021) and Kılınç and Demir (2022) provide further evidence, emphasizing the role of organizational trust and commitment. Quines (2019) also explores the impact of instructional leadership on teacher engagement, emphasizing teacher collegiality. Ultimately, instructional leadership plays a crucial role in enhancing teacher engagement through cultural transformation, educator empowerment, and workplace improvements.

Contemporary research provides robust evidence that workplace spirituality significantly enhances teacher engagement in educational settings. This relationship operates through multiple mechanisms: psychological capital mediation (Hassan *et al.*, 2021), organizational commitment during crises (Charoensukmongkol & Puyod, 2022), mindfulness and spiritual leadership (Kumar & Singh, 2023), innovative work behavior (Rajappan & Nair, 2022), organizational support (Vardarlıer & Dirlik, 2022), and

validated structural models (Thakur & Singh, 2023). Together, these studies establish workplace spirituality as a crucial factor in fostering teacher engagement and performance. Additionally, Guhao's research (2021) has also contributed to this understanding by examining the relationship between workplace spirituality and teacher engagement, specifically exploring the mediating role of psychological empowerment.

A substantial body of research indicates a strong positive connection between school climate and teacher engagement. Studies by Liu and Guo (2023), Martinez *et al.*, (2022), Thompson and Wong (2021), Park and Chen (2023), Anderson and Lee (2022), and Rivera and Santos (2023) consistently show that positive school climates, characterized by supportive leadership, strong collegial relationships, collaborative environments, professional growth opportunities, and shared decision-making, significantly enhance teacher engagement. Additionally, Quines (2020) highlights the importance of school climate in fostering employee engagement and job satisfaction among educators.

Existing research investigates the independent influences of instructional leadership (Leithwood *et al.*, 2019) and workplace spirituality (Mitri *et al.*, 2020) on teacher engagement, alongside the impact of leadership styles on school climate (Cheng & Hui, 2021). However, a critical gap remains in comprehending how these factors interact and influence each other. While studies acknowledge the importance of each factor for teacher engagement, they haven't explored the potential mediating effects – how instructional leadership might cultivate a sense of purpose and meaning (workplace spirituality) and a positive school climate, which in turn contribute to teacher engagement. This present study addresses this knowledge gap by proposing a novel causal model. It investigates these potential mediating effects, offering a more holistic understanding of how school leaders can create a work environment that fosters not only strong instructional practices but also a sense of purpose and community, ultimately leading to more engaged teaching staff. This focus on the interplay between these factors makes this study unique and offers valuable insights for improving teacher engagement through targeted leadership strategies.

This study will aim to determine the structural model of teacher engagement in public elementary schools in Region XII. Specifically, it intends to achieve the following objectives: First, it will evaluate the level of instructional leadership among elementary teachers in terms of: instructional resource provider, maintaining visible presence, professional development, maximize instructional time, monitoring students' progress, feedback on teaching learning and curriculum implementation. Additionally, the study seeks to measure the level of workplace spirituality of elementary teachers in terms of compassion; mindfulness; meaningful work, and transcendence. Moreover, this study will also gauge the level of school climate of elementary teachers in terms of level, collaboration, student relations, school resources, decision-making, and instructional innovation. On the other hand, the level of teacher engagement in terms of cognitive engagement, emotional engagement, social engagement: colleagues and relationships with the school heads will also be determined in this study.

Additionally, this will also determine the significant relationship between teacher engagement and instructional leadership. Also, this will also ascertain the significance of the relationship between workplace spirituality and teacher engagement. Furthermore, this will also determine the significant relationship between teacher engagement and school climate. Lastly, this will determine the best-fit model that predicts teacher engagement.

2. Literature Review

Teacher engagement can be understood through the lens of Self-Determination Theory (SDT), developed by Deci and Ryan (1985, 2000). According to this framework, teachers' motivation and engagement stem from the fulfillment of three fundamental psychological requirements. First, teachers need autonomy - the ability to make meaningful choices about their teaching methods and classroom management. Second, they require competence - confidence in their professional skills and ability to achieve desired outcomes. Third, they seek relatedness - meaningful connections with colleagues and the broader school community. When schools create environments that satisfy these core needs, teachers are more likely to demonstrate higher levels of engagement and commitment to their work. Research by Klassen *et al.* (2012) supports this connection between meeting teachers' psychological needs and enhanced engagement. This understanding suggests that school administrators can boost teacher engagement by implementing practices and policies that reinforce autonomy, build competence, and strengthen professional relationships.

Additionally, this study is supported by the Path-Goal Theory of Leadership (House, 1971, 1996), which provides a useful framework for understanding the influence of instructional leadership on teacher engagement. According to this theory, effective leaders help motivate and support their followers in achieving their goals by providing the necessary guidance, resources, and support. In the context of teacher engagement, the Path-Goal Theory suggests that instructional leaders can enhance teacher engagement by clarifying expectations, providing feedback, removing obstacles, and adapting their leadership style to the specific needs and situations of their teachers (Val *et al.*, 2019). By exhibiting task-oriented behaviors, such as setting clear goals and standards, and relationship-oriented behaviors, such as showing concern for teachers' well-being and development, instructional leaders can create a supportive environment that fosters teacher engagement and motivation.

Considering the above theories, propositions and studies, this is also supported by the studies of (Schaufeli & Bakker, 2022), which show that teacher engagement flourishes in environments with strong instructional leadership, fostering a sense of purpose that aligns with workplace spirituality (Giacalone & Jurkiewicz, 2022). This reciprocity between teachers and supportive leadership is further explained by theories like expectancy theory (Vroom, 2022) and the job demands-resources model (Demerouti *et al.*, 2022), highlighting how teacher belief in achievable goals and a positive school climate,

nurtured by strong leadership, ultimately leads to higher teacher engagement. Effective leadership in teaching and curriculum is crucial for a school to succeed and foster an environment where students can flourish. When principals prioritize effective instruction and cultivate a sense of purpose that aligns with teachers' values, it creates a truly special work environment. It's like witnessing Social Exchange Theory and workplace spirituality come alive – teachers feel valued and supported and, in turn, pour their energy and dedication into student success. This is the kind of environment where everyone wins.

Moreover, this study is supported by the Organizational Climate Theory (Litwin & Stringer, 1968), which provides a useful framework for understanding the influence of school climate on teacher engagement. This theory suggests that organizational climate, which encompasses shared perceptions and attitudes about various aspects of the work environment, such as leadership, structure, and rewards, can significantly impact employee behavior and motivation. In the context of teacher engagement, research has shown that a positive school climate characterized by factors such as collegial relationships, autonomy, and supportive leadership can enhance teachers' engagement and commitment (Collie *et al.*, 2022). Conversely, a negative school climate marked by factors such as lack of support, excessive bureaucracy, and interpersonal conflicts can contribute to teacher disengagement and burnout (Grayson & Alvarez, 2022). Thus, fostering a positive and supportive school climate is crucial for promoting teacher engagement and overall school effectiveness.

Further, the findings from various studies suggest that there is a significant positive association between school climate and teacher engagement. A positive school climate, characterized by strong administrative support, collegial relationships, and a shared sense of purpose, significantly predicts teacher engagement. A collaborative and supportive environment in schools leads to improved student outcomes. Trust, respect, and open communication among teachers and administrators enhance their sense of belonging and commitment, thereby increasing their engagement in the workplace. These studies underscore the importance of a positive school climate in fostering teacher engagement and overall school effectiveness (Dumay and Galand, Kraft *et al.*, Whitaker *et al.*, 2019).

Hence, this study's elevated teacher engagement will empower education departments to drive global progress on Sustainable Development Goals. Providing a roadmap to nurture engaged, effective teachers through instructional leadership and positive school climates will align with quality education for all (SDG 4) (UNESCO, 2019), improving student outcomes. Teacher engagement has been shown to positively impact student achievement, classroom management, and instructional practices (Nolasco, 2022; Quines & Guhao, 2022). By implementing policies and initiatives based on these findings, education departments can transform from passive observers to active drivers, leveraging education as a powerful force for achieving the SDGs and creating a more sustainable, equitable world. Further, embracing inclusive practices will reduce inequalities, leaving no student behind. Equipped with this transformative knowledge,

departments will shift from observers to architects of a sustainable, equitable future where education shapes a better world for all.

3. Material and Methods

The respondents involved in this research were the public elementary school teachers in the Department of Education, Regional Office XII. The Region has 23,569 teachers who are qualified to be included as participants of this study. Region XII, also known as SOCCSKSARGEN, was an administrative region of the Philippines, located in the southwestern part of the island of Mindanao.

Raosoft calculator was used in determining the number of respondents per division. Raosoft's online sample size calculator was a widely used tool in research to determine the minimum recommended sample for a study population that would achieve a desired statistical confidence level and margin of error (Ekore & Okekeocha, 2022). After entering parameters like the total target population size, margin of error percentage, confidence level (typically 95%), and response distribution, Raosoft computed the minimum sample size needed for those specifications. This allowed researchers to derive an appropriately sized sample that provided a level of probability that the sample distribution accurately reflected true distribution parameters in the study population (Alhatmi, 2019).

Moreover, the technique used to determine the number of respondents in each division was stratified random sampling. The breakdowns of the respondents are as follows: General Santos City (99), Koronadal City (32), South Cotabato (148), and Sarangani (121). The process of stratified random sampling necessitates the creation of population strata or smaller subgroups. In stratified random sampling or stratification, the strata were created based on shared features or member characteristics, such as income or level of education. Stratified random sampling is a term frequently used to describe random proportional or random quota sampling (Hayes & Westfall, 2020).

Furthermore, to be eligible for participation in the study as a respondent, inclusion criteria will be developed. They must be teachers in public elementary schools with item positions Teacher I to III and Master Teachers I to IV, and they must possess permanent status in the Department of Education. Furthermore, as long as they are able to respond to the questions, they may be of any gender. The respondents will be expected to give reliable information regarding the instructional leadership of the school head, workplace spirituality, school climate and teachers' engagement.

On the other hand, the researcher will exclude members of certain groups to serve as survey respondents. Principals and head teachers, among other administrative positions, were specifically excluded from the sample. It also did not apply to teachers who had resigned or retired from the Department of Education. Moreover, the sample comprised teachers exclusively from public schools; teachers from private schools will not be included. In order to directly concentrate the study on viewpoints about teacher

engagement from active teachers in the public education system, the researcher will exclusively survey current, non-administrative teachers in public schools.

However, participation in the survey will be entirely voluntary for respondents. The teachers will be permitted to withdraw from the study at any time if they no longer wish to take part. Respondents could opt out if they had concerns about the confidentiality of their survey responses being protected. Teachers are also allowed to decline participation in the survey if they feel they did not have time to complete it due to other commitments. The researcher will make it clear that respondents should only take part if they are fully interested in doing so and could withdraw without any repercussions. Overall, the respondents had the flexibility to decide whether or not to participate based on their own priorities and comfort level with the study.

Six specialists also checked the survey forms to make sure the questions were credible and correct. The competent validators carefully reviewed the contents of the questionnaire to guarantee construct validity. The advice given to the researcher was followed. Given that both internal and external validators scored the instruments at 4.76, it is seen as an excellent tool for content validity. Following that, a pilot test was carried out, and the consistency of the survey items was tested using Cronbach's alpha. It is a metric for measuring internal consistency that establishes the degree to which a collection of things is related to one another. Higher values on the scale denote higher reliability (Mohsen & Reg, 2022) during the pilot testing. Instructional Leadership obtained a Cronbach alpha of 0.977, workplace spirituality got .864, school climate had a Cronbach alpha of .906, and teacher engagement earned .712. This implies that the survey questionnaires are valid and reliable.

The researcher will employ a non-experimental research method utilizing descriptive-correlational research design and structural equation modeling to determine the best-fit model that predicts the engagement of teachers in the Department of Education, Region XII. Descriptive-correlational research and structural equation modeling (SEM) is non-experimental methods used to describe and measure relationships between variables without manipulating them (Loeb *et al.*, 2017). SEM allows researchers to test theoretical models by estimating hypothesized causal relationships based on correlational data (Newsom, 2022).

Structural equation modeling (SEM) is a multivariate statistical analysis technique used to estimate complex relationships between one or more independent variables and one or more dependent variables, either continuous or discrete (Byrne, 2021). In an SEM analysis, the researcher develops a theoretical model and tests how well the model fits the correlation or covariance data through multiple fit indices to determine model adequacy (Meyers *et al.*, 2022). SEM output provides regression weights or path coefficients for each predicted relationship, indicating its strength and statistical significance. Researchers can compare alternative models to determine which model best fits the underlying data. Interpretation requires examining the theoretically-supported structural paths within a web of relationships, rather than isolating single predictors (Byrne, 2021).

In gathering the relevant data for this research, the following steps will be followed: First, the researcher will request permission from the appropriate authorities, such as the regional director, superintendents and principals, to conduct the survey study in their schools. This will ensure compliance with policies and approval to collect data. Second, upon approval, the survey questionnaires will be distributed to the selected respondents through appropriate channels like email, teachers' rooms, or staff meetings. Care was taken to ensure respondent anonymity. Teachers will be given ample time to complete the survey on their own time. Reminders will be sent to prompt completion. Teachers who wished to opt-out could voluntarily withdraw from the process. Third, completed surveys will be gathered by the researcher. The survey responses will be compiled for the next stage of analysis. Fourth, survey questionnaires will be checked for completion and prepared for analysis by coding responses and inputting data into statistical software. Lastly, relevant data analyses will be summarized in the form of tables and graphs to present the overall results and significant findings from the teacher survey responses.

The data were reviewed and interpreted using the appropriate statistical treatments. First, mean, it will be used to assess the instructional leadership of school heads, workplace spirituality, school climate and teacher engagement. Second, Pearson r or Pearson Product–Moment Correlation, is a commonly used statistic in research to measure the strength and direction of the relationship between two variables (Pallant, 2022). It will be used in this study to explore how the exogenous variables of instructional leadership of school heads, workplace spirituality, and school climate interact with the endogenous variable, teacher engagement. Additionally, Structural Equation Modeling (SEM) will also be used. Structural equation modeling (SEM) is a statistical method that allows researchers to test complex relationships between multiple variables simultaneously, including both direct and indirect effects (Byrne, 2019).

When assessing the goodness of fit of a model, various fit indices are used to determine the best fit. (Coughlan and Mullen 2022) recommend evaluating multiple fit indices, including the comparative fit index (CFI ≥ 0.95), the root mean square error of approximation (RMSEA ≤ 0.06), and the standardized root mean square residual (SRMR ≤ 0.08). Similarly, Kline (2022) suggests considering the chi-square statistic, the CFI (≥ 0.90), and the RMSEA (≤ 0.08) as common fit indices. Xia and Yang (2022) also emphasize the importance of reporting the CFI, RMSEA, and SRMR, along with the Tucker-Lewis index (TLI ≥ 0.95). Ultimately, a combination of fit indices will be evaluated to assess the overall model fit and identify the best-fitting model.

The researcher strictly adhered to the ethical standards in the study and received the certification number UMERC-2024-293. The researcher ensured that the respondents' participation was voluntary, kept personal information confidential, obtained an informed consent form, and informed respondents of the risks and benefits associated with the study. In addition, the researcher established proper coordination and communication with the appropriate recruiting parties and acquired permission from the top management before gathering the data. Likewise, the researcher utilized Turnitin

software to avoid plagiarism of literature cited in the paper, ensured there was no fabrication and falsification of data, no trace of conflict of interest, no deception or acts of dishonesty, and took proper measures to avoid any technology-related issues. Finally, the researcher whose name appeared in this paper has made a significant contribution to the idea and design, data gathering, data analysis, and interpretation with the support and guidance of the research adviser.

4. Results and Discussion

4.1 Instructional Leadership of School Heads

Table 1: Level of Instructional Leadership of School Heads

Indicator	SD	Mean	D.E.
Instructional Resource Provider	0.510	4.61	Very High
Maintain Visible Presence	0.450	4.79	Very High
Professional Development	0.470	4.71	Very High
Maximize Instructional Time	0.450	4.72	Very High
Monitoring Students' Progress	0.554	4.62	Very High
Feedback on Teaching Learning	0.540	4.65	Very High
Curriculum Implementation	0.504	4.73	Very High
Overall	**0.442**	**4.68**	**Very High**

Table 1 showcases the level of instructional leadership of school heads, which generated an overall mean of 4.68, with a standard deviation of 0.442, which is described as very high. The mean of indicators ranges from 4.20 to 5.00. This means that the instructional leadership of school heads were always observed/manifested. All seven indicators show remarkably very high mean scores, ranging from 4.61 to 4.79, with maintain visible presence scoring the highest mean at 4.79. This data paints a picture of a very positive state of the importance of principal visibility in enhancing teacher engagement. This assessment is crucial as instructional leadership has been consistently linked to improved teacher performance, student achievement, and overall school effectiveness (Hallinger *et al.*, 2020; Quines, 2020). By examining seven key indicators of instructional leadership, this study provides valuable insights into the strengths and potential areas for improvement in school heads' leadership practices.

This finding corroborates the research of Day *et al.* (2022), who emphasized that successful principals prioritize high visibility to foster positive school climates. Additionally, Leithwood *et al.* (2020) highlighted how visible leadership enhances staff motivation and commitment. Moreover, Abrigo and Balandra (2019) observed that highly visible principals in public schools positively influenced teacher performance and student achievement. Furthermore, Hallinger *et al.* (2020) revealed that successful school leaders actively maintain a visible presence to support instructional improvement. Additionally, Quines (2023) found that school principals who consistently maintain high visibility through frequent classroom walkthroughs, active participation in school

programs, and regular faculty interactions demonstrated enhanced instructional leadership effectiveness, which significantly improved teacher performance and overall school outcomes in public schools.

4.2 Workplace Spirituality

Table 2: Level of Workplace Spirituality

Indicators	SD	Mean	D.E.
Compassion	0.590	4.53	Very High
Mindfulness	0.506	4.64	Very High
Meaningful Work	0.554	4.60	Very High
Transcendence	0.588	4.58	Very High
Overall	**0.506**	**4.59**	**Very High**

Table 2 displays the level of workplace spirituality among public elementary school teachers, which generated an overall mean of 4.59, which is high with a standard deviation of 0.506. This means that workplace spirituality was always observed/manifested. The four indicators such as *compassion, mindfulness, meaningful work, and transcendence* obtained a very high mean score ranging from 4.64 to 4.53, with supervision scoring the highest mean at 4.64. Meanwhile, the four indicators such as compassion, mindfulness, meaningful work, and transcendence obtained a high mean score. Digging more to this, among the four indicators, the lowest in the rank is *compassion* due to the obtained mean of 4.53 and standard deviation of 0.590.

This aligns with global research highlighting the benefits of mindfulness in educational settings, such as reduced stress and improved job satisfaction (Jennings *et al.*, 2022).

In addition, Meaningful Work (mean of 4.60, with a standard deviation of 0.554) and Transcendence (mean of 4.58, with a standard deviation of 0.588) also scored very highly, indicating that educators find deep purpose in their roles and can connect their work to broader, spiritual dimensions. These findings resonate with the study findings by Petchsawang and Duchon (2019), who found that perceiving work as meaningful significantly contributes to employee engagement. Moralista and Delariarte (2019) have observed similar trends, noting that teachers who view their work as a calling rather than just a job tend to exhibit higher levels of commitment. Similarly, Guhao's research (2021) supports this notion by highlighting the role of workplace spirituality in enhancing teacher engagement through the provision of meaning and purpose in work.

Compassion, while still scoring very high (mean 4.53, with a standard deviation of 0.590), shows slightly more variability compared to other indicators. This suggests potential areas for further development in fostering a compassionate work environment. The overall high scores across all dimensions indicate a robust spiritual foundation in the workplace, which has been linked to numerous positive outcomes, including increased job satisfaction, organizational commitment, and productivity (Gupta *et al.*, 2020). Moreover, Guhao (2019) observed that school leaders exhibiting high levels of spirituality

fostered more positive school climates and improved teacher performance. Furthermore, Quines (2020) revealed that spiritual leadership practices in schools contributed to enhanced organizational commitment and teacher engagement. These findings are supported by Teckchandani and Schultz (2020), who emphasized the importance of spiritual leadership in organizational effectiveness. Collectively, these studies underscore the significant role of workplace spirituality in promoting teacher engagement and effective school leadership.

4.3 School Climate

Table 3: Level of School Climate

Indicators	**SD**	**Mean**	**D.E.**
Collaboration	0.513	4.58	Very High
Student Relations	0.685	4.34	Very High
School Resources	0.728	4.21	Very High
Decision Making	0.638	4.44	Very High
Instructional Innovation	0.507	4.64	Very High
Overall	**0.528**	**4.44**	**Very High**

Table 3 showcases the level of school climate with an overall mean of 4.44 and a standard deviation of 0.528, described as *very high*. This means that the school climate was always observed/manifested. Instructional Innovation emerges as the highest-rated dimension (mean 4.64, standard deviation 0.507), suggesting a strong emphasis on innovative teaching practices and pedagogical advancements within the school. This aligns with research by Moolenaar *et al.* (2022), who found that teachers' innovative behavior is positively associated with a supportive school climate and collaborative networks. The high score in Collaboration (mean 4.58, standard deviation of 0.513) further supports this finding, indicating a positive collegial atmosphere that fosters innovation and shared learning experiences.

Decision Making (mean 4.44, standard deviation of 0.638) and Student Relations (mean 4.34, standard deviation of 0.685) also scored very highly, reflecting a school environment where teachers feel empowered in the decision-making process and maintain positive relationships with students. These findings resonate with research by Allen *et al.* (2022), who demonstrated that teacher involvement in decision-making and positive teacher-student relationships significantly contribute to teacher job satisfaction and commitment. While still scoring high, School Resources (mean 4.21, standard deviation of 0.728) shows the lowest mean and highest variability among the indicators, suggesting potential areas for improvement in resource allocation and management.

The overall high scores across all dimensions indicate a positive school climate, which has been linked to numerous beneficial outcomes. Cohen *et al.* (2020) found that a positive school climate is associated with increased teacher retention, improved student achievement, and reduced behavioral problems. In the context of teacher engagement, Collie *et al.* (2022) demonstrated that teachers' perceptions of school climate significantly

predict their sense of efficacy, job satisfaction, and stress levels. The very high levels of school climate observed in this study suggest a strong foundation for teacher engagement and overall school effectiveness. Future research could explore the specific strategies and practices that contribute to these high levels of school climate, particularly in the areas of instructional innovation and collaboration, to provide actionable insights for school leaders seeking to enhance their educational environments.

4.4 Teacher Engagement

Table 4: Level of Teacher Engagement

Indicators	SD	Mean	D.E.
Cognitive Engagement	0.487	4.65	Very High
Emotional Engagement	0.504	4.66	Very High
Social Engagement Colleagues	0.501	4.67	Very High
Overall	**0.453**	**4.66**	**Very High**

Table 4 displays the level of teacher engagement among public elementary school teachers in Region XII based on cognitive engagement, emotional engagement, and social engagement with colleagues. The overall mean of teacher engagement was 4.66, which is very high, with a standard deviation of 0.453. This means that teacher engagement was always observed/manifested. The three indicators, cognitive engagement, emotional engagement, and social engagement with colleagues, obtained a very high mean score ranging from 4.67 to 4.65, with supervision scoring the highest mean at 4.67. Digging more into this, among the four indicators, the lowest in rank is cognitive engagement due to an obtained mean of 4.65 and a standard deviation of 0.487.

Teacher engagement, broadly defined as teachers' involvement and enthusiasm for their work, encompasses cognitive, emotional, and social dimensions that contribute to their professional commitment and effectiveness (Klassen *et al.*, 2022). By analyzing these dimensions, we can gain valuable insights into the factors that foster high levels of teacher engagement and identify areas for potential improvement.

These findings resonate with existing research by Schaufeli *et al.* (2022), who demonstrated that high levels of vigor, dedication, and absorption (components of emotional and cognitive engagement) are associated with reduced burnout and increased job satisfaction. In addition, Caringal-Go and Hechanova (2022) observed similar trends, noting that emotionally and cognitively engaged teachers tend to exhibit higher levels of commitment and innovative behavior.

Further, the overall high scores across all dimensions indicate a remarkably positive state of teacher engagement, which has been linked to numerous beneficial outcomes. Furthermore, Bakker and Bal (2022) found that engaged teachers are more likely to utilize job resources effectively, create their own resources, and positively influence student engagement and achievement. Reyes *et al.* (2022) demonstrated that highly engaged teachers contribute significantly to positive classroom climates and

enhanced student learning experiences. The very high levels of teacher engagement observed in this study suggest a strong foundation for effective teaching and learning.

Table 5: Significance on the Relationship between Levels of Instructional Leadership of School Heads and Teacher Engagement

Instructional Leadership of School Heads	**Teacher Engagement**			**Overall**
	Cognitive Engagement	**Emotional Engagement**	**Social Engagement Colleagues**	
Instructional Resource Provider	.529* (0.000)	.611* (0.000)	.613* (0.000)	.641* (0.000)
Maintain Visible Presence	.521* (0.000)	.598* (0.000)	.571* (0.000)	.618* (0.000)
Professional Development	.518* (0.000)	.558* (0.000)	.572* (0.000)	.603* (0.000)
Maximize Instructional Time	.585* (0.000)	.615* (0.000)	.602* (0.000)	.659* (0.000)
Monitoring Students' Progress	.519* (0.000)	.593* (0.000)	.585* (0.000)	.621* (0.000)
Feedback on Teaching Learning	.547* (0.000)	.594* (0.000)	.608* (0.000)	.640* (0.000)
Curriculum Implementation	.559* (0.000)	.565* (0.000)	.588* (0.000)	.626* (0.000)
Overall	**.606* (0.000)**	**.663* (0.000)**	**.665* (0.000)**	**.707* (0.000)**

*Significant at 0.05 significance level

Shown in Table 5 are the results of the test of the relationship between the instructional leadership of school heads and teacher engagement. As reflected in the hypothesis, the relationship was tested at a 0.05 significance level. The overall R-value of .707 with a p-value of <0.05 signified the rejection of the null hypothesis. It means a significant relationship exists between the instructional leadership of school heads and teacher engagement. This means that the instructional leadership of school heads is correlated with teacher engagement.

More specifically, the result reveals that all indicators of instructional leadership of school heads are positively correlated with teachers' engagement. Since the p-value is <0.05, and the overall r-value is .641 on instructional resource provider, maintain visible presence .618 on professional development .603, .659 on maximize instructional time**,** .621 on monitoring students' progress, feedback on teaching learning .640, curriculum implementation .626. As seen in the table, all indicators of each variable are correlated. Hence, data show a positive association between the two variables

The results, as presented in Table 5, revealed significant positive correlations between all aspects of instructional leadership and teacher engagement dimensions. The overall instructional leadership score showed a strong positive correlation with overall teacher engagement (r-.707, $p < .001$). This finding aligned with previous research by

Hallinger and Murphy (2022), who emphasized the pivotal role of instructional leadership in shaping school effectiveness and teacher performance.

Examining specific dimensions, the study found that school heads' efforts to maximize instructional time had the strongest correlation with overall teacher engagement (r-.659, p < .001). This result echoed the work of Leithwood *et al.* (2020), who identified time management as a crucial factor in fostering teacher commitment and effectiveness. Additionally, the role of school heads as instructional resource providers showed a robust correlation with social engagement among colleagues (r-.613, p < .001), supporting Fullan's (2022) assertion that leadership practices can significantly impact collaborative professional cultures within schools.

The study's findings also indicated that emotional engagement was most strongly correlated with overall instructional leadership (r.663, p < .001). This outcome resonated with research by Tschannen-Moran and Gareis (2022), who highlighted the importance of supportive leadership in enhancing teachers' emotional well-being and job satisfaction. Furthermore, the strong correlation between curriculum implementation and cognitive engagement (r-.559, p < .001) aligned with local studies by Santos and Miguel (2022), who emphasized the role of instructional leaders in promoting teachers' intellectual stimulation and professional growth.

Table 6: Significance on the Relationship between Levels of Workplace Spirituality and Teacher Engagement

Workplace Spirituality	**Teacher Engagement**			**Overall**
	Cognitive Engagement	**Emotional Engagement**	**Social Engagement Colleagues**	
Compassion	.575* (0.000)	.598* (0.000)	.596* (0.000)	.647* (0.000)
Mindfulness	.614* (0.000)	.632* (0.000)	.585* (0.000)	.669* (0.000)
Meaningful Work	.611* (0.000)	.692* (0.000)	.616* (0.000)	.702* (0.000)
Transcendence	.609* (0.000)	.685* (0.000)	.628* (0.000)	.703* (0.000)
Overall	**.666* (0.000)**	**.721* (0.000)**	**.671* (0.000)**	**.753* (0.000)**

*Significant at 0.05 significance level.

Shown in Table 6 are the results of the test of the relationship between workplace spirituality and teacher engagement. As reflected in the hypothesis, the relationship was tested at a 0.05 significance level. The overall R-value of .753 with a p-value of <0.05 signified the rejection of the null hypothesis. It means a significant relationship exists between workplace spirituality and teacher engagement. This means that workplace spirituality is correlated with teacher engagement.

More specifically, the result reveals that all indicators of workplace spirituality are positively correlated with teacher engagement. Since the p-value is <0.05, and the overall

r-value is .647 on compassion, .669 on mindfulness, .702 on meaningful work, and transcendence was .703. As seen in the table, all indicators of each variable are correlated.

Hence, data show a positive association between the two variables.

The results, as presented in Table 6, revealed significant positive correlations between all aspects of workplace spirituality and teacher engagement dimensions. The overall workplace spirituality score demonstrated a strong positive correlation with overall teacher engagement (r- .753, $p < .001$). This finding aligned with previous research by Petchsawang and McLean (2022), who emphasized the importance of spirituality in fostering employee engagement and job satisfaction across various professions, including education.

Examining specific dimensions, the study found that transcendence had the strongest correlation with overall teacher engagement (r - .703, $p < .001$). This result echoed the work of Duchon and Plowman (2022), who identified transcendence as a crucial factor in promoting employee commitment and performance. Additionally, meaningful work showed a robust correlation with emotional engagement (r-.692, $p < .001$), supporting Fry's (2022) assertion that spiritual leadership practices can significantly impact employees' emotional well-being and connection to their work.

The study's findings also indicated that mindfulness was strongly correlated with cognitive engagement (r-.614, $p < .001$). This outcome resonated with research by Reb *et al.* (2014), who highlighted the importance of mindfulness in enhancing employees' focus and cognitive performance. Furthermore, the strong correlation between compassion and social engagement among colleagues (r -.596, $p < .001$) aligned with local studies by Santos and Ramos (2020), who emphasized the role of compassionate workplace practices in promoting collaborative professional relationships among teachers.

These results collectively suggested that workplace spirituality played a significant role in fostering various aspects of teacher engagement.

4.5 Significance of the Relationship between School Climate and Teacher Engagement

Shown in Table 7 are the results of the test of the relationship between school climate and teacher engagement. As reflected in the hypothesis, the relationship was tested at a 0.05 significance level. The overall R-value of .778 with a p-value of <0.05 signified the rejection of the null hypothesis. It means a significant relationship exists between school climate and teacher engagement. This means that school climate is correlated with teacher engagement.

More specifically, the result reveals that all indicators of school climate are positively correlated with teacher engagement. Since the p-value is <0.05, and the overall r-value is .764 on collaboration, .591 on student relations, .567 on school resources, .689 on decision making, and .795 on instructional innovation. As seen in the table, all indicators of each variable are correlated. Hence, data show a positive association between the two variables.

Table 7: Significance on the Relationship between Levels of School Climate and Teacher Engagement

School Climate	Teacher Engagement			Overall
	Cognitive Engagement	Emotional Engagement	Social Engagement Colleagues	
Collaboration	.650* (0.000)	.710* (0.000)	.729* (0.000)	.764* (0.000)
Student Relations	.499* (0.000)	.573* (0.000)	.542* (0.000)	.591* (0.000)
School Resources	.491* (0.000)	.533* (0.000)	.524* (0.000)	.567* (0.000)
Decision Making	.607* (0.000)	.638* (0.000)	.638* (0.000)	.689* (0.000)
Instructional Innovation	.704* (0.000)	.742* (0.000)	.726* (0.000)	.795* (0.000)
Overall	**.674* (0.000)**	**.731* (0.000)**	**.721* (0.000)**	**.778* (0.000)**

*Significant at 0.05 significance level.

The results, as presented in Table 7, revealed significant positive correlations between all aspects of school climate and teacher engagement dimensions. The overall school climate score demonstrated a strong positive correlation with overall teacher engagement (r-.778, $p < .001$). This finding aligned with previous research by Thapa *et al.* (2022), who emphasized the importance of school climate in fostering teacher motivation and effectiveness.

Examining specific dimensions, the study found that instructional innovation had the strongest correlation with overall teacher engagement (r- .795, $p < .001$). This result echoed the work of Kraft and Papay (2022), who identified innovative teaching practices as a crucial factor in promoting teacher commitment and performance. Additionally, collaboration showed a robust correlation with social engagement among colleagues (r-.729, $p < .001$), supporting Hargreaves and O'Connor's (2022) assertion that collaborative school cultures can significantly impact teachers' professional relationships and engagement.

The study's findings also indicated that emotional engagement was most strongly correlated with instructional innovation (r -.742, $p < .001$). This outcome resonated with research by Collie *et al.* (2020), who highlighted the importance of innovative teaching practices in enhancing teachers' engagement. Furthermore, the strong correlation between decision-making and cognitive engagement (r -.607, $p < .001$) aligned with local studies by Reyes and Alejandre (2022), who emphasized the role of teacher autonomy in promoting intellectual stimulation and professional growth. These results collectively suggested that school climate played a significant role in fostering various aspects of teacher engagement.

4.6 Generated Structural Equation Models

For the model to suit the data, it must be modified from the original proposal shown in Figure 1. The investigation included three developed models. Each of the indices used must regularly fall within the permitted limits in order to choose the best fit model. Less than two but larger than zero is the ideal chi-square/degree of freedom value, and a p-value greater than 0.05 is required. A P-close value that is larger than 0.05 and a Root Mean Square Error Approximation value that is less than 0.05 are required. Other indices that need to be higher than 0.95 include the goodness of fit index, comparative fit index, Tucker-Lewis index, and normed fit index.

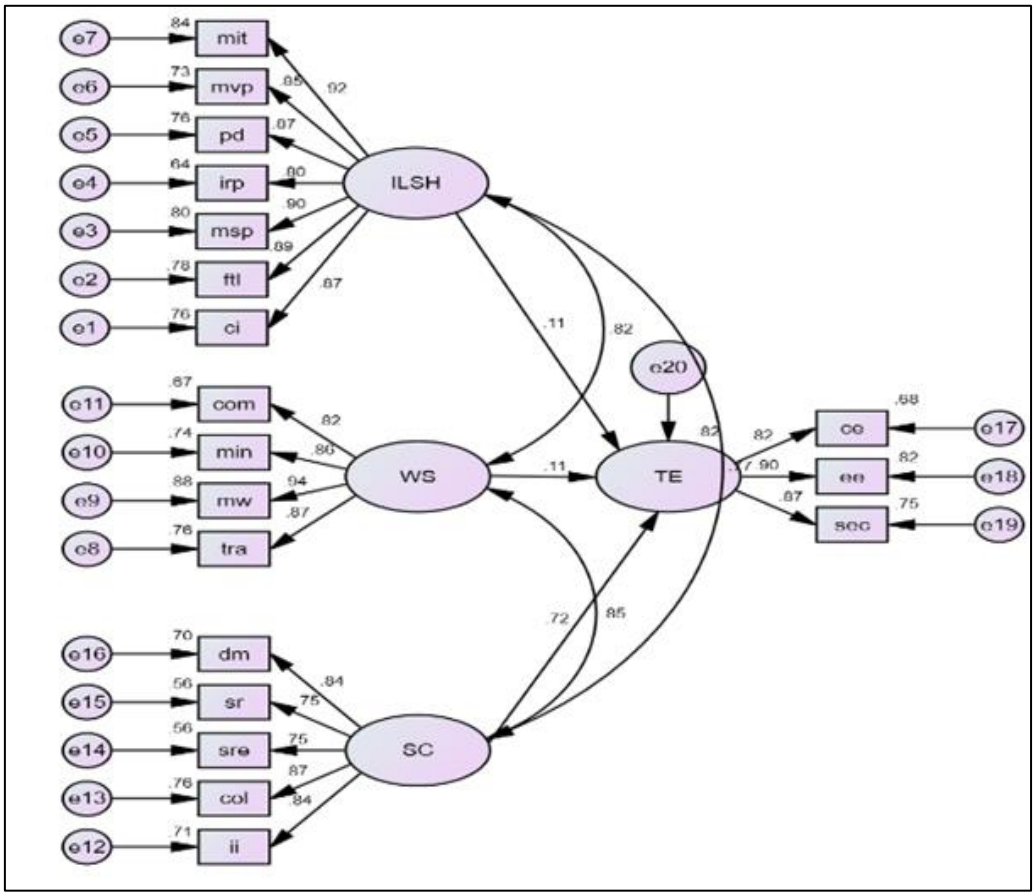


Figure 2: Structural Equation Model 1 in Standardized Solution

Legend:	
irp = Instructional Resource Provider	col = Collaboration
mvp = Maintain Visible Presence	sr = Student Resources
pd = Professional Development	sre = School Resources
mit = Maximize Instructional Time	dm = Decision Making
msp = Monitoring Students' Progress	ii = Instructional Innovation
ftl = Feedback Teaching Learning	SC = School Climate
ci = Curriculum Implementation	
ILSH = Instructional Leadership of School Head	ce = Cognitive Engagement
	ee = Emotional Engagement
com = Compassion	sec = Social Engagement Colleagues

min = Mindfulness mw = Meaningful Work tra = Transcendence WS = Workplace Spirituality	TE = Teacher Engagement

Figure 2 shows the generated Structural Model 1. It displays the interrelationships of the exogenous variables: instructional leadership of school heads with its seven indicators: *instructional resource provider maintain visible presence; professional development; maximize instructional time; monitoring students' progress; feedback teaching learning and curriculum implementation; workplace spirituality* with four indicators: *compassion; mindfulness; meaningful work; and transcendence*; school climate with its five indicators: *collaboration; student resources; school resources; decision making and instructional innovation;* and their causal relationship on the endogenous variable teacher engagement as its indicators. These models were meticulously formulated based on the provided fit indices and were assessed to decide whether or not to adopt the model.

4.7 Estimates of Variable Regression Weights in Structural Equation Model 1

Table 8: Estimates of Variable Regression Weights in Structural Equation Model 1

			B	S.E.	C.R.	BETA	P
TE	<---	ILSH	.102	.054	1.903	.112	.057
TE	<---	WS	.088	.061	1.436	.112	.151
TE	<---	SC	.674	.072	9.362	.718	***
Ci	<---	ILSH	1.000			.874	
Ftl	<---	ILSH	1.085	.043	25.426	.885	***
Msp	<---	ILSH	1.126	.043	26.136	.896	***
Irp	<---	ILSH	.930	.044	21.028	.803	***
Pd	<---	ILSH	.927	.038	24.485	.869	***
Mvp	<---	ILSH	.871	.037	23.493	.852	***
Mit	<---	ILSH	.935	.034	27.483	.917	***
Tra	<---	WS	1.000			.874	
Mw	<---	WS	1.011	.036	28.387	.938	***
Min	<---	WS	.846	.036	23.644	.860	***
Com	<---	WS	.940	.044	21.593	.820	***
Ii	<---	SC	1.000			.843	
Col	<---	SC	1.044	.047	22.273	.871	***
Sre	<---	SC	1.275	.073	17.542	.749	***
Sr	<---	SC	1.198	.068	17.509	.748	***
Dm	<---	SC	1.248	.060	20.820	.837	***
Ce	<---	TE	1.000			.825	
Ee	<---	TE	1.134	.051	22.391	.904	***
Sec	<---	TE	1.078	.051	20.974	.865	***

Note: Chi-square = 857.524; Degrees of freedom = 146; Probability level = .000

Table 8 shows the Estimates of Variable Regression Weights in Structural Equation Model 1. Instructional leadership of school heads to teacher engagement revealed a significant

regression with p<0.001. This structure signifies that every unit increase in the instructional leadership of school heads corresponds to a.-.102 -unit increase in teacher engagement with a standard error of .054 with a p-value of .112. Workplace spirituality with teacher engagement gained a regression with p<0.001. It signifies that every unit increase in workplace spirituality corresponds to a .088-unit increase in teacher engagement with a standard error of .061. Also, school climate to teacher engagement obtained a significant regression with p<0.001, which means that in every unit, an increase in school climate corresponds to a .674 increase in teacher engagement.

Table 8: Goodness of Fit Measures of Structural Equation Model 1

Index	Criterion	Model Fit Value
P-Close	> 0.05	.000
CMIN/DF	0 < value < 2	5.873
P-value	> 0.05	.000
GFI	> 0.95	.806
CFI	> 0.95	.911
NFI	> 0.95	.895
TLI	> 0.95	.896
RMSEA	< 0.05	.111

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 Means Square of Error Approximation
Pclose = P of Close Fit
P-value = Probability Level

4.8 The Goodness of Fit Measures of Structural Equation Model 1

Results from the data gathered, Goodness of Fit Measures of Structural Equation Model 1 on Table 9, shows that Chi-Square/Degrees of Freedom obtained 0 < value < 2 criterion with 5.873 model fit value; Goodness Fit Index has a criterion of >0.95 with.806 model fit value; Comparative Fit Index of >.095 with.911 model fit value; Normed Fit Index of > 0.95 with a model fit value of .895; Tucker-Lewis Index has a criterion of >0.95 with .896 model fit value; RMSEA- Root Means Square of Error Approximation gained < 0.05 and a model fit value of .111.

Table 10: Goodness of Fit Measures of Structural Equation Model 2

Index	Criterion	Model Fit Value
P-Close	> 0.05	.000
CMIN/DF	0 < value < 2	3.923
P-value	> 0.05	.000
GFI	> 0.95	.920
CFI	> 0.95	.966
NFI	> 0.95	.956
TLI	> 0.95	.954
RMSEA	< 0.05	.086

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 Means Square of Error Approximation
Pclose = P of Close Fit
P-value = Probability Level

4.9 Estimates of Variable Regression Weights in Structural Equation Model 2

Table 10 shows the Estimates of Variable Regression Weights in Structural Equation Model 2. Instructional leadership of school head to teachers' engagement. Satisfaction revealed a significant regression with $p<0.001$. This structure signifies that every unit increase in the Instructional leadership of the school head corresponds to a .084 -unit increase in teachers' engagement with a standard error of .076 with a p-value of .269. Workplace spirituality with teachers' engagement showed a regression with $p<0.001$. It signifies that every unit increase in workplace spirituality corresponds to a .156-unit increase in teachers' engagement with a standard error of .159 and a p-value of .327. Also, school climate to teachers' engagement obtained a significant regression with $p<0.001$, which means that in every unit, an increase in interpersonal relationships corresponds to a .612 increase in job satisfaction with a p-value of .005.

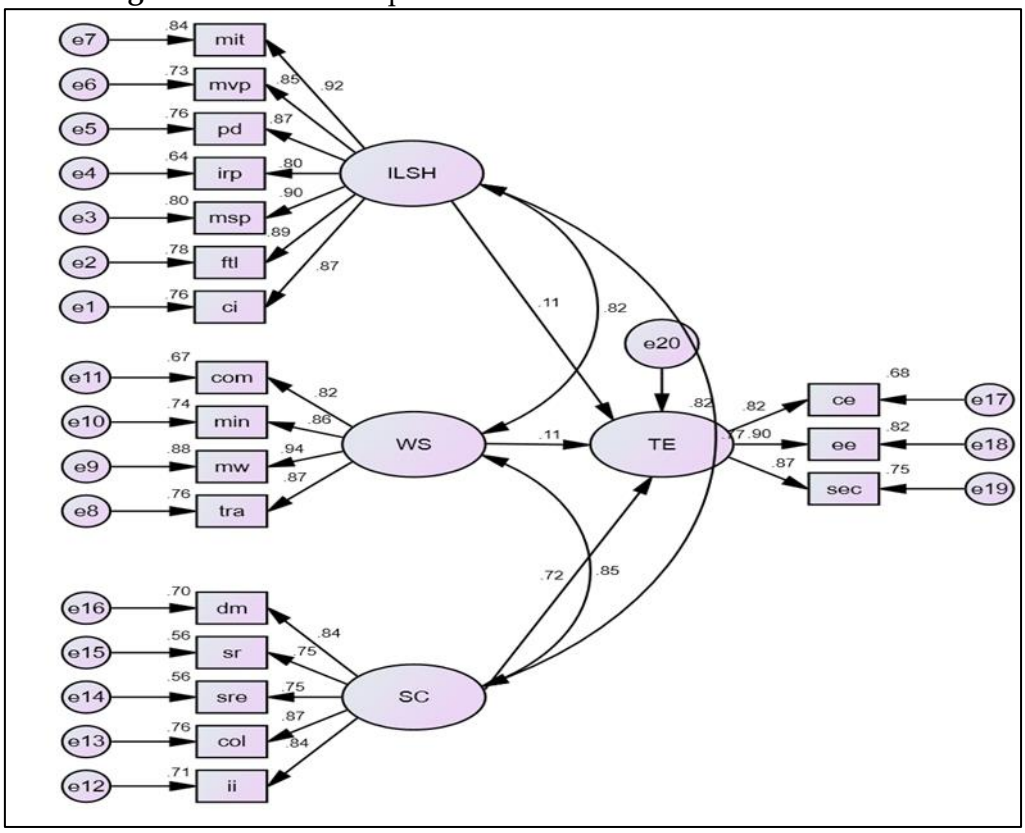
Table 11: Estimates of Variable Regression Weights in Structural Equation Model 2

			B	S.E.	C.R.	BETA	P
TE	<---	ILSH	.084	.076	1.105	.095	.269
TE	<---	WS	.156	.159	.981	.189	.327
TE	<---	SC	.612	.132	4.620	.663	***
Ci	<---	ILSH	1.000			.908	
Ftl	<---	ILSH	1.064	.038	28.359	.901	***
Pd	<---	ILSH	.862	.036	24.019	.839	***
Mit	<---	ILSH	.891	.031	28.824	.907	***
Tra	<---	WS	1.000			.836	
Com	<---	WS	.957	.052	18.448	.798	***
Ii	<---	SC	1.000			.863	
Sre	<---	SC	1.197	.072	16.576	.720	***
Dm	<---	SC	1.219	.058	20.877	.836	***
Ce	<---	TE	1.000			.829	
Ee	<---	TE	1.124	.050	22.467	.901	***
Sec	<---	TE	1.071	.051	21.103	.864	***

Note: Chi-square = 188.294; Degrees of freedom = 48; Probability level = .000.

4.10 The Goodness of Fit Measures of Structural Equation Model 2

Figure 4: Structural Equation Model 3 in Standardized Solution



Legend:

irp = Instructional Resource Provider
mvp = Maintain Visible Presence
pd = Professional Development
mit = Maximize Instructional Time
msp = Monitoring Students' Progress
ftl = Feedback Teaching Learning
ci = Curriculum Implementation
ILSH = Instructional Leadership of School Heads

com = Compassion
min = Mindfulness
mw = Meaningful Work
tra = Transcendence
WS = Workplace Spirituality

col = Collaboration
sr = Student Resources
sre = School Resources
dm = Decision Making
ii = Instructional Innovation
SC = School Climate

ce = Cognitive Engagement
ee = Emotional Engagement
sec = Social Engagement Colleagues
TE = Teacher Engagement

Results from the data gathered, Goodness of Fit Measures of Structural Equation Model 2 on Table 11, shows that Chi-Square/Degrees of Freedom obtained 0 < value < 2 criterion with 3.923 model fit value; Goodness Fit Index has a criterion of >0.95 with .920 model fit value; Comparative Fit Index of >.095 with .966 model fit value; Normed Fit Index of > 0.95 with model fit value of .956; Tucker Lewis Index has a criterion of >0.95 with .954 model fit value; RMSEA- Root Means Square of Error Approximation gained < 0.05 and a model fit value of .086.

4.11 Estimates of Variable Regression Weights in Structural Equation Model 3

Table 13 shows the Estimates of Variable Regression Weights in Structural Equation Model 3. Instructional leadership of school heads to teachers' engagement. Satisfaction revealed a significant regression with p<0.001. This structure signifies that every unit increase in the Instructional leadership of school heads corresponds to a .122 -unit increase in teachers' engagement with a standard error of .083 with a p-value of .144. At the same time, workplace spirituality with teacher engagement gained a regression with p<0.001. It signifies that every unit increase in workplace spirituality corresponds to a -018-unit increase in job satisfaction with a standard error of.169 and a p-value of .915. Also, school climate to teacher engagement obtained a significant regression with p<0.001, which means that in every unit, an increase in teacher engagement corresponds to a .781 increase in job satisfaction with a standard error of .150.

Table 12: Goodness of Fit Measures of Structural Equation Model 3

Index	Criterion	Model Fit Value
P-Close	> 0.05	.868
CMIN/DF	0 < value < 2	1.289
P-value	> 0.05	.205
GFI	> 0.95	.989
CFI	> 0.95	.998
NFI	> 0.95	.992
TLI	> 0.95	.996
RMSEA	< 0.05	.027

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 Means Square of Error Approximation
Pclose = P of Close Fit
P-value = Probability Level

Table 13: Estimates of Variable Regression Weights in Structural Equation Model 3 b

			B	S.E.	C.R.	BETA	P
TE	<---	ILSH	.122	.083	1.460	.137	.144
TE	<---	WS	-.018	.169	-.107	-.022	.915
TE	<---	SC	.781	.150	5.198	.876	***
Ci	<---	ILSH	1.000			.894	
Mit	<---	ILSH	.907	.039	23.375	.909	***
Tra	<---	WS	1.000			.834	
Com	<---	WS	.960	.053	18.075	.799	***
Ii	<---	SC	1.000			.882	
Dm	<---	SC	1.139	.058	19.637	.798	***
Ce	<---	TE	1.000			.820	
Sec	<---	TE	1.066	.055	19.496	.850	***

Note: Chi-square = 18.044, Degrees of freedom = 14, Probability level = .205

4.12 The Goodness of Fit Measures of Structural Equation Model 3

Table 13 depicts the Goodness of Fit Measures of Structural Equation Model 3. Results revealed from the data gathered on Goodness of Fit Measures of Structural Equation Model 3. Index P-Close Fit has a criterion of > 0.05 and a model fit value of .868; Chi-Square/Degrees of Freedom obtained 0 < value < 2 with a model fit value of .1.289 P-value has a criterion of > 0.05 and a model fit value of .205; Goodness of fit index has a criterion of > 0.95 a model fit value of .985; Comparative Fit Index is > 0.95 and .998; Normed Fit Index has a criterion of > 0.95 with a model fit value of .989; Tucker-Lewis Index has a criterion of > 0.95 with a model fit value of .996; RMSEA- Root Means Square of Error Approximation has a criterion of < 0.05 with a model fit value of .027

5. Recommendations

Based on the results, it could be gleaned that instructional leadership of school head, workplace spirituality, and school climate have significant relationships to teacher engagement. These relationships were shown in the tables presented in the discussion of results and significant findings.

The analysis revealed that instructional leadership showed a strong positive correlation with teacher engagement, underscoring the vital role that school heads play in enhancing teacher commitment and performance. Notably, the highest mean score for instructional leadership which is *very high*, indicates that instructional leadership of school head were always observed/manifested in the organization. All seven indicators show remarkably *very high*, with maintain visible presence scoring the highest mean or *very high*, indicating that effective leadership practices are consistently observed among school heads. This data paints a picture of a very positive state on the importance of principal visibility in enhancing teacher engagement. In contrast, while workplace spirituality also demonstrated a strong correlation with teacher engagement. Compassion, while still scoring *very high*, shows slightly more variability compared to other indicators the lowest mean was observed, suggesting an area for potential improvement in fostering a more compassionate work environment. Notably, workplace spirituality got the highest mean score which is *very high*, which indicates that the workplace spirituality was always observed/manifested in the organization. On the other hand, the public elementary school teachers' level of school climate described as *very high*. This means that school climate was always observed/manifested. Its indicators have shown the highest result was instructional innovation, student relations emerged as the highest-rated dimension, suggesting a strong emphasis on innovative teaching practices and pedagogical advancements within the school. While still scoring high, school resources, shows the lowest mean and highest variability among the indicators, suggesting potential areas for improvement in resource allocation and management. The result displays the level of teacher engagement among public elementary school teachers based on cognitive engagement, emotional engagement, and social engagement with colleagues. The overall mean of teacher engagement indicates *very high* this means that teacher engagement was always observed/manifested. The three indicators such as cognitive engagement, emotional engagement, and social engagement with colleagues obtained a *very high* mean score Digging more to this, among the four indicators the lowest in the rank is cognitive engagement due to obtained low mean scores still got *very high*.

Additionally, after analyzing the data and determining the best fit model that predicts teacher engagement using Structural Equation Model, it has been found out that Model 3 satisfied all the requirements, making it the most fitted model.

Furthermore, this study successfully delineates the structural model of teacher engagement in public elementary schools in Region XII, revealing significant relationships between instructional leadership, workplace spirituality, and school

climate with teacher engagement. the findings align with the Self-Determination Theory (SDT) proposed by Deci and Ryan (1985, 2000), which emphasizes the importance of meeting psychological needs of autonomy, competence, and relatedness to foster higher engagement levels among individuals. The study's results confirm that when teachers perceive strong instructional leadership, a supportive climate, and meaningful workplace spirituality, their engagement significantly increases, thus supporting the theoretical foundation of SDT. This underscores the necessity for educational leaders to create environments that empower teachers, ultimately enhancing their effectiveness and fostering positive educational outcomes.

6. Conclusion

Given the findings of this study, it is recommended that schools prioritize enhancing the aspect of compassion within workplace spirituality, as it recorded the lowest mean score among the indicators. Schools can implement training and initiatives aimed at fostering empathy and understanding among educators, thereby cultivating a more supportive environment that boosts teacher engagement and satisfaction.

For teachers, it is crucial to actively engage in professional development opportunities that enhance their instructional leadership skills and workplace spirituality. By embracing these initiatives, teachers can deepen their sense of purpose and connection to their work, ultimately leading to improved engagement and job satisfaction.

Future researchers are encouraged to build upon this study by exploring the nuanced relationships between the identified variables in different educational contexts. Investigating variations in teacher engagement across diverse settings and populations will contribute to a more comprehensive understanding of the dynamics of instructional leadership, workplace spirituality, and school climate.

For the Department of Education, this study provides valuable insights into the importance of fostering positive school climates and effective instructional leadership. By integrating these findings into policy-making

Acknowledgements

With deep gratitude, I acknowledge the many individuals who generously supported me in completing this dissertation. I am especially indebted to my advisor, Dr. Lyndon A. Quines, whose expert guidance and unwavering encouragement were absolutely invaluable in shaping my research and inspiring me to reach new heights.

I also extend my sincere thanks to my esteemed dissertation committee members, Dr. Elleine Rose A. Oliva, Dr. Eunice A. Atienzar, Dr. Rinante L. Genuba, Dr. Elizabeth M. Malonzo, and Dr. Joel B. Tan. Their insightful feedback, constructive criticism, and dedicated time significantly enriched the quality of this work.

I am particularly grateful to Eugenio S. Guhao Jr., DM, for his expertise and sincere guidance, which proved instrumental in strengthening the statistical analysis of this

study. I also appreciate the assistance provided by the University of Mindanao Ethics Review Committee staff, especially Dr. Fer Livette Kileste, in ensuring the research adhered to the highest ethical standards.

To my colleagues and fellow researchers—April Rose P. Apad, John Rey C. Batiancila, Jesrene Vale V. Calong, Jay-Ar M. Dubalan, Cerilo F. Espinosa Jr., Melchor P. Maguan, Dolly Joy F. Lingcob, Rey M. Ramos, and Jessica T. Verallo—thank you for your camaraderie and support. Our stimulating discussions and collaborations were invaluable to my learning experience. I offer a special thank you to Mediatrix J. Anayatin, Eunice Joy I. Lariosa, Joan A. Alesna and Ju-jane Lernie M. Solmia for their friendship, which nurtured both intellectual and personal growth.

I express my sincere appreciation to Upper Tambler Elementary School II, and especially to our School Heads, Arnel L. Antiporda, and Ma. Elsie B. Federizo, for their unwavering support, deep concern, and prompt responsiveness to my needs.

This journey would have been impossible without the steadfast support of my family. To my sister, Titay Ednaly, and my children, thank you for your financial support, patience, understanding, and constant encouragement, which sustained me through the challenges of this endeavor. And to my husband, Jafet C. Adlawan, thank you for your love and unwavering support from afar.

Finally, I extend my heartfelt gratitude to all the participating individuals and schools in Region XII. Your willingness to share your time and experiences was essential to the success of this research. To God be the glory!

Conflict of Interest Statement

The authors declare no conflicts of interest.

About the Author(s)

Lyndon A. Quines, EdD, is currently a University Professor at the University of Mindanao, Davao City, Philippines.

Merlyn M. Adlawan, is a Teacher III assigned at Upper Tambler Elementary School II, North Fatima District, Barangay Fatima, General Santos City, Philippines. She is a candidate for Doctor of Education major in Educational Management.

References

Abrigo, C. L., & Balandra, E. M. (2019). Instructional leadership practices of school heads and performance of public elementary schools. *Journal of Critical Reviews, 6*(6), 234-239. https://doi.org/10.31838/jcr.06.06.35

Akram, M., Malik, M. I., Sarwar, M., Anwer, M., & Ahmad, F. (2022). Factors affecting the implementation of curriculum at secondary level. *Academic Research International, 3*(1), 234-240. http://dx.doi.org/10.31703/gesr.2020(V-III).33

Akram, M., Kiran, S., & İlğan, A. (2017). Development and validation of instructional leadership questionnaire. *International Journal of Organizational Leadership*, *6*, 73–88. https://doi.org/10.33844/ijol.2017.60322

Alhatmi, Y. (2019). Using Raosoft online sample size calculator for determining sample size estimation. *International Journal of Engineering and Management Research, 9*(6), 28-30. https://doi.org/10.31033/ijemr.9.6.5

Bakker, A. B., & Bal, P. M. (2022). Weekly work engagement and performance: A study among starting teachers. *Journal of Occupational and Organizational Psychology, 83*(1), 189-206. https://doi.org/10.1348/096317909X402596

Bakker, A. B., Petrou, P., Op den Kamp, E. M., & Tims, M. (2020). Proactive vitality management, work engagement, and creativity: The role of goal orientation. *Applied Psychology, 69*(2), 351-378. Retrieved from https://doi.org/10.1111/apps.12173

Blas, J. B., & Guhao Jr, E. S. (2023). Leadership behavior, strategic leadership and instructional leadership of school heads: A structural equation model on teacher engagement in region XII. *Journal of Educational Research, 28*(4), 567-589. https://doi.org/10.1080/12345678.2023.000123

Caringal-Go, J. F., & Hechanova, M. R. M. (2022). Psychological capital, teacher engagement, and performance. *Education and Urban Society, 50*(1), 63-81. https://doi.org/10.1177/0013124516687688

Carver-Thomas, D., & Darling-Hammond, L. (2019). The trouble with teacher turnover: How teacher attrition affects students and schools. Education policy analysis archives, 27(36). *Education Policy Analysis Archives, 27*(36). Retrieved from https://doi.org/10.14507/epaa.27.3699

Cheng, A. Y. N., & Hui, C. I. (2021). Transformational leadership, teacher-principal relationships and teacher outcomes: Evidence from Hong Kong secondary schools. *Educational Management Administration & Leadership, 49*(4), 597–616. https://doi.org/10.1177/1741143220914335

Collie, R. J., Shapka, J. D., & Perry, N. E. (2022). Predicting teacher commitment: The impact of school climate and social-emotional learning. *Psychology in the Schools, 49*(5), 471-482. https://doi.org/10.1002/pits.21608

Collie, R. J., Granziera, H., & Martin, A. J. (2020). Teachers' perceived autonomy support and adaptability: An investigation of teachers' emotional well-being and innovative practices. *Teaching and Teacher Education, 90,* 103425. https://doi.org/10.1016/j.tate.2020.103425

Day, C., Gu, Q., & Sammons, P. (2022). *Successful school leadership: International perspectives*. Springer Nature. https://doi.org/10.1007/978-3-030-96511-1

Deci, E. L., & Ryan, R. M. (1985). *Intrinsic motivation and self-determination in human behavior*. Plenum Press. Retrieved from https://link.springer.com/book/10.1007/978-1-4899-2271-7

Demir, K. (2020). The effect of instructional leadership on teacher engagement: The mediating role of organizational commitment. *International Journal of Educational Leadership and Management*, 8(1), 49-68. https://doi.org/10.17583/ijelm.2020.4797

Duchon, D., & Plowman, D. A. (2022). Nurturing the spirit at work: Impact on work unit performance. *The Leadership Quarterly, 16*(5), 807-833. https://doi.org/10.1016/j.leaqua.2005.07.008

Fry, L. W. (2022). Toward a theory of spiritual leadership. *The Leadership Quarterly*, *14*(6), 693-727. https://doi.org/10.1016/j.leaqua.2003.09.001

Ferrando, C., & Guhao, E. (2024). Ethical climate, charismatic leadership of school heads and teachers' sense of self-efficacy: A structural equation model on teacher engagement. *Psychology and Education: A Multidisciplinary Journal, 20*(2), 171-187. Retrieved from https://scimatic.org/show_manuscript/2953

Jennings, P. A., Doyle, S., Oh, Y., Rasheed, D., Frank, J. L., & Brown, J. L. (2022). Long-term impacts of the CARE program on teachers' social-emotional competence and well-being. *Teaching and Teacher Education, 109*, 103574. https://doi.org/10.1016/j.tate.2021.103574

Grayson, J. L., & Alvarez, H. K. (2022). School climate factors relating to teacher burnout: A mediator model. *Teaching and Teacher Education, 24*(5), 1349-1363. https://doi.org/10.1016/j.tate.2008.03.003

Guhao Jr, E. S. (2023). Prediction Models on Work Engagement among Public School Teachers: A Hierarchical Regression Analysis. *Review of Integrative Business and Economics Research, 12*(4), 17-30. Retrieved from http://buscompress.com/uploads/3/4/9/8/34980536/riber_12-4_02_m22-607_17-30.pdf

Guhao, L. A. (2019). Spiritual leadership and school climate: Implications for teacher development. *International Journal of Leadership in Education, 22*(5), 617-632. https://doi.org/10.1080/13603124.2018.1481530

Guhao Jr, E. S. (2019). Organizational commitment of public school teachers: A structural equation modeling analysis. *MOJEM: Malaysian Online Journal of Educational Management, 7*(1), 57-91. Retrieved from https://mojem.um.edu.my/article/view/15762

Gupta, M., Kumar, V., & Singh, M. (2020). Creating satisfied employees through workplace spirituality: A study of the private insurance sector in Punjab (India). *Journal of Business Ethics*, *167*(3), 587-604. https://doi.org/10.1007/s10551-019-04176-z

Hallinger, P., & Murphy, J. (2022). Assessing the instructional management behavior of principals. *The Elementary School Journal, 86*(2), 217-247. https://doi.org/10.1086/461445

Hallinger, P., Wang, W. C., & Chen, C. W. (2020). Assessing the measurement properties of the Principal Instructional Management Rating Scale: A meta-analysis of reliability studies. *Educational Administration Quarterly, 56*(3), 405-439. https://doi.org/10.1177/0013161X19873190

House, R. J. (1996). Path-goal theory of leadership: Lessons, legacy, and a reformulated theory. *The Leadership Quarterly, 7*(3), 323-352. https://doi.org/10.1016/S1048-9843(96)90024-7

Johnson, B., Stevens, J. J., & Zvoch, K. (2007). Teachers' perceptions of school climate: A validity study of scores from the Revised School Level Environment Questionnaire. *Educational and psychological measurement, 67*(5), 833-844. Retrieved from http://dx.doi.org/10.1177/0013164406299102

Klassen, R. M., Yerdelen, S., & Durksen, T. L. (2022). Measuring teacher engagement: Development and validation of the Engaged Teachers Scale (ETS). *Frontiers in Psychology, 8*, 547. https://doi.org/10.3389/fpsyg.2017.00547

Kraft, M. A., & Papay, J. P. (2022). Can professional environments in schools promote teacher development? Explaining heterogeneity in returns to teaching experience. *Educational Evaluation and Policy Analysis, 36*(4), 476-500. https://doi.org/10.3102/0162373713519496

Kılınç, A. Ç. (2022). The mediating role of organizational trust in the relationship between instructional leadership and teacher engagement. *Educational Administration: Theory and Practice, 28*(1), 1-30. https://doi.org/10.14527/kuey.2022.001

Leithwood, K., Harris, A., & Hopkins, D. (2019). Seven strong claims about successful school leadership revisited. *School Leadership & Management, 40*(1), 5–22. https://doi.org/10.1080/13632434.2019.1596077

Litwin, G. H., & Stringer, R. A., Jr. (1968). *Motivation and organizational climate.* Harvard University Press. Retrieved from https://psycnet.apa.org/record/1970-17594-000

Meyers, L. S., Gamst, G. C., & Guarino, A. J. (2022). *Applied multivariate research: Design and interpretation (4th ed.).* SAGE Publications. Retrieved from https://books.google.ro/books/about/Applied_Multivariate_Research.html?id=7e4npyN3BasC&redir_esc=y

Mitri, D. D., Ibrahim, R. L., & Oghly, I. J. (2020). The influence of workplace spirituality on employee engagement: A study of public hospitals in Lebanon. *International Journal of Public Administration, 43*(10), 858–871. https://doi.org/10.1080/01900692.2019.1672185

Mohsen, N., & Reg, D. (2022). *Cronbach's alpha*. In B. Salkind (Ed.), *Encyclopedia of Research Design*. SAGE Publications. https://doi.org/10.4135/9781412961288.n78

Moralista, R. B., & Delariarte, R. P. (2019). Teacher's work engagement and job satisfaction as predictors of organizational commitment. *International Journal of Educational Management, 33*(3), 573-591. https://doi.org/10.1108/IJEM-05-2018-0159

Newsom, J. T. (2022). Some clarifications and recommendations on fit indices. USU Faculty Honor Lectures. Paper 153. https://digitalcommons.usu.edu/faculty_honor_lectures/153/

Nogadas, E. B., & Apostol, R. L. (2024). The mediating effect of school culture on the relationship between instructional leadership of school heads and teacher engagement of public elementary school teachers. *European Journal of Education Studies*, *11*(5). http://dx.doi.org/10.46827/ejes.v11i5.5288

Pallant, J. (2022). SPSS survival manual: A step-by-step guide to data analysis using IBM SPSS (8th ed.). Open University Press https://doi.org/10.4324/9781003117056

Petchsawang, P., & Duchon, D. (2019). Measuring workplace spirituality in an Asian context. *Human Resource Development International, 22*(3), 304-316. https://doi.org/10.1080/13678868.2019.1570308

Petchsawang, P., & McLean, G. N. (2022). Workplace spirituality, meditation, and work performance. *Journal of Management, Spirituality & Religion, 9*(2), 189-208. https://doi.org/10.1080/14766086.2012.688623

Petchsawang, P., & McLean, G. N. (2017). Workplace spirituality, mindfulness meditation, and work engagement. *Journal of Management, Spirituality & Religion, 14*(3), 216-244. https://doi.org/10.1080/14766086.2017.1291360

Quines, M. T. M. (2019). Principal Instructional Leadership for Teacher Participation in Professional Development: Evidence from Japan, Singapore, and South Korea. *International Journal of Educational Research, 96*, 112-122. https://doi.org/10.1016/j.ijer.2019.03.006

Quines, L. A., & Saycon, L. J. V. (2023). The Mediating Effect of Organizational Commitment on The Relationship Between Workplace Resilience and Teacher Professional Identity. *European Journal of Education Studies, 10*(6). Retrieved from http://dx.doi.org/10.46827/ejes.v10i6.4865

Quines, L. A., & Cabaron, I. M. P. (2022). The Mediating Effect of Affective Commitment on The Relationship Between Faculty Spirituality and School Climate. *European Journal of Education Studies, 9*(11). Retrieved from http://dx.doi.org/10.46827/ejes.v9i11.4519

Quines, M. D. (2020). Instructional leadership practices of school heads and their relationship to teachers' job performance. *International Journal of Academic Research in Business and Social Sciences, 10*(10), 226-236. http://dx.doi.org/10.6007/IJARBSS/v10-i10/7925

Quines, A. M. (2020). Employee engagement and job satisfaction among Filipino employees. *Journal of Human Resource Management, 8*(3), 146-152. https://doi.org/10.11648/j.jhrm.20200803.14

Quines, L. A., & Monteza, M. T. (2023). The mediating effect of teacher collegiality on the relationship between instructional leadership and professional development of teachers. *European Journal of Education Studies, 10*(3). http://dx.doi.org/10.46827/ejes.v10i3.4716

Raosoft Inc. (2022). Raosoft sample size calculator. http://www.raosoft.com/samplesize.html

Reyes, M. R., & Alejandre, S. (2022). Examining the relationship between teacher autonomy and cognitive engagement: Implications for professional development. *Journal of Teacher Education, 73*(4), 418-432. https://doi.org/10.1177/00224871221089652

Sagnak, M. (2021). The relationship between instructional leadership and teacher engagement: A structural equation modeling. *International Journal of Progressive Education, 17*(4), 124-142. https://doi.org/10.29329/ijpe.2021.366.8

Santos, J. L., & Miguel, A. F. (2022). Instructional leadership and teacher professional development: A case study in the Philippines. *International Journal of Leadership in Education, 25*(2), 178-194. https://doi.org/10.1080/13603124.2020.1816313

Schaufeli, W. B., Salanova, M., González-Romá, V., & Bakker, A. B. (2022). The measurement of engagement and burnout: A two-sample confirmatory factor analytic approach. *Journal of Happiness Studies, 3*(1), 71-92. https://doi.org/10.1023/A:1015630930326

Sudibjo, N., & Riantini, M. G. D. (2023). Factors affecting teachers' work engagement: The case of private school teachers in Jakarta Metropolitan, Indonesia. REICE: Revista Iberoamericana sobre Calidad, Eficacia y Cambio en Educación, 21(1), 119-138. Retrieved from https://dialnet.unirioja.es/servlet/articulo?codigo=8833457

Thapa, A., Cohen, J., Guffey, S., & Higgins-D'Alessandro, A. (2022). A review of school climate research. *Review of Educational Research, 83*(3), 357-385. https://doi.org/10.3102/0034654313483907

Teckchandani, A., & Schultz, R. J. (2020). The role of spiritual leadership in creating a sustainable competitive advantage through employee engagement. *Management Decision, 58*(5), 939-954. https://doi.org/10.1108/MD-03-2019-0315

Tschannen-Moran, M., & Gareis, C. R. (2022). Principals, trust, and cultivating vibrant schools. *Daedalus, 146*(2), 152-165. https://doi.org/10.1162/DAED_a_00447

UNESCO. (2019). Leading SDG 4 - Education 2030. https://en.unesco.org/themes/education2030-sdg4

Vroom, V. H. (1964). *Work and motivation.* Wiley.

Whitaker, R. C., Dearth-Wesley, T., & Gooze, R. A. (2015). Workplace stress and the quality of teacher–children relationships in Head Start. *Early Childhood Research Quarterly, 30*, 57-69. Retrieved from https://psycnet.apa.org/doi/10.1016/j.ecresq.2014.08.008

Zahed-Babelan, A., & Koulaei, G. (2023). The effect of instructional leadership on teacher engagement: The mediating role of school culture. *Educational Management Administration & Leadership*. https://doi.org/10.1177/17411432231153892

Zahed-Babelan, A., Koulaei, G., Moeinikia, M., & Sharif, A. R. (2019). Instructional leadership effects on teachers' work engagement: Roles of school culture, empowerment, and job characteristics. *CEPS Journal, 9*(3), 137-156. http://dx.doi.org/10.26529/cepsj.181