

European Journal of Education Studies

ISSN: 2501 - 1111 ISSN-L: 2501 - 1111

Available online at: www.oapub.org/edu

DOI: 10.46827/ejes.v12i2.5853

Volume 12 | Issue 2 | 2025

SCHOOL CLIMATE, PRINCIPAL INSTRUCTIONAL MANAGEMENT, ORGANIZATIONAL CITIZENSHIP BEHAVIOR. A STRUCTURAL EQUATION MODEL ON SCHOOL EFFECTIVENESS IN PUBLIC SCHOOLS

Melodina G. Villan¹ⁱ,

Lyndon A. Quines²

¹Doctor of Education in Educational Management,

University of Mindanao,

Philippines

²University of Mindanao, EdD,

University of Mindanao – Professional Schools,

Davao City, 8000, Philippines

Abstract:

This study was conducted to determine the best fit model on school effectiveness in the public schools in the Department of Education Region XI as estimated by school climate, principal instructional leadership and organizational citizenship behavior. The study was conducted during the school year 2023-2024. The researcher employed a quantitative approach using a correlational technique with Structural Equation Modeling (SEM). The respondents of the study were the 379 public school teachers in the Davao Region who were determined using the stratified sampling procedure. Mean, Pearson r, and Structural Equation Modeling were used as statistical tools. Moreover, adapted, modified and validated survey questionnaires were used by the researcher during the data gathering process. The results indicated that the level of school climate is high. On the other hand, the level of principal instructional leadership is high. Also, the level of organizational citizenship behavior is high. Additionally, the level of school effectiveness is very high. The results also showed that school climate, principal instructional leadership and organizational citizenship behavior were significantly related to school effectiveness. Model 3 was considered the Best Fit Model. The model satisfied all the criteria, making it the Best Fit Model on school effectiveness in the public elementary schools in the Department of Education, Region XI.

SDG Indicator: (4) Quality Education

Keywords: educational management, school climate, principal instructional leadership, organizational citizenship behavior, school effectiveness, SEM, Philippines

_

ⁱCorrespondence: email <u>m.villan@umindanao.edu.ph</u>

1. Introduction

The pursuit of educational efficiency and effectiveness stands as a cornerstone for enhancing school performance. Effectiveness, entailing a school's capacity to fulfill its objectives, particularly in nurturing students' academic success, converges with efficiency—a measure comparing educational outcomes against resource inputs. In the context of underperforming schools, issues like leadership flux, unavailability, and unpreparedness compound the hurdles in achieving these aims. Recent analyses spotlight the significance of robust classroom leadership in driving the efficiency of successful schools. Nonetheless, numerous public schools grapple with challenges such as elevated dropout rates, academic deficiencies, frequent repetition, and constrained institutional capacity, signaling deficiencies in skills among school leaders, educators, and administrators poised to uplift these educational institutions (Capacite, 2021; Martin, 2021).

On the other hand, Javornik and Klemenčič Mirazchiyski's (2023) study highlights the complexity of measuring school effectiveness through indicators like academic achievement, student engagement, and teacher satisfaction. A review of school effectiveness found that good schools had strong leadership, excellent teaching approaches, a great school culture, and parental involvement. School resources, including financing and buildings, can have an impact on school effectiveness, especially in underserved neighborhoods.

Consequently, research underscores the pivotal influence of organizational climate and citizenship behavior on school effectiveness, notably linked to principals' mindfulness. Another study in South-Central Arizona Catholic Schools, employing Social Exchange Theory, revealed connections between elements such as leadership, professionalism, and academic pressure and teachers' behavior, impacting overall effectiveness. These findings highlight the critical role of school climate factors in shaping teacher conduct and potentially altering school effectiveness. Moreover, research supports the notion that deputy principals' instructional leadership directly and positively affects school effectiveness, emphasizing the substantial role of school leaders. Notably, organizational citizenship has emerged as a significant predictor of school effectiveness in multiple studies (Aboyi, 2018; Hesbol, 2019; Ismail *et al.*, 2021; Karabatak *et al.*, 2018; Özgenel, 2020; Želvys *et al.*, 2019).

Although there are many studies on school effectiveness in the literature, none of them have addressed the conceptual relationship between school effectiveness, school climate, principal instructional management, and organizational citizenship behavior of public schools. There was already a study on the factors contributing to school effectiveness, such as the study of Javornik, Š. & Klemencic Mirazchiyski (2023) and the study of Creemers, Peters & Reynolds (2022) on School effectiveness and school improvement.

Contentiously, it is in the above context that the researcher would like to conduct a study on the relationship of these three variables, namely school climate, principal

instructional management and organizational citizenship behavior to form a model that uplifts school effectiveness. Uniquely, the researcher has rarely come across the study. The existing body of knowledge is scarce on providing a suitable model to improve school effectiveness, especially in the local context of Department of Education Region XI. Thus, the realization of this study. Therefore, it is a contribution to the existing literature on each variable covered in this study.

Furthermore, this study seeks to determine whether the effect of school effectiveness on public school heads is influenced by school climate, principal instructional management, and organizational citizenship behavior using a Structural Equation Model. In addition, this seeks to: assess the level of school climate in terms of safety, academic, community, and institutional environment; describe the level of principal instructional management in terms of frame the school goals, communicate the school goals, supervise and evaluate instruction, coordinate the curriculum, monitor student progress, protect instructional time, maintain high visibility, provide incentives for teachers, promote professional development, and provide incentives for learning.

In addition, this aimed to ascertain the level of organizational citizenship behavior in terms of conscientiousness, sportsmanship, civic virtue, courtesy, and altruism; to determine the level of school effectiveness in terms of the effectiveness of the school climate, school administration effectiveness, the effectiveness of the teachers, the effectiveness of the relationship with the local community, the effectiveness of educational practices, the students have a sense of belongingness to the surrounding environment; determine the significant relationship of school climate on principal instructional management, school climate on organizational citizenship behavior, principal instructional management on organizational citizenship behavior, school effectiveness and organizational citizenship behavior on school effectiveness; determine the domain significantly influence school climate, principal instructional management, organizational citizenship behavior, and school effectiveness, and to find out the best fit model to school effectiveness.

Thus, the following alternative hypothesis was tested at a significance level of 0.05: there is no significant relationship between school climate and principal instructional management. Also, there is no significant relationship between school climate and organizational citizenship behavior; principal instructional management there is no significant relationship on organizational citizenship behavior; school climate there is no significant relationship between on school effectiveness; principal instructional management has no significant relationship on school effectiveness; organizational citizenship behavior have no significant relationship on school effectiveness and there is no best fit model that predicts organizational effectiveness among schools in Davao Region.

On the other hand, the conceptual framework of this study is shown in Figure 1. As shown in the structural model, school climate as an endogenous variable has the following indicators physical safety, academic, community and institutional

environment; principal instructional management as an endogenous variable has 10 indicators which include frame the school goals, communicate the school goals, supervise and evaluate action, coordinate the curriculum, monitor student progress, protect instructional time, maintain high visibility, provide incentives for teachers, promote professional development and provide incentive for learning. Additionally, organizational citizenship behavior as an endogenous variable has 5 indicators, which include conscientiousness, sportsmanship, civic virtue, courtesy and altruism. Lastly, school effectiveness as an exogenous variable has 6 indicators, which include he effectiveness of the school climate, school administration effectiveness, the effectiveness of the teacher, the effectiveness of the relationship with the local community, the effectiveness of educational practices and the students having a sense of belonging to the surrounding environment.

Furthermore, in the formulated Structural Equation Model, it is hypothesized that school climate has a direct effect on school effectiveness, principal instructional management has a direct effect on school effectiveness, and organizational citizenship behavior has a direct effect on school effectiveness as represented by a single-headed arrow.

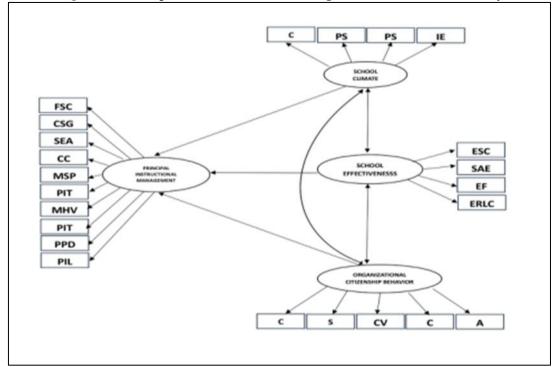


Figure 1: Conceptual Framework Showing the Variables of the Study

On the other hand, the study was anchored on Steers' (1985) theory of organizational effectiveness, which suggests that schools are not performing optimally due to suboptimal implementation and optimization of indicators such as principal leadership and teacher performance. The ideal conditions for effectiveness that each school must meet vary depending on the standards established by the country in which

the school is located. Achieving the perfect situation is inextricably linked to the elements that influence it.

Moreover, this theory is supported by Rutter *et al.* (1979), who formulated the Theory of School Effectiveness, states that school effectiveness occurs when there is efficiency in principal instructional leadership, high expectations by listeners, school environment conducive to learning, focusing on basic skills, looking up with students regularly, and teachers displaying good organizational citizenship behavior. Moreover, the most important factor in determining the highest level of effectiveness is balance in the reward system, intellectual, school environment, opportunity for student's role, academic goal, teacher as a role model, excellent classroom management, strong leadership, and democratic decision-making.

Consequently, the study is supported by the proposition of Proctor (1984), who created Models of School Learning, which explained that in improving classroom and school effectiveness, the following foundations must be maintained and monitored: teachers' behavior, which refers to planning, management, and instruction; student behaviors, which refer to coverage, involvement, and success; school climate, which refers to academic emphasis, orderly environment, and expectations for success; supervision, which means conducting entrance exams, providing diagnostic and technical assistance to colleagues; and excellent student achievement.

However, relevant literature and studies are offered herein for readers to learn the facts about the study's variables. First and foremost, this multi-regression study involves three independent variables, namely school climate, principal and instructional management, organizational citizenship behavior, and one dependent variable, which is school effectiveness. Thus, gathered facts in each variable shall be obtained from reliable sources like articles, journals, theses, and dissertations.

Consistently, a great deal of research shows that student perceptions of school climate affect academic motivation and achievement. This is in line with the correlation found between school climate and work motivation. Increasingly, research is showing that perceptions of school climate also influence student behavioral and emotional problems. A positive school environment, also referred to as "school climate," greatly affects students' ability to learn social, emotional, and academic skills. The climate sets the tone at a school and can be seen in the physical environment, experienced during the learning process, and felt in how people within the school interact with one another. In fact, there are many key components that make for a positive school climate. Providing a caring and safe atmosphere are two essential factors that are often mentioned (Block, 2011; Darling-Hammond & Cook-Harvey, 2018; Melecio & Vinitwatanakhun, 2022).

In addition, school climate is often referred to as the social atmosphere of a setting or learning environment in which students have different experiences, depending upon the protocols set up by the teachers and administrators. School climate, and particularly an authoritative school environment, is strongly associated with better social-emotional health among adolescents. This climate includes norms, values, and expectations that support people feeling socially, emotionally and physically safe. People are engaged and

respected. Students, families and educators work together to develop, live, and contribute to a shared school vision (Dayon & Jayme, 2019; Wong *et al.*, 2021).

Research indicates that there are multiple benefits to a positive school climate, including higher academic achievement, lower chronic absenteeism, and a decrease in discipline referrals. Students with higher perceptions of a positive school climate exhibited sustained or improved academic achievement over time. In a similar vein, school climate may be useful as an intervention to support school-based health promotion to reduce the achievement gap in school. Further, school climate has consistent associations with socio-emotional, behavioral, and academic outcomes were found (Daily *et al.*, 2020; Jacobs, 2018; Larson *et al.*, 2020).

Moreover, research findings provide new evidence that an authoritative school climate is associated with high school academic performance. Another research pointed out that school climate theory has been severely limited by a failure to construct conceptual models that identify mechanisms by which specific features of school climate are associated with student outcomes such as academic achievement. It should be regarded as a system of school characteristics that influence one another and are linked to meaningful student outcomes. That is why it is suggested that inherently interpersonal characteristics, such as the quality of teacher-student relationships, should be distinguished from personal characteristics such as motivation and engagement and those in turn should be distinguished from behavioral outcomes such as test performance or school attendance (Astor & Benbenishty, 2018; Cornell & Huang, 2019; Konold *et al.*, 2018).

In essence, school climate is a widely researched concept in the area of school effectiveness, and various frameworks of the concept testify to researchers' interest in its conceptualization and assessment. It is a predictor of educational outcomes, including students' well-being, academic achievement, and motivation. In the same way, school climate is an important factor for school success and helps understand how a subset of schools is consistently able to beat the odds and perform better than its peers (Rohatgi & Scherer, 2020; Voight *et al.*, 2020).

On the other hand, findings from interviews and observations supported the survey results, confirming that a majority of principals are engaged in the supervision and evaluation of instruction. In fact, response from 105 primary school teachers from five primary schools in Alor Gajah, Malaysia testified a moderate level of perception of instructional leadership functions related to defining the school's mission, a moderate level of perception of functions related to managing instructional program and a low level of perception of instructional leadership with respect to promoting a positive climate (Ghavifekr *et al.*, 2019; VanTuyle, 2018).

More so, teachers perceive school mission as the greatest instructional leadership behavior of the principals, and there were empirical findings that rated "defining school mission" as the highest level whilst "developing a positive school learning climate" was rated in the lowest level. In fact, studies on school effectiveness have documented that school effectiveness can be predicted by teachers' perception of the principals' leadership.

SCHOOL CLIMATE, PRINCIPAL INSTRUCTIONAL MANAGEMENT, ORGANIZATIONAL CITIZENSHIP BEHAVIOR. A STRUCTURAL EQUATION MODEL ON SCHOOL EFFECTIVENESS IN PUBLIC SCHOOLS

Successful principals hint teachers on their classroom instruction as well as the resources and avenue to act on the principal's comments. Such principals also provide opportunities for teachers to attend professional development courses that can assist in discharging their duties (Al-Mahdy et al., 2018; Bada et al., 2020; Jarvis, 2018).

Furthermore, the school principals play a fundamental role in providing leadership to the schools and the wider community. This is especially so in recent times, where there is high demand for principals to be accountable for happenings in the school environment and to keep abreast with educational goals. Moreover, emotional intelligence is found to be a significant factor of instructional leadership, and a strong association of principals' instructional leadership is found to their teachers' instructional strategy (Chen & Guo, 2018; Sagala et al., 2019).

The findings of the mediation analysis in the study by Dutta and Sahney (2021) demonstrated a substantial correlation between the academic performance of students, the school atmosphere and the instructional leadership of the principal. The physical surroundings and teachers' performance of their assigned tasks are the main factors that contribute to this indirect effect. The social and affective environment did not significantly contribute to the indirect effect. However, the latter completely moderated the association between instructors' extra-role or citizenship conduct and instructional leadership.

Ismail, Khatibi, and Azam's (2021) study found a direct and positive correlation between school effectiveness and the instructional leadership of the deputy principal. The results of the moderation test showed that the association between the instructional leadership of the deputy principal and school effectiveness is moderated by the school level, with a larger interaction effect at the secondary level than at the primary level. The findings have numerous ramifications for instructional leadership theory and practice, as well as school efficacy.

This study by Manaf and Omarit (2017) found that school climate and culture have a positive relationship with increasing school effectiveness. Therefore, it can be concluded that improving school effectiveness can be achieved by making improvements to the school climate and culture.

Karabatak, Alanoğlu, and Engür (2018) found that school effectiveness was significantly and positively correlated with all dimensions of teachers' organizational citizenship behaviors and significantly and negatively correlated with stress. Additionally, they found that only the seniority variable was a significant predictor of school effectiveness and that stress and organizational citizenship behavior dimensions were significant predictors of school effectiveness with no significant correlation to demographic characteristics.

While the survey results indicated a significant positive relationship between instructional leadership and school effectiveness, the focus group discussions offered insightful information about the obstacles and solutions for successful implementation of instructional leadership practices, according to the comparative analysis of Kilag et al.'s (2023) quantitative and qualitative study. Overall, this study indicates that improving

school effectiveness in Toledo City Division, Philippines, educational institutions is greatly aided by instructional leadership.

The concept of school effectiveness is multifaceted and intricate. This text provides an overview of the current perspective held by a school. The approach is focused towards achieving specific objectives and is contingent upon the resources that are accessible. In order to achieve optimal efficacy, schools necessitate the judicious utilization of available resources. These resources encompass various factors, including the type of school, student availability, staff sources, students' socio-economic condition, physical facilities and equipment, as well as the socio-cultural milieu. Human resources constitute a crucial element in determining the performance of educational institutions. The efficacy of schools can be significantly impacted by the presence of efficient teachers and responsible school leaders. Furthermore, the concept of school effectiveness pertains to the causal impact of attending a certain school or group of schools on student performance in standardized tests and several other educational outcomes (Angrist *et al.*, 2022; Singha & Sikdar, 2022).

Over the last two decades, educational research has solidified the assertion that principal leadership is the catalyst for school effectiveness. Results confirmed the relationship between Effective Principal Leadership Practices and School Effectiveness. It is quite evident that school leadership is needed for the successful execution of programmes and policies directed at ensuring that schools achieve their desired results. Yet, many leadership styles were debated to be most appropriate for the development of schools and many advocates have produced empirical evidence to support the best practices of the instructional, transformational, participative and distributed leadership styles as crucial to leading schools to effectiveness and specific principal leadership practices were more desirous to elicit effectiveness in schools (Bush, 2018; Hallinger 2018; Martin, 2021).

Additionally, the influence of principal leadership on the attributes of the educational institution is well-acknowledged, leading to a subsequent enhancement in the overall efficacy of the school. Furthermore, it has been found that sustainable leadership is a strong predictor of perceived school performance, with high and moderate level correlations seen. This suggests that the effectiveness of principal instructional leadership practices is likely to be enhanced when they are aligned with a well-defined and widely shared vision and when an understanding of both collaborative and individual efforts informs them. In contrast, if these practices are simply reactive responses to policies and processes dictated by the district's central administration, their impact on success is likely to be diminished (Leithwood et al., 2019; Nartgün et al., 2020) As a synthesis, all cited literature found in journals, books, and other researched materials in the form of concepts, insights, and ideas have shown relevance to the study by strictly following on the anchored theory and the developed structured model. Ideas taken suggest ways to combat problems related to elevating school effectiveness. And accordingly, instructional leadership is constantly the antecedent of school effectiveness before the intrusion of other variables like good school climate, organizational citizenship

behavior, employee retention, and academic motivation, which are vividly explained in the literature section. Principal Instructional Management is rated number 1 in leading pupils and teachers to perform at the highest level of academics and in society.

Further, the global importance of this study lies in its exploration of school climate, principal instructional management, and organizational citizenship behavior in public schools. By unraveling these factors, this study sheds light on their crucial aspects. First, it delves into how a positive school climate impacts student outcomes, influencing engagement, academic achievement, and well-being and potentially informing educational policies. Second, it examines teacher-student relationships within this climate, aiming to enhance learning experiences and behavior.

Additionally, the research contributes to understanding how organizational citizenship behavior fosters a positive climate and promotes student engagement. Finally, methodological advancements using structural equation models in this study pave the way for improved approaches in exploring educational settings. Ultimately, these findings have far-reaching implications for informing policies and practices to foster better learning environments and student outcomes in public schools worldwide.

Hence, this study holds significant social value because it offers insights into the fundamental dynamics of public schools. By exploring the interplay between school climate, instructional management, and organizational behavior, this study addresses critical aspects affecting educational experience. Understanding how these factors impact student outcomes, teacher-student relationships, and the overall school environment will contribute to creating more supportive and effective learning spaces. These findings can guide policymakers, educators, and administrators in implementing strategies that promote positive climates, enhance teaching practices, and foster stronger connections between stakeholders within educational institutions. Ultimately, this research holds the potential to elevate the quality of education and positively influence societal progress by nurturing well-rounded individuals equipped for future challenges. This study helps in the attainment of Sustainable Development Goal 4 (Quality Education) as this study aims to predict the best fit model on school effectiveness, which will potentially help improve the quality of education in the country.

Moreover, this theory is supported by Rutter *et al.* (1979), who formulated the Theory of School Effectiveness, states that school effectiveness occurs when there is efficiency in principal instructional leadership, high expectations by listeners, school environment conducive to learning, focusing on basic skills, looking up with students regularly, and teachers displaying good organizational citizenship behavior. Moreover, the most important factor in determining the highest level of effectiveness is balance in the reward system, intellectual, school environment, opportunity for student's role, academic goal, teacher as a role model, excellent classroom management, strong leadership, and democratic decision-making.

Consequently, the theory is supported by the proposition of Proctor (1984), who created Models of School Learning, which explained that in improving classroom and school effectiveness, the following foundations must be maintained and monitored:

teachers' behavior, which refers to planning, management, and instruction; student behaviors, which refer to coverage, involvement, and success; school climate, which refers to academic emphasis, orderly environment, and expectations for success; supervision, which means conducting entrance exams, providing diagnostic and technical assistance to colleagues; and excellent student achievement.

This study helps in promoting Sustainable Development Goal 4 (Quality Education) as this could potentially help school leaders and teachers across the country on sustaining school effectiveness by ensuring excellent instructional leadership of the school leaders, good school climate and good organizational citizenship behavior. This may also benefit educational institutions in the country, both in the Department of Education of the Higher Education institutions as the results may be used as their basis in crafting programs and policies to improve their school effectiveness. This will also help the researcher because she is also an elementary school teacher, and reflecting on the results of this investigation, she can also provide meaningful suggestions and recommendations to improve school effectiveness among the schools in the region or the entire country in general. The education sector across the globe may benefit from this study as this could be used as the basis of the policymakers in the development of educational mandates, which will enhance the quality of education in the country. Other researchers may also reflect on the delimitations of this study and conduct studies on the variables that are not included in this research. Future studies may explore other variables that may directly or indirectly influence school effectiveness by also including other research respondents in other regions.

2. Materials and Methods

The respondents of the study were the elementary teachers in the Davao Region. This research employed a stratified random sampling method among 25,808 public school teachers based on the data given by the Office of the Regional Director Department of Education Region XI in the Philippines. This technique involved selecting samples from various smaller groups within the larger population to ensure a representative sample. By doing so, researchers gained a comprehensive understanding of the entire population by focusing on specific smaller groups. Using Raosoft, a sample size of 379 respondents was determined to achieve statistical significance within this extensive population. The distribution between the respondents includes the following: 54 from Davao City Division, 47 from Davao Del Norte, 32 from Davao Del Sur, 48 from Davao Occidental, 38 from Davao Oriental, 41 from Digos City, 29 from Island Garden City of Samal, 31 from Mati City, 31 from Panabo City and 28 from Tagum City Division. The study aimed to explore the intricate relationship between school climate, principal instructional management, teachers' organizational citizenship behavior, and their collective impact on the effectiveness of public-school teachers in Department of Education Region XI. Through this research, the study aimed to highlight crucial dynamics within the educational system.

Moreover, the inclusion criteria polled public school teachers working in the public schools of Region XI. They have been categorized as Elementary teachers, affiliated with specific divisions: Compostella Valley, Davao Oriental, Davao del Norte, Davao del Sur, Davao Occidental, Mati City, Digos City, Davao City, Panabo City, Tagum City, and Island Garden City of Samal. Notably, schools that fall beyond these specified divisions and those in non-public settings were not included in this study. Respondents had the freedom to withdraw from participation at any point without facing consequences, ensuring their right to do so is respected. This approach guaranteed a well-defined selection process while prioritizing ethical considerations and honoring the autonomy of the respondents throughout the study.

As a matter of fact, a modified survey questionnaire was used as an instrument of the study. The questionnaire was composed of four (4) variables, specifically school climate, principal instructional management, organizational citizenship behavior, and school effectiveness. The first part was about perception of teachers about school climate modified questionnaire adopted from School Climate Scale (Sudla *et al.*, 2020) with 32 items; the second part was the principal instructional management modified questionnaire adopted from Principal Instructional Management Scale (Pettiegrew, 2013) with 50 items; the third part was organizational citizenship behavior modified survey questionnaire adopted from Organizational Citizenship Behavior Questionnaire (Shaad, 2019) with 19 items; and the fourth part was school effectiveness modified survey questionnaire adopted from School Effectiveness Scale (Mohammad *et al.*, 2020) with 38 items.

Additionally, the survey questionnaires used a 5-point Likert scale for respondents to assess their agreement with statements regarding school climate, principal instructional management, organizational citizenship behavior, and school effectiveness. To interpret the responses, the following criteria were employed: mean values ranging from 4.20 to 5.00 indicated a very high level, suggesting consistent observations; means between 3.40 and 4.19 denoted a high level, signifying frequent observations; means falling within 2.40 and 3.39 signified a moderate level, suggesting occasional observations; while means ranging from 1.80 to 2.39 suggested a low level, indicating rare observations. Lastly, means between 1.00 and 1.79 indicated a very low level, signifying no observations.

Furthermore, to ensure measurement accuracy, the questionnaires have undergone content validity and reliability analysis with an overall rating of 4.46. External validators, experts in social research and statistics, validated the survey instruments. Validated questionnaires were reviewed by these experts, and any recommended minor corrections were incorporated before the final version was printed. Ahead of the actual survey, a pilot test was conducted with forty (40) respondents to assess the questionnaires' reliability. The overall Alpha value is 0.85, which indicates that the questionnaires are all very good. The initial data collected underwent a validity test for internal consistency using Cronbach's alpha. A Cronbach alpha value of 0.7 or higher indicates satisfactory internal consistency (Taber, 2018).

Consequently, this study used a quantitative investigation that employed a descriptive-correlational technique with Structural Equation Modeling (SEM) to illustrate the correlational and causative links between the various variables. This was done by analyzing both observable and latent data and merging techniques from path analysis and component analysis into a single prediction model. Covariance structure modeling, study of covariance structures, and causal modeling are all different names for structural equation modeling (SEM). This method used sophisticated statistical methods and processes such as mean, Pearson r, goodness of fit measures and structural education modeling.

Furthermore, multivariate descriptive statistics were employed to analyze the relationships between more than two variables. This study examined the impact of three independent variables on a single dependent variable. This study aimed to examine the impact of predictors on the outcome variable, as indicated in the Structural Equation Model. In recent years, structural equation modeling (SEM) has emerged as a prominent methodology for investigating and comprehending the interconnections between latent variables. Multivariate data analysis is a statistical technique employed to examine the intricate interactions between constructs and indicators (Deng *et al.*, 2018; Hair *et al.*, 2021).

A systematic approach was employed to distribute survey questionnaires among the participants to ensure an organized data collection phase for the research study. This involved seeking permission from educational authorities at various levels, such as the Office of the Regional Director, Division Superintendents, District Supervisors, and School Heads. The initial step included drafting a formal request to conduct the study, addressed to the Department of Education Region XI. Subsequently, a request was prepared and sent to the principals of the selected schools identified for participation in the research. These steps are intended to secure the necessary approvals and cooperation essential for distributing and collecting the survey instruments. After obtaining approval, the researcher duplicated the survey questionnaires for distribution to the selected respondents. Once distributed, the retrieval process is anticipated to span approximately one week.

3. Results and Discussion

This section presents the results of the findings of the study. The first part describes the level of school climate, principal instructional management, organizational citizenship behavior and school effectiveness. On the other hand, the second part presents the significant relationship between and among school climate, principal instructional management, organizational citizenship behavior and school effectiveness. Lastly, the third part presents the Structural Equation Modeling on school effectiveness in the Department of Education, Region XI.

3.1 School Climate

Table 1 presents the level of school climate in the schools in the Department of Education, Regional Office XI, with the following indicators: physical safety, academic, community and institutional environment. The results indicate that the school climate is high, with an overall mean of 4.10. This means that the public teachers agreed that they have an excellent school climate in their respective schools. Among all the indicators mentioned, academic got the highest mean of 4.33, which could be interpreted as very high. This means that the elementary teachers strongly agreed that they have an excellent school climate in regard to academics. Lastly, physical safety got a mean of 3.76, which could be interpreted as high. This means that the teachers agreed that they have an excellent school climate in terms of physical safety.

Indicators	SD	Mean	Descriptive Level
Physical Safety	0.57	3.76	High
Academic	0.61	4.33	Very High
Community	0.53	4.29	Very High
Institutional Environment	0.57	4.03	High
Overall	0.46	4.10	High

Table 1: Level of School Climate

The results imply that the elementary school teachers' level of school climate in Region XI is high. This means that the teachers agreed that they have excellent school climates in their respective schools. The indicator with the highest mean was academic. This means that the teachers strongly agreed that they understand the academic visions and goals of the school determined by the school principal or supervisors and that they have a role and a clear scope of academic work. Also, they agreed that they have been advised on opportunities for improvement they can apply to their work, as well as received encouragement and direction from school principals and supervisors, work in a school where school principals or supervisors can accomplish all school, have full autonomy to organize the classroom instructions to help students achieve their academic goals and can organize my classroom instructions by following school guidelines, with support from school principals and colleagues.

Additionally, the indicator with the lowest mean was physical safety. The teachers agreed that equipment and tools, classrooms, teacher rooms, and buildings are good, there are security systems, it does not have problems with burglary and other safety problems, no problems working with their school friends, can straightforwardly discuss matters, or disagreed with their colleagues often create their backs, their colleagues work collaboratively, generously, and sincerely with each other and some colleagues often create misunderstandings, which create work conflicts among my fellow teachers.

The study's findings corroborate those of Roesminingsih, Nusantara, Prismana, and Widyaswari's (2023) investigation, which found that the Unesa Lab environment's overall school atmosphere is outstanding, as shown by the average increase of 4.19. Out of all the indicators, the following tend to receive lower scores than the others: the

students' happy atmosphere is not maximized, and there are still doubts about completing the assignment, information is provided in secret, leading to the continued appearance of mutual suspicion, the collaboration between school principals, teachers, and students in the teaching and learning process is not maximized, the facilities provided for teaching and learning are not purpose-driven and the assistance provided has not been maximized for any difficulties that arise as a result of assignments given to students.

3.2 Principal Instructional Management

Table 2 presents the level of principal instructional management as perceived by the teachers in Region XI with the following indicators: frame the school goals, communicate the school goals, supervise and evaluate action, coordinate the curriculum, monitor student progress, protect instructional time, maintain high visibility, provide incentives for teachers, promote professional development and provide incentive for learning. With the overall mean of 4.16, which could be interpreted as high, the public school teachers agreed that their principals employ instructional management. Also, framing the school goals got a mean of 4.24, which could be interpreted as very high. This shows that the public school teachers strongly agreed that their principals employ instructional management in terms of these areas. On the other hand, maintaining high visibility obtained the lowest mean of 3.99, respectively, which could be interpreted as high. This shows that the elementary teachers agreed regarding their principals' instructional management.

Table 2 Level of Principal Instructional Management

Indicators	SD	Mean	Descriptive Level
Frame the School Goals	0.63	4.26	Very High
Communicate the School Goals	0.66	4.24	Very High
Supervise and Evaluate Action	0.61	4.15	High
Coordinate the Curriculum	0.65	4.23	Very High
Monitor Student Progress	0.71	4.23	Very High
Protect Instructional Time	0.64	4.09	High
Maintain High Visibility		3.99	High
Provide Incentives for Teachers		4.03	High
Promote Professional Development		4.21	Very High
Provide Incentive for Learning	0.58	4.16	High
Overall	0.53	4.16	High

The results imply that the level of public school teachers' principal instructional management is high. Thus, they agreed that their school principals are employing instructional management strategies. The indicator with the highest mean was framing the school goals. The public school teachers strongly agreed that they develop a focused set of annual school-wide goals, frame the school's goals in terms of staff responsibilities for meeting them, use needs assessment or other formal and informal methods to secure staff input on goal development, use data on student performance when developing the

school's academic goals and develop goals that are easily understood and used by teachers in the school.

On the other hand, the indicator with the lowest mean is maintaining high visibility. The public school teachers agreed that their school leaders take time to talk informally with students and teachers during recess and breaks, visit classrooms to discuss school issues with teachers and students, attend/participate in extra- and co-curricular activities, cove classes for teachers until a late or substitute teacher arrives and tutor students or provide direct instruction to classes.

The findings of Liwa's (2018) study are also supported by these results, which show that the principal's level of instructional management was almost always manifested or very high when it came to defining and communicating the school's goals, supervising and evaluating instruction, coordinating the curriculum, keeping an eye on students' progress, protecting instructional time, maintaining high visibility, offering incentives to teachers, encouraging professional development, and offering incentives for learning.

3.3 Organizational Citizenship Behavior

Table 3 presents the level of organizational citizenship behavior among the elementary school teachers in Region XI with the following indicators: conscientiousness, sportsmanship, civic virtue, courtesy, and altruism. With the overall mean of 3.84, the level of public school teachers' organizational citizenship behavior is high. This means that they agreed that they have organizational citizenship behavior. With the means of 4.38, the teachers have very high courtesy. This means that the teachers strongly agreed that they have these identified indicators of organizational citizenship behavior. Lastly, with a mean of 2.35, the elementary teachers have a low level of sportsmanship, which means they disagreed with having this behavior.

Tuble of Devel of Organizational Childenship Denavior								
Indicators	SD	Mean	Descriptive Level					
Conscientiousness	0.70	4.26	Very High					
Sportsmanship	1.11	2.35	Low					
Civic Virtue	0.71	3.96	High					
Courtesy	0.65	4.38	Very High					
Altruism	0.58 4.24 Ver		Very High					
Overall	0.48	3.84	High					

Table 3: Level of Organizational Citizenship Behavior

The results imply that the level of the elementary school teachers in Region XI have a high level of organizational citizenship behavior. Based on the results, courtesy got the highest mean of 4.38, which could be interpreted as very high. This means that the elementary teachers strongly agreed that they are mindful of how their behavior affects other people's jobs, they do not abuse the rights of others, and they try to avoid creating problems for co-workers. On the other hand, the indicator with the lowest mean of 2.35, which could be interpreted as low, is sportsmanship. This means that they disagreed that

they consume much time complaining about trivial matters, always focus on what is wrong rather than the positive side, tend to make mountains out of molehills, find fault with what the school is doing and are the classic "squeaky wheel" that permanently needs greasing.

This finding supports Polat's (2019) study, which used "the scale of OCB" developed by Podsakoff, MacKenzie, Moorman, and Fetter (1990) and Moorman (1991) to collect data, elementary school teachers demonstrated a significant degree of OCB. Administrators at the school claim that teachers behave in a courteous manner first, followed by acts of altruism, civil virtue, conscientiousness, and sportsmanship, in that sequence.

3.4 School Effectiveness

Table 4 discusses the level of school effectiveness among the public school teachers in Region XI with the following indicators: the effectiveness of the school climate, school administration effectiveness, the effectiveness of the teacher, the effectiveness of the relationship with the local community, the effectiveness of educational practices and the students have a sense of belonging to the surrounding environment. It could be gleaned from the results that with the overall mean of 4.22, the elementary teachers' level of school effectiveness is very high. This also means that they strongly agreed about the school's effectiveness in their respective stations. The elementary teachers have very high levels of with the means of effectiveness of the teacher with a mean of 4.28. This means that the teachers strongly agreed on these indicators. On the other hand, with the mean of 4.12, the elementary teachers have a high level of school effectiveness in terms of students' sense of belonging to their surrounding environment. This further implies that they agreed on this indicator.

Descriptive **Indicators** SD Mean Level 0.51 4.20 Very High The Effectiveness of the School Climate 0.58 4.22 Very High School Administration Effectiveness The Effectiveness of the Teacher 0.58 4.28 Very High The Effectiveness of the Relationship with the Local Community 0.59 4.26 Very High 0.56 Very High The Effectiveness of Educational Practices 4.23 The Students Have a Sense of Belonging to the Surrounding 0.55 4.12 High Environment Very High Overall 0.47 4.22

Table 4: Level of School Effectiveness

The results imply that the level of public school teachers in Region XI's level of school effectiveness is very high. It could also be noted that the indicator that obtained the highest mean is the effectiveness of the teachers. The teachers strongly agreed that the teachers vary in teaching methods, use the computer and its applications in the learning process, prepare different teaching aids, motivate students to learn, use modern educational techniques interested in gifted students and use different teaching methods.

On the other hand, the indicator that obtained the lowest mean was school effectiveness regarding students having a sense of belonging to their surrounding environment. The teachers agree that they contribute to introducing students to archaeological sites, link the learning process to the needs of society, contribute to adult literacy programs, work to educate students about forest wealth and work to acquaint students with water resources.

This finding is corroborated by a 2019 study by Panigrahi, which found that schools with superior physical facilities, high-achieving teachers, and high student performance all contributed to their exceptionally high levels of school effectiveness. To improve student achievement and boost school effectiveness, it is critical to identify schools that are less effective and offer the support they need to improve their physical facilities and other areas. An important discovery of this study is the correlation between increased community involvement and improved school performance.

3.5 Correlations Between School Climate and School Effectiveness in Public Schools

One of the objectives of this research is to determine the correlation between school climate and school effectiveness. Table 5 presents the significant relationship between school climate and school effectiveness among public schools in the Department of Education, Region XI. With an overall computed r-value of 0.392 and probability level of 0.000 at a 0.05 level of significance, it could be concluded that the null hypothesis is rejected. Therefore, there is a significant relationship between school climate and school effectiveness. It could also be noted that all the school climate coordinators have significant relationships with all the indicators of school effectiveness.

Table 5: Significance on the Relationship between School Climate and School Effectiveness in Public Schools

School Climate	School Effectiveness								
	The Effectiveness of the School Climate	School Administration Effectiveness	The Effectiveness of the Teacher	The Effectiveness of the Relationship with the Local Community	The Effectiveness of Educational Practices	The Students Have a Sense of Belonging to the Surrounding Environment	Overall		
Physical	.333**	.234**	.316**	.272**	.338**	.399**	.372**		
Safety	.000	.000	.000	.000	.000	.000	.000		
Academic	.345**	.252**	.310**	.237**	.225**	.277**	.324**		
Academic	.000	.000	.000	.000	.000	.000	.000		
Community	.329**	.203**	.254**	.205**	.167**	.205**	.267**		
Community	.000	.000	.000	.000	.001	.000	.000		
Institutional	.382**	.215**	.243**	.209**	.218**	.236**	.294**		
Environment	.000	.000	.000	.000	.000	.000	.000		
Overall	.431**	.282**	.350**	.288**	.296**	.349**	.392**		
Overall	.000	.000	.000	.000	.000	.000	.000		

The data further showed positive relationships between the indicators of school climate and the indicators of school effectiveness. Among all the indicators of school climate,

physical safety got the highest r-value of 0.372 followed by academic, institutional environment and community, with the r-values of 0.324, 0.294 and 0.267, respectively. The results of Özgenel's (2020) study, which indicate that school climate predicts efficacy, support this. Suggestions were given to the administrators and teachers after the findings were examined concerning the findings of other studies in the literature.

3.6 Relationship between Principal Instructional Management and School Effectiveness

The next goal of this study was to determine the relationship between principal instructional management and school effectiveness. Table 6 presents the significance of the relationship between the indicators of principal instructional management and school effectiveness. With an overall computed r-value of 0.491 with a probability level of 0.000 at a 0.05 significance level, it could be concluded that the null hypothesis is rejected. Thus, there is a significant relationship between principal instructional management and school effectiveness. It could also be gleaned that all of the indicators of principal instructional management are significantly correlated with all the indicators of school effectiveness.

Table 6: Significance of the Relationship between Principal Instructional Management and School Effectiveness in Public Schools

	School Effectiveness							
Principal Instructional Management	The Effectiveness of the School Climate	School Administration Effectiveness	The Effectiveness of the Teacher	The Effectiveness of the Relationship with the Local Community	The Effectiveness of Educational Practices	The Students Have a Sense of Belonging to the Surrounding Environment	Overall	
Frame the School Goals School Goals	.493** .000	.429** .000	.340** .000	.291** .000	.292** .000	.322** .000	.426** .000	
Communicate the School Goals	.461** .000	.403** .000	.362** .000	.285** .000	.280** .000	.329** .000	.417** .000	
Supervise and Evaluate Action	.519** .000	.421** .000	.296** .000	.344** .000	.333** .000	.370** .000	.448**	
Coordinate the Curriculum	.481** .000	.423** .000	.354** .000	.309** .000	.314** .000	.376** .000	.443**	
Monitor Student Progress	.416** .000	.421** .000	.336** .000	.236** .000	.263** .000	.299** .000	.388**	
Protect Instructional Time	.423** .000	.362** .000	.327** .000	.301** .000	.279** .000	.364** .000	.405** .000	
Maintain High Visibility	.404** .000	.467** .000	.337** .000	.245** .000	.279** .000	.286** .000	.398** .000	
Provide Incentives for Teachers	.354** .000	.376** .000	.347** .000	.228** .000	.294** .000	.301** .000	.374** .000	
Promote Professional Development	.337** .000	.352** .000	.307** .000	.256** .000	.301** .000	.271** .000	.359** .000	
Provide Incentive for Learning	.392** .000	.332** .000	.315** .000	.330** .000	.332** .000	.324** .000	.399** .000	
Overall	.501** .000	.487** .000	.405** .000	.337** .000	.371** .000	.393** .000	.491** .000	

The results implied that positive relationships are observed between all the indicators of principal instructional management and school effectiveness. Among all the indicators of principal instructional management, supervising and evaluating action got the highest r-value of 0.448, while the indicator with the lowest r-value is promoting professional development with an R-value of 0.359. This is corroborated by the research of Ismail, Khatibi, and Azam (2021), which found a direct and positive correlation between the instructional leadership of the deputy principal and the success of the school. The results of the moderation test showed that the instructional leadership of the deputy principal and school effectiveness are influenced by the school level, with a more interaction effect at the secondary level than at the primary level.

3.7 Relationship between Organizational Citizenship Behavior and School Effectiveness

The next objective of this study is to determine the significant relationship between organizational citizenship behavior and school effectiveness. Table 7 shows the significant relationships between the indicators of organizational citizenship behavior and school effectiveness. Based on the results, with the overall r-value of 0.412 at 0.05 level of significance, the null hypothesis should be rejected. Thus, it could be noted that there was a significant relationship between organizational citizenship behavior and school effectiveness. However, it could be gleaned that the relationship between sportsmanship and the indicators of school effectiveness is not significant except for the relationship between sportsmanship and the teacher's effectiveness.

Table 7: Significance of the Relationship between Organizational Citizenship Behavior and School Effectiveness in Public Schools

			Schoo	l Effectiveness			
Organizational Citizenship Behavior	The Effectiveness of the School Climate	School Administration Effectiveness	The Effectiveness of the Teacher	The Effectiveness of the Relationship with the Local Community	The Effectiveness of Educational Practices	The Students Have a Sense of Belonging to the Surrounding Environment	Overall
Conscientiousness	.403**	.320**	.403**	.301**	.274**	.279**	.390**
Conscientiousness	.000	.000	.000	.000	.000	.000	.000
Sportsmanship	.044	080	108*	.026	049	024	039
Sportsmanship	.376	.107	.031	.607	.328	.636	.431
Civic Virtue	.314**	.303**	.313**	.323**	.380**	.323**	.387**
Civic virtue	.000	.000	.000	.000	.000	.000	.000
Countagy	.378**	.350**	.444**	.273**	.314**	.283**	.403**
Courtesy	.000	.000	.000	.000	.000	.000	.000
Altruism	.374**	.325**	.393**	.266**	.326**	.285**	.389**
	.000	.000	.000	.000	.000	.000	.000
Overall	.423**	.318**	.374**	.333**	.332**	.311**	.412**
Overall	.000	.000	.000	.000	.000	.000	.000

The results also implied a positive relationship between the indicators of organizational citizenship behavior and school effectiveness. However, it was also found that there is a

negative relationship between sportsmanship and all the indicators of school effectiveness, but most of these negative correlations are not significant. However, in terms of sportsmanship and effectiveness of the teacher, the negative correlation is found to be significant. Thus, it could be implied that when the sportsmanship of the teachers is low, their effectiveness as teachers is also low.

This supports the findings of a study by Karabatak, Alanoğlu, and Mengür (2018), which showed that stress and organizational citizenship behavior dimensions were significant predictors of school effectiveness and that all dimensions of teachers' organizational citizenship behaviors were significantly and positively correlated with school effectiveness. Additionally, the study found that demographic characteristics were not a significant predictor of school effectiveness and that only the seniority variable was.

3.8 Influence of School Climate, Principal Instructional Management, and Organizational Citizenship Behavior on School Effectiveness

Another objective of this study is to gauge the influence of school climate, principal instructional management and organizational citizenship behavior on school effectiveness. As presented in Table 8, with the F-value of 63.005, the regression model is, therefore, significant. Thus, it results in the rejection of the null hypothesis. Also, some indicators can predict the school effectiveness in public elementary schools.

On the other hand, with the R-value of 0.567, it could be implied that 56.7 percent of the variation in school effectiveness is explained by school climate, principal instructional management and organizational citizenship behavior as the predictive variables. It could also be noted that 43.3 percent of the variation can be attributed to other factors besides the variables identified in this study.

Table 8: Significance on the Influence of School Climate, Principal Instructional Management, and Organizational Citizenship Behavior on School Effectiveness in Public Schools

and Organizational Citizenship Behavior on School Effectiveness in Fubic Schools							
School Effectiveness							
(Variables)	(Variables)				Sig.		
Constant		1.402		6.556	.000		
School Climate		.161	.155	3.215	.001		
Principal Instructional Management		.291	.323	6.529	.000		
Organizational Citizenship Behavior		.247	.250	5.580	.000		
R	.567						
R ²	.322						
ΔR	.317						
F	63.005						
P	.000						

The results also revealed that with a beta of 0.291, the standard coefficient of principal instructional management has the highest beta. It shows that principal instructional management has the highest influence on school effectiveness. Additionally, with the

beta of 0.247, organizational citizenship behavior obtained the second highest influence on school effectiveness and school climate has the least influence on school effectiveness with beta 0.161

3.9 Goodness of Fit Measures of the Structural Best Fit Model

Table 9 presents the Goodness of Fit Measured of the Structural Best Fit Model. The results of Model 3 of the Structural Equation Model are presented below. The outcomes show that this model passed or satisfied all the criteria in order for it to become the best fit model.

Table 9: The Goodness of Fit Measures of the Structural Best Fit Model

Index	Criterion	Model Fit Value
P-value	> 0.05	.088
CMIN/DF	0 < value < 2	1.251
GFI	> 0.95	.976
CFI	> 0.95	.996
NFI	> 0.95	.979
TLI	> 0.95	.993
RMSEA	< 0.05	.025
P-Close	> 0.05	.997

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

P-close = P of Close Fit

As shown in the table, the P-value is 0.88 of Model 3 is more than 0.05, and its CMIN/DF value is 1.251. Also, its GFI, CFI, NFI and TLI values are 0.976, 0.996, 0.979 and 0.993, respectively which are greater than 0.95. Also, the RMSEA value is 0.25, which is greater than 0.05, and the P-close value is 0.997, which is also greater than 0.05. The results satisfied all the criteria, making Model 3 the Best Fit Model on school effectiveness in the public elementary schools in the Department of Education, Region XI.

3.10 Best Fit Model on School Effectiveness

The last objective of this paper is to determine the best fit model on school effectiveness among the schools in Region XI. Based on the results of the study, Model 3 was the best fit model as it satisfied the criteria, making it the best fit model on school effectiveness. There were three (3) generated models in this paper. However, the Generated Models 1 and 2 do not satisfy all the criteria, making them not the best fit model that predicts school effectiveness. This model, as illustrated in Figure 2, is the product of Structural Equation Modeling (SEM).

SCHOOL CLIMATE, PRINCIPAL INSTRUCTIONAL MANAGEMENT, ORGANIZATIONAL CITIZENSHIP BEHAVIOR. A STRUCTURAL EQUATION MODEL ON SCHOOL EFFECTIVENESS IN PUBLIC SCHOOLS

The Best-Fit Structural Model of School Effectiveness is shown in Figure 2. The term "best-fit structural model" describes the model that best captures the relationships between the variables under study, both theoretically and quantitatively. Based on thorough statistical validation and theoretical compatibility, Model 3 has been identified as the best-fit model for this study on school effectiveness. Models 1 and 2 only function as developmental or comparative stages to illustrate the iterative process that leads to Model 3. They offer perceptions into the other models that were considered throughout the investigation.

As presented in Figure 2, all the school climate coordinators were retained after Structural Equation Modeling. Also, in terms of the principal instructional management, framing school goals, providing incentives for teachers, protecting instructional time, monitoring students' progress, coordinating the curriculum, and communicating the school goals were retained while supervising and evaluating action and maintaining high visibility, promoting professional development and providing incentives for learning were eliminated after Structural Equation Modeling. Regarding Organizational Citizenship Behavior, only three (3) indicators were retained in the Best Fit Model: courtesy, sportsmanship and conscientiousness, while altruism and civic virtue were eliminated. Lastly, in terms of school effectiveness, only two (2) indicators were retained, and these are effectiveness of the school climate and effectiveness of the relationship with the local community, in contrast, school administration effectiveness, effectiveness of the teacher, effectiveness of educational practices and students having a sense of belonging to the surrounding environment were eliminated.

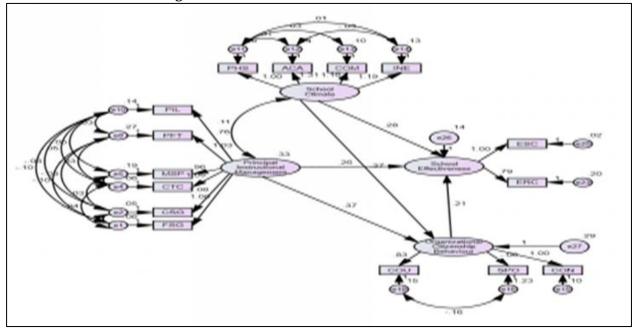


Figure 2: Best Fit Model on School Effectiveness

3.11 Summary of Goodness of Fit Index

Table 10 summarizes of the Goodness of Fit measures for the three (3) generated models. Each model is evaluated based on several indices, and the optimal model is the one that best meets the criteria for each index. The models not considered best-fit models are just developmental or comparative stages to illustrate the iterative process that leads to the best one.

As presented in the table, Model 1's P-value is less than 0.05 that is lower than the required P-value to become the Best Fit Model, the CMIN/DF value is 6.588, the GFI value is 0.734, the CFI value is 0.807, the NFI value is 0,781, the TLI value is 0.787 and the RMSEA value is 0.118 and the P-close value is 0.000 that is lower than 0.05, suggesting a poor fit. Thus, this model is not the best fit model on school effectiveness among schools in Region XI.

On the other hand, for Model 2, the P-value is 0.00, which is also lower than 0.05. Also, the CMIN/DF value is 5.934, and the GFI value is 0.759. Additionally, the CFI value is 0.831, and the BFI value is 0.805. On the other hand, the TLI value is 0.812, and the RMSEA value is 0.111. Lastly, the P-close value is 0.000. The results in this model do not satisfy the requirement for this to become the Best Fit Model and suggest a poor fit. Thus, Model 2 is not the best fit model for school effectiveness.

Furthermore, Model 3's P-value is 0.88, which is greater than 0.05, and its CMIN/DF value is 1.251. Also, its GFI, CFI, NFI and TLI values are 0.976, 0.996, 0.979 and 0.993, respectively, which are greater than 0.95. Also, the RMSEA value is 0.25, which is greater than 0.05, and the P-close value is 0.997, which is also greater than 0.05. The results satisfied all the criteria, making Model 3 the Best Fit for school effectiveness in the public elementary schools in the Department of Education, Region XI.

Table 10: Summary of Goodness of Fit Measures of the Three Generated Models

Model	P-value (>0.05)	CMIN / DF (0 <value<2)< th=""><th>GFI (>0.95)</th><th>CFI (>0.95)</th><th>NFI (>0.95)</th><th>TLI (>0.95)</th><th>RMSEA (<0.05)</th><th>P-close (>0.05)</th></value<2)<>	GFI (>0.95)	CFI (>0.95)	NFI (>0.95)	TLI (>0.95)	RMSEA (<0.05)	P-close (>0.05)
1	.000	6.588	.734	.807	.781	.787	.118	.000
2	.000	5.934	.759	.831	.805	.812	.111	.000
3	.088	1.251	.976	.996	.979	.993	.025	.997

Legend:

CMIN/DF = Chi Square/Degrees of Freedom

NFI = Normed Fit Index

GFI = Goodness of Fit Index

TLI = Tucker-Lewis Index

RMSEA = Root Mean Square of Error Approximation

CFI = Comparative Fit Index

4. Recommendations

The Department of Education must extend more efforts to ensure the physical safety of the teachers in their respective stations. The organization should conduct regular school building monitoring and assessment because the physical structure of the school might have affected the perception of the teachers at their school climate in terms of physical safety. Also, it was found out in the study that the teachers have low levels of sportsmanship. The organization should also strengthen their programs that will promote sportsmanship among their teachers, considering that this is also one of the traits that the schools promote to their learners, especially during sports and other competition-related activities. For the teachers, they should embrace acceptance and sportsmanship as one of their organizational citizenship behaviors.

For the school leaders, in order to ensure school effectiveness in their respective stations, they have to ensure that their teachers and stakeholders are in a community where positive school climate and organizational citizenship behavior are being observed and implemented. Also, they should ensure that they implement recent strategies in instructional supervision or instructional management because, as school leaders, part of their job description is to provide meaningful technical assistance to the teachers during their instructional supervision. They also need to ensure that they are always visible in the school so that they can quickly address the issues, concerns and problems encountered by the teachers.

For future researchers, studies related to determining the best fit models on school effectiveness focusing on the context of schools situated in Geographically Isolated and Disadvantaged Areas (GIDA) may also be conducted. The results may be compared to the outcomes of the present study. Other researchers may also use respondents that are more than the total number of teachers who participated in this study.

5. Conclusion

As highlighted in the results, it could be concluded that school climate, organizational citizenship behavior, principal instructional management and school effectiveness have been found to have significant relationships to each other. Thus, it could be implied for the schools in Region XI to be effective in delivering its quality and equitable services to its intended clientele, it must ensure positive school climate and organizational citizenship behavior and implement excellent principal instructional management strategies.

In terms of the school climate, it was found that there was a high level of school climate among the public-schools in terms of physical safety, academic, community and institutional environment. The indicators and results were the following: physical safety with *high* mean, academic with *very high* mean, community with *very high* mean and institutional environment with *high* mean.

On the other hand, in terms of organizational citizenship behavior, it was found out that the teachers are at a high level of organizational citizenship behavior. The variables have the following indicators with the results: *very high* in conscientiousness, *low* in sportsmanship, *high* in civic virtue, and *very high* in courtesy and altruism. However, it was surprising that the teachers have a low level of sportsmanship. Thus, it is also essential for the Department of Education to instill sportsmanship in the teachers. Additionally, in terms of school effectiveness, the teachers are at *very high* level in terms of the effectiveness of the school climate, school administration effectiveness, the effectiveness of the teacher, the effectiveness of the relationship with the local community, the effectiveness of educational practices and the students have a sense of belonging to the surrounding environment. However, students' sense of belonging to the environment obtained the lowest mean that could still be interpreted as *high*. Thus, schools must ensure that learners are always engaged with their surrounding environment in the school.

Furthermore, some indicators were eliminated from the variables of this study after the Structural Equation Modeling and Model 3 emerged as the best fit model that predicts school effectiveness in the elementary schools in the Department of Education, Region XI.

Acknowledgments

The successful completion of this dissertation would not have been possible without the assistance of the following persons, who have made significant efforts to provide essential support and useful insights to the researcher.

The researcher expresses gratitude to Dr. Lyndon A. Quines, his adviser, for providing support, guidance, patience, and most significantly, dedicating his time to ensure the researcher's well-guided throughout the full course of this research. He consistently provided essential technical support to enhance the paper. The researcher was motivated to complete this investigation due to the researcher's steadfast encouragement.

The defense panel, consisting of Dr. Elleine Rose A. Oliva, Dr. Elizabeth B. Malonzo, Dr. Rey Doble, Dr. Josie T. Bolofer, Dr. Eunice, offered valuable insights and suggestions that guided the researcher in establishing a clear direction for this paper.

The researcher would like to express gratitude to Dr. Renante Genuba, the statistician, for his invaluable assistance in ensuring the appropriate utilization of statistical methods for interpreting the data.

To the officials of the Department of Education (DepEd) Region XI, led by the dynamic Regional Director, Dr. Allan G. Farnazo, CESO IV, and the Schools Division Superintendents of the Eleven Division Offices, thank you for granting permission to the researcher to conduct the study within your areas of responsibility. The author would like to express gratitude to the Elementary School Principals who facilitated the author's research and to the instructors who participated as respondents in this study, for their cooperation.

I would like to express my gratitude to the personnel of the University of Mindanao Professional Schools for their exceptional responsiveness anytime their expertise is required. Above all, I acknowledge and attribute all the praise and honor to our divine creator.

Conflict of Interests Statement

The authors declare no conflicts of interest.

About the Authors

Melodina G. Villan is a Doctor of Education with a concentration in Educational Management student at the University of Mindanao Professional Schools, Davao City. She is currently a Master Teacher I in Clib Elementary School, Sulop District in the Division of Davao del Sur, Philippines.

Lyndon A. Quines (EdD) is a graduate of Doctor of Education Major in Educational Management and a graduate school professor at the University of Mindanao, Davao City. He is currently a school principal in Emilio Jose Sr. Elementary School in the Division of Davao del Sur, Philippines.

References

- Abd-Rabo, A. M. Q., & Hashaikeh, S. A. I. (2020). Assessing School Principals' Perceptions of School Effectiveness in the Palestinian Schools. *Universal Journal of Educational Research*, 8(11), 5536–5546. https://doi.org/10.13189/ujer.2020.081157
- Aboyi, J. (2018). A Correlational Study on School Climate and Organizational Citizenship Behavior in Catholic Schools. [Doctoral dissertation, Grand Canyon University]. Retrieved from https://www.proquest.com/openview/7f8ce616fc4b81f6e406fd2d66cc8eb8/1?pq-origsite=gscholar&cbl=18750
- Ahmad, B., Iqbal, S., Hai, M., & Latif, S. (2021). The interplay of personal values, relational mobile usage and organizational citizenship behavior. *Interactive Technology and Smart Education*, 19(2). https://doi.org/10.1108/itse-01-2021-0016
- Al-Mahdy, Y. F. H., Emam, M. M., & Hallinger, P. (2018). Assessing the contribution of principal instructional leadership and collective teacher efficacy to teacher commitment in Oman. *Teaching and Teacher Education: An International Journal of Research and Studies*, 69(1), 191-201. http://dx.doi.org/10.1016/j.tate.2017.10.007
- Angrist, J. D., Hull, P., & Walters, C. (2022). Methods for Measuring School Effectiveness. *National Bureau of Economic Research*. https://doi.org/10.3386/w30803
- Arar, K., & Abu Nasra, M. (2019). Leadership style, occupational perception and organizational citizenship behavior in the Arab education system in Israel. *Journal of Educational Administration*, 57(1), 85–100. https://doi.org/10.1108/jea-08-2017-0094

- Astor, R. A., & Benbenishty, R. (2018). Bullying, School Violence, and Climate in Evolving Contexts: Culture, Organization, and Time. Retrieved from https://books.google.com.ph/books?hl=en&lr=&id=wdB2DwAAQBAJ&oi=fnd&pg=PP1&ots=nbhI7FoF1j&sig=2uC6trvWvpqy5R206slNj9KD3T8&redir_esc=y#v=onepage&q&f=false
- Bada, H. A., Ariffin, T. F. T., & Nordin, H. (2020). Teachers' Perception of Principals' Instructional Leadership Practices in Nigeria. *Universal Journal of Educational Research*, 8(10), 4459–4469. https://doi.org/10.13189/ujer.2020.081013
- Bellibas, krü, Polatcan, M., & Kılınç, A. (2022). Linking instructional leadership to teacher practices: The mediating effect of shared practice and agency in learning effectiveness. *Educational Management Administration & Leadership*, 50(5), 812–831. https://doi.org/10.1177/1741143220945706
- Block, M. (2011). School Climate. *Encyclopedia of Child Behavior and Development*, 1291–1293. https://doi.org/10.1007/978-0-387-79061-9 2500
- Bush, T. (2018). Preparation and induction for school principals: Global perspectives. Management in Education, 32(2), 6671. Retrieved from https://nottinghamrepository.worktribe.com/preview/921224/MiE%20PREPARATION%20AND%20INDUCTION%20PAPER%202017.pdf
- Capacite, R. (2021). School-Based Management Practices as Predictors of School Performance in Public Elementary Schools amid the Pandemic. *GNOSI: An Interdisciplinary Journal of Human Theory and Praxis*, 4(3), 2714–2485. Retrieved from https://www.gnosijournal.com/index.php/gnosi/article/view/134
- Chen, J., & Guo, W. (2018). Emotional intelligence can make a difference. *Educational Management Administration & Leadership*, 48(1). https://doi.org/10.1177/1741143218781066
- Cornell, D., & Huang, F. (2019). Collecting and analyzing local school safety and climate data. In M. J. Mayer & S. R. Jimerson (Eds.), *School safety and violence prevention: Science, practice, policy* (pp. 151–175). American Psychological Association. https://doi.org/10.1037/0000106-007
- Daily, S. M., Mann, M. J., Lilly, C. L., Dyer, A. M., Smith, M. L., & Kristjansson, A. L. (2020). School Climate as an Intervention to Reduce Academic Failure and Educate the Whole Child: A Longitudinal Study. *Journal of School Health*, 90(3), 182–193. https://doi.org/10.1111/josh.12863
- Darling-Hammond, L., & Cook-Harvey, C. (2018). Educating the Whole Child: Improving School Climate to Support Student Success. https://files.eric.ed.gov/fulltext/ED606462.pdf
- Dayon, C. & Jayme, J. (2019). School Climate through the Lens of Students. *International Journal of Education Research for Higher Learning*, 25(1), 1–https://ejournals.ph/article.php?id=13318
- Deng, L., Yang, M., & Marcoulides, K. M. (2018). Structural Equation Modeling with Many Variables: A Systematic Review of Issues and Developments. *Frontiers in Psychology*, 9. https://doi.org/10.3389/fpsyg.2018.00580

- Devi, B., Lepcha, N., & Basnet, S. (2023). Application of Correlational Research Design in Nursing and Medical Research. *Journal of Xi'an Shiyou University, Natural Sciences Edition*, 65(11), 60–69. http://dx.doi.org/10.17605/OSF.IO/YRZ68
- Elche, D., Ruiz-Palomino, P., & Linuesa-Langreo, J. (2020). Servant leadership and organizational citizenship behavior. *International Journal of Contemporary Hospitality Management*, 32(6), 2035–2053. https://doi.org/10.1108/ijchm-05-2019-0501
- Ghavifekr, S., Radwan, O., & Velardee, J. (2019). Teachers' Perceptions of Principals' Instructional Leadership Roles and Practices. *Malaysian Journal of Education*, 44(2), 72–83.
- Habeeb, S. (2019). A proposed instrument for assessing organizational citizenship behavior in BFSI companies in India. *Cogent Business & Management*, 6(1). https://doi.org/10.1080/23311975.2019.1625702
- Hair, J. F., Hult, G. T. M., Ringle, C. M., Sarstedt, M., Danks, N. P., & Ray, S. (2021). An Introduction to Structural Equation Modeling. *Classroom Companion: Business*, 1–29. https://doi.org/10.1007/978-3-030-80519-7 1
- Hallinger, P. (2018). Bringing context out of the shadows of leadership. *Educational Management Administration and Leadership*, 46(1), 5-24. Retrieved from https://doi.org/10.1177/1741143216670652
- Hesbol, K. (2019). Principal self-efficacy and learning organizations: influencing school improvement. *International Journal of Educational Leadership Preparation*, 14(1), 33-51. Retrieved from https://eric.ed.gov/?id=EJ1218932
- Hosseingholizadeh, R., Amrahi, A., & El-Farr, H. (2020). Instructional leadership, and teacher's collective efficacy, commitment, and professional learning in primary schools: A mediation model. *Professional Development in Education*. https://doi.org/10.1080/19415257.2020.1850510
- Hou, Y., Cui, Y., & Zhang, D. (2019). Impact of instructional leadership on high school student academic achievement in China. *Asia Pacific Education Review*. https://doi.org/10.1007/s12564-019-09574-4
- Ismail, M., Khatibi, A. A., & Azam, S. M. F. (2021). The moderating role of school level in the relationship between deputy principal's instructional leadership and school effectiveness in public schools in Maldives. *Research in Educational Administration & Leadership*, 6(2), 472-513. Retrieved from https://files.eric.ed.gov/fulltext/EJ1306778.pdf
- Jacobs, J. (2018). School Climate: A Comparison of Teachers, Students, and Parents. *Electronic Theses and Dissertations*. https://dc.etsu.edu/etd/3476/
- Jarvis, A. (2018). 10 Instructional or Distributed Leadership? Comparing Two Approaches to the Improvement of Learning in Schools. Mastering Theories of Educational Leadership and Management. Retrieved from https://pure.hud.ac.uk/en/publications/instructional-or-distributed-leadership-comparing-two-approaches-

- Karabatak, S., Alanoğlu, M., & Şengür, D. (2018a). The Effect of Teachers' Organizational Citizenship Behaviors and Stress Levels on School Effectiveness. *European Journal of Education Studies*, 5(4), 67–82. http://dx.doi.org/10.5281/zenodo.1464115
- Khan, M. A., Ismail, F. B., Hussain, A., & Alghazali, B. (2020). The Interplay of Leadership Styles, Innovative Work Behavior, Organizational Culture, and Organizational Citizenship Behavior. *SAGE Open*, 10(1), 1–16. https://doi.org/10.1177/2158244019898264
- Kim, W. G., McGinley, S., Choi, H.-M., & Agmapisarn, C. (2019). Hotels' environmental leadership and employees' organizational citizenship behavior. *International Journal of Hospitality Management, 87*. https://doi.org/10.1016/j.ijhm.2019.102375
- Konold, T., Cornell, D., Jia, Y., & Malone, M. (2018). School Climate, Student Engagement, and Academic Achievement: A Latent Variable, Multilevel Multi-Informant Examination. *AERA Open*, 4(4). https://doi.org/10.1177/2332858418815661
- Larson, K. E., Nguyen, A. J., Orozco Solis, M. G., Humphreys, A., Bradshaw, C. P., & Lindstrom Johnson, S. (2020). A systematic literature review of school climate in low and middle income countries. *International Journal of Educational Research*, 102, 101606. https://doi.org/10.1016/j.ijer.2020.101606
- Leithwood, K., Harris, A., & Hopkins, D. (2019). Seven strong claims about successful school leadership revisited. *School Leadership & Management*. http://www.profdavidhopkins.com/assets/docs/Seven%20strong%20claims%20about%20successful%20school%20leadership%20revisited.pdf
- Liwa, I. S. C. (2018). School principals' leadership behaviors vis-à-vis teachers' instructional practices. WVSU Research Journal, 7(2), 15-39.
- Li, H., Sajjad N., Wang, Q., Muhammad Ali, A., Khaqan, Z., Amina, S. (2019). Influence of transformational leadership on employees' innovative work behavior in sustainable organizations: Test of mediation and moderation processes. *Sustainability*, 11(6), 1594. https://doi.org/10.3390/su11061594
- Liebowitz, D. D., & Porter, L. (2019). The Effect of Principal Behaviors on Student, Teacher, and School Outcomes: A Systematic Review and Meta-Analysis of the Empirical Literature. *Review of Educational Research*, 89(5), 785–827. https://doi.org/10.3102/0034654319866133
- Lynn, P. (2019). The Advantage and Disadvantage of Implicitly Stratified Sampling. *Methods, Data, Analyses: A Journal for Quantitative Methods and Survey Methodology* (*Mda*), 13(2). https://doi.org/10.12758/mda.2018.02
- Martin, A. (2021). Investigating the Relationships between Effective Principal Leadership Practices and School Effectiveness as Perceived By Teachers. *Journal of Arts and Humanities*, 10(08), 07-21. https://doi.org/10.18533/jah.v10i08.2089
- Marzano, R. J. (2003). What Works in Schools: Translating research into action? USA: ASCD. Mehdizadeh, S., Tavakoli, A. M., Salajeghe, S., & Sheikhi, A. (2018). Designing model of organizational citizenship behavior and health administrative "Issued by

- Supreme Leader" by mediator organizational spirituality. Iran. J. Educ. Soc. 1, 95-107. Retrieved from https://iase-idje.ir/article-1-179-en.pdf
- Melecio, V. K., & Vinitwatanakhun, W. (2022). A Correlation Study on Teachers' Perception of the School Climate and their Degree of Work Motivation at Assumption College Samutprakarn, Thailand. Scholar: Human Sciences, 14(1), 267-267. http://www.assumptionjournal.au.edu/index.php/Scholar/article/view/5077
- Meyer, A., Richter, D., & Hartung-Beck, V. (2022). The relationship between principal leadership and teacher collaboration: Investigating the mediating effect of teachers' collective efficacy. Educational Management Administration and Leadership, 50(4), 593-612. https://doi.org/10.1177/1741143220945698
- Nkomo, N., & Mohamed, A. (2023). Instructional Supervision and Improved Teaching Performance for Public Primary Schools in Somalia. International Journal of Education and Evaluation 9(3), 100 -105.https://doi.org/10.56201/ijee.v9.no3.2023.pg100.105
- Olaifa, A. S., & Awodiji, O. A. (2023). Nexus between Principals' Instructional Responsibilities and Secondary School Effectiveness. International Journal of Theory and Application in Elementary and Secondary School Education, 5(1), 63-77. https://doi.org/10.31098/ijtaese.v5i1.1186
- Özgenel, M. (2020). An organizational factor predicting school effectiveness: School climate. *International Journal of Psychology and Educational Studies*, 7(1), 38-50.
- Özgenel, M. & Topal, M. (2019). The relationship between school effectiveness and teachers' job satisfaction levels. VIth International Eurasian Educational Research Congress, 19-22 June 2019, Ankara University, Ankara.
- Özgenel, M. (2020). An Organizational Factor Predicting School Effectiveness: School Climate. International Journal of Psychology and Educational Studies, 7(1), 38-50. https://doi.org/10.17220/ijpes.2020.01.004
- Panigrahi, M. R. (2019). School Effectiveness at Primary Level of Education in Relation to Classroom Teaching. *International Journal of Instruction*, 7(2), 51-64.
- Pettiegrew, H. (2013). The Perceptions of Principal Instructional Leadership Practices on (OAA). 8th Grade Ohio Achievement Archive. Assessment **ETD** https://engagedscholarship.csuohio.edu/etdarchive/240
- Polat, S. (2019). Organizational citizenship behavior (OCB) display levels of the teachers at secondary schools according to the perceptions of the school administrators. Procedia-Social and Behavioral Sciences, 1(1), 1591-1596.
- Pinto, S. (2023, August). The Pandemic's Effects on Children's Education | Richmond Fed. Www.richmondfed.org.https://www.richmondfed.org/publications/research/eco nomic brief/2023/eb 23-29
- Proctor, C. (1984). Teacher expectations: A model for school improvement. The Elementary School Journal, 469-481. Retrieved from https://psycnet.apa.org/record/1984-27219
- Rashid, A., Gul, F., & Khalid, G. K. (2018). Internal corporate social responsibility and intention to quit: the mediating role of organizational citizenship behavior. NUML

- Int. J. Bus. Manag. 13, 79–95. Retrieved from https://www.researchgate.net/publication/352210634 Internal Corporate Social Responsibility and Intention to Quit The Mediating Role of Organizational Citizenship Behavior
- Reijers, W. (2023). Technology and Civic Virtue. *Philosophy & Technology*, 36(4). https://doi.org/10.1007/s13347-023-00669-w
- Ridwan, M., Mulyani, S., & Ali, H. (2020). Improving Employee Performance Through Perceived Organizational Support, Organizational Commitment and Organizational Citizenship Behavior. *Systematic Reviews in Pharmacy*, 11(12), 839–849. http://repository.upiyptk.ac.id/3808/1/7.%20improving-employee-performance-through-perceived-organizational-support-organizational-commitment-and-organizational-cit.pdf
- Rita, M., Randa Payangan, O., Rante, Y., Tuhumena, R., Erari, A. (2018). Moderating effect of organizational citizenship behavior on the effect of organizational commitment, transformational leadership and work motivation on employee performance. *International Journal of Law and Management*, 60(4), 953–964. Retrieved from https://www.emerald.com/insight/content/doi/10.1108/ijlma-03-2017-0026/full/html
- Roesminingsih, M. V., Nusantara, W., Prismana, I. P. E., & Widyaswari, M. (2023). Analysis of School Climate in the Unesa School Lab. *Tarbawi: Jurnal Keilmuan Manajemen Pendidikan*, 9(01), 17-26. https://doi.org/10.32678/tarbawi.v9i01.7051
- Rohatgi, A., & Scherer, R. (2020). Identifying profiles of students' school climate perceptions using PISA 2015 data. *Large-Scale Assessments in Education*, 8(1). https://doi.org/10.1186/s40536-020-00083-0
- Rutter, Maughan, Mortimore, Ouston, & Smith, (1979) Rutter, M., Maughan, B., Mortimore, P., & Ouston, J. (with Smith, A.). (1979). Fifteen thousand hours: Secondary schools and their effects on children. Cambridge, MA: Harvard University Press. Retrieved from https://books.google.ro/books?id=j-7FcLrSrEQC&printsec=frontcover&redir_esc=v#v=onepage&q&f=false
- Sagala, S., Lubis, W., & Sagala, G. H. (2019). Canonical correlation between principal leadership and school capacity. *International Journal of Management in Education*, 13(3), 256-280. http://dx.doi.org/10.1504/IJMIE.2019.10020120
- Singha, S. K., & Sikdar, D. P. (2022). Concept of School effectiveness & its modern trends of Research. *International Journal of Multidisciplinary*, 3(8). https://www.researchgate.net/publication/357714312 Concept of School effectiveness its modern trends of Research
- Sudla, W., Sriklaub, K., & Wongwanich, S. (2020). Development of a School Climate Scale Based on School Members' Shared Experiences. *the Journal of Behavioral Science*, 15(1), 52–72. http://dx.doi.org/10.69523/swu.tjbs.2020.15.1.4

- Taber, K. S. (2018). The use of Cronbach's alpha when developing and reporting research Instruments in science education. *Research in Science Education*, 48(6), 1273-1296. https://doi.org/10.1007/s11165-016-9602-2
- Teng, C.-C., Lu, A. C. C., Huang, Z.-Y., & Fang, C.-H. (2019). Ethical work climate, organizational identification, leader-member-exchange (LMX) and organizational citizenship behavior (OCB). *International Journal of Contemporary Hospitality Management*, *ahead-of-print* (ahead-of-print). https://doi.org/10.1108/ijchm-07-2018-0563
- Thiruchelvan, K., Kadir, S. A., Basri, R., & Ayub, A. F. M. (2020). Influence of school culture and climate in Tamil schools, Malaysia. *International Journal of Academic Research in Business and Social Sciences*, 10(5), 1-12. Retrieved from http://dx.doi.org/10.6007/IJARBSS/v10-i5/7167
- Tian, H., Iqbal, S., Akhtar, S., Qalati, S. A., Anwar, F., & Khan, M. A. S. (2020). The Impact of Transformational Leadership on Employee Retention: Mediation and Moderation Through Organizational Citizenship Behavior and Communication. *Frontiers in Psychology*, 11(3). https://doi.org/10.3389/fpsyg.2020.00314
- VanTuyle, V. L. (2018). Illinois Assistant Principals: Instructional Leaders or Disciplinarians. *Education Leadership Review*, 19(1), 1–20. https://eric.ed.gov/?id=EJ1200805
- Voight, A., Austin, G., & Hanson, T. (2020). A Climate for Academic Success: How School Climate Distinguishes Schools That Are Beating the Achievement Odds (Full Report).

 WestEd. https://www.wested.org/resources/a-climate-for-academic-success-how-school-climate-distinguishes-schools-that-are-beating-the-achievement-odds-full-report/
- Wong, M. D., Dosanjh, K. K., Jackson, N. J., Rünger, D., & Dudovitz, R. N. (2021). The longitudinal relationship of school climate with adolescent social and emotional health. *BMC Public Health*, 21(1). https://doi.org/10.1186/s12889-021-10245-6
- Zakrzewska-Bielawska, A., M. Lis, A., & Ujwary-Gil, A. (2022). Use of structural equation modeling in quantitative research in the field of management and economics: A bibliometric analysis in the systematic literature review. *Journal of Entrepreneurship, Management and Innovation*, 18(2), 7–40. https://doi.org/10.7341/20221821
- Zamir, N. A. (2020). A Review of School Effectiveness Theory for School Improvement. International Journal of Academic Research in Business and Social Sciences, 10(3). https://doi.org/10.6007/ijarbss/v10-i3/7028
- Zeyada, M. (2018). Organizational culture and its impact on organizational citizenship behavior. *Int. J. Acad. Res. Bus. Soc. Sci.* 8, 418–429. http://dx.doi.org/10.6007/IJARBSS/v8-i3/3939
- Zheng, X., Yin, H., & Li, Z. (2018). Exploring the relationships among instructional leadership, professional learning communities and teacher self-efficacy in China. *Educational Management Administration & Leadership*, 47(6). https://doi.org/10.1177/1741143218764176

Melodina G. Villan, Lyndon A. Quines SCHOOL CLIMATE, PRINCIPAL INSTRUCTIONAL MANAGEMENT, ORGANIZATIONAL CITIZENSHIP BEHAVIOR. A STRUCTURAL EQUATION MODEL ON SCHOOL EFFECTIVENESS IN PUBLIC SCHOOLS

Želvys, R., Zabardast, A., Nemati, S., Adak, K., & Shariati, O. (2019). Mindful principals in effective schools: mediating role of organizational climate and organizational citizenship behavior. *Pedagogika*, 133(1), 5–27. https://doi.org/10.15823/p.2019.133.1

Author(s) will retain the copyright of their published articles agreeing that a Creative Commons Attribution 4.0 International License (CC BY 4.0) terms will be applied to their work. Under the terms of this license, no permission is required from the author(s) or publisher for members of the community to copy, distribute, transmit or adapt the article content, providing a proper, prominent and unambiguous attribution to the authors in a manner that makes clear that the materials are being reused under permission of a Creative Commons License. Views, opinions and conclusions expressed in this research article are views, opinions and conclusions of the author(s). Open Access Publishing Group and European Journal of Education Studies shall not be responsible or answerable for any loss, damage or liability caused in relation to/arising out of conflicts of interest, copyright violations and inappropriate or inaccurate use of any kind content related or integrated into the research work. All the published works are meeting the Open Access Publishing requirements and can be freely accessed, shared, modified, distributed and used in educational, commercial and non-commercial purposes under a Creative Commons Attribution 4.0 International License (CC BY 4.0).