



**SCHOOL ENVIRONMENT, TRANSFORMATIONAL
LEADERSHIP ATTRIBUTES, SUPPORT SYSTEM,
AND COMMUNITY INVOLVEMENT: A STRUCTURAL
EQUATION MODEL ON SENSE OF COMMUNITY
AMONG PUBLIC ELEMENTARY SCHOOLS**

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Abstract:

This study determined the best-fit structural model of sense of community among 350 public elementary school teachers in Region XI, Philippines, using Structural Equation Modeling (SEM). The results showed that school environment, transformational leadership attributes, support system, community involvement, and sense of community were rated high to very high, with significant positive relationships among the variables. In the final structural model, community involvement and transformational leadership attributes significantly predicted sense of community, with community involvement exerting the strongest influence. The final structural model demonstrated strong goodness of fit and parsimony. Following model modification, the school environment was defined by autonomy climate and school harshness; transformational leadership attributes by inspirational motivation and individual consideration; the support system by supportive leadership and research ethics and integrity; community involvement by communication and collaboration with the community; and sense of community by reinforcement of needs and shared emotional connection. The findings highlighted the critical roles of community engagement and transformational leadership in strengthening teachers' sense of community and supported the attainment of SDG #4 and SDG #8.

SDG #4: Quality Education;

SDG #8: Decent Work and Economic Growth.

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1. Introduction

Teachers' sense of community is critical and must be addressed to foster collaboration among teachers within schools. There are several factors, including inconsistent leadership styles and a lack of strategic leadership training. Such factors limit the use of transformational leadership to inspire teachers and improve the overall quality of a school (Kareem, 2023). Teachers' own community involvement, communication barriers, and inadequate parent involvement further inhibit teachers' sense of belonging in the community (White, Braun, & Miller, 2025). The problems described here help us understand how to strengthen teachers' sense of community and create supportive, collaborative professional environments in schools.

A community of teachers is essential to fostering policies and developing practices that enable teachers to feel connected, have a sense of belonging, and be committed to the school. Teachers' sense of community is strengthened by supportive leadership. This is accomplished through collegial relationships, opportunities to participate in decision-making, recognition, and shared values (Wator *et al.*, 2025). In fact, teachers support the profession's goals, demonstrate a strong commitment to collaboration, and actively participate in the instructional process. Ultimately, a community of teachers is vital to a supportive, collaborative, and engagement-driven school culture and to achieving positive learning outcomes.

Moreover, community building is best achieved in a positive school environment. Studies have linked feelings of belonging and community with positive, supportive, respectful, and inclusive school environments (Bouhlila & Hentati, 2024; Chii & Wan, 2023; Rafiq *et al.*, 2022; Dellosa & Guhao, 2024). These studies noted that school environments defined by safety, respect, and good relationships, as well as supportive and participatory environments, feel inclusive and value members. Therefore, school environments that include these elements also help strengthen community among teachers.

Transformational leadership will help strengthen teachers' sense of community by focusing on building belonging, shared purpose, and connection. Transformational leadership helps build relationships by balancing teachers' wants and needs with the school's overall goals through cooperative efforts (Bagga *et al.*, 2023; Cabayag & Guhao, 2024). Transformational leadership efforts that inspire, nurture, and develop teachers foster a sense of community among members (Gastanes & Guhao, 2024). Therefore, the presence of transformational leadership will help strengthen teachers' sense of community.

A good support system provides teachers with the academic, social, and emotional support they need to build connections and a sense of belonging in their schools. People

who experience support are more likely to be actively engaged in both educational and social activities, leading to increased involvement and stronger bonds with the community (Cacciamani *et al.*, 2024). Responsive systems for teachers' academic, emotional, and social support will help develop relationships and build a stronger sense of belonging (Johnson & Lee, 2023). Therefore, a good support system will enhance a strong sense of community among teachers.

Community involvement is useful in many respects for both community networks and the sense of community. When teachers and/or parents find opportunities to interact with community members, learning networks are more concerned and engaged. Teachers can be viewed as connectors of community networks that span and transcend the classroom (Sparks & Louw, 2023). Common experiences within the community foster personal bonds as well as community-focused goals.

A constructive school atmosphere nurtures a sense of belonging in the school community and fosters caring relationships. Inclusive and respectful, orderly relationship environments cultivate and promote trusting relationships, well-being, and school achievement (Sakellariou, 2025; Stremfel *et al.*, 2024). Similarly, a positive school climate creates an atmosphere in which teachers and other members of the school community feel appreciated and welcome. These findings indicate the positive effects of a good school environment on teachers' relationships with their colleagues and the school community.

The positive school environment may not always benefit teachers, depending on the support and consistency of the environment in which they work. Environments lacking good support may limit opportunities to form meaningful connections. This may be especially true for environments with limited participation and/or inequitable treatment. The existing evidence supports a positive relationship between the school environment and the community. However, differences in climate and working conditions may account for variations in teachers' connectedness and sense of belonging.

Generally, positive results have been published on transformational leadership and its influence on school culture and teachers' experiences. Transformational leaders, through influential role modelling and motivation, individualized attention, and concern, may foster well-being and a strong desired culture in the organizations for which they work. Further, it has been shown to serve a social Constructionist function by fostering a sense of shared purpose and relationships, as well as promoting growth at the individual and collective levels of teachers (Heenan *et al.*, 2024). Also, transformational leadership has been positively linked to teacher satisfaction and improved performance, as well as to a caring school environment in which staff members feel more connected and have a greater sense of belonging (Adriantoni *et al.*, 2023).

Although these results are generally positive, the impact of transformational leadership heavily depends on the reliability and quality of leadership practices. If leaders provide limited support, motivation, inclusivity, or appreciation, teachers have fewer opportunities to develop trust and a collective focus in the school. This suggests

that transformational leadership has different impacts across schools. However, the literature indicates that consistent transformational leadership fosters a sense of community and closeness among teachers at school and strengthens personal bonds and shared commitment to the school.

A good support system can enable teachers to build professional, emotional, social, and academic relationships and help them feel a greater sense of belonging. According to Hurley (2023), supportive and relational practices enhance safe school environments, foster acceptance, and build a community identity. Similarly, multiple tiers of support can make schools supportive communities in which all members assist one another and improve their relationships (Stremfel *et al.*, 2024). These results demonstrate that high support can foster a greater sense of community among teachers by making them feel valued, assisted, and more integrated into the school.

Not all of the school's support systems may be accessible or consistent. The gaps in professional and emotional support, leadership support, and collegial relationships make it difficult for teachers to develop connections in the school community. Though research mostly treats support systems as net positives for belonging and connectedness, disparities in the support systems offered may lead teachers to experience a more muted or even less positive overall sense of community.

Egure *et al.* (2023) have shown that engaged community participation improves connections and co-responsibility among school community participants. Equitable two-way partnerships involving school staff, families, and community engagement provide social and emotional safety and strengthen a collective sense of responsibility within the community. Collaboration among families and schools may also strengthen connections for teachers within the parent and community stakeholder communities and engender a more positive sense of community for teachers.

The level of community involvement is likely to vary from school to school and may be related to the level of stakeholder participation and collaborative opportunities offered. Meaningful community participation for teachers is likely to be more limited by weak community collaboration, low parent participation, and one-way partnerships rather than reciprocal ones. Positive participation may suggest stronger connectedness and co-responsibility among community members; however, community participation may be more limited, resulting in a less positive overall sense of community for teachers.

Teachers develop a stronger sense of community through positive relationships, collaboration, supportive leadership, acknowledgment, shared values, and involvement in school decision-making. Wator *et al.* (2025) describe teachers' sense of belonging as resulting from collegial relationships, leadership support, acknowledgment, and positive conditions within a school. Teachers are more inclined to collaborate, engage in joint activities, and accomplish shared goals when supported by their colleagues and the school community. These findings lend further credence to the role of community as an important element in teachers' well-being and engagement.

The opposite of the highly community-oriented teachers are teachers for whom the sense of community is lacking. Such teachers experience either the disconnected nature of collegial relationships, insufficient support from their leaders, minimal or negligible appreciation, and limited opportunities to participate and connect. A deficiency in community participation and engagement also extends to teachers (Wator *et al.*, 2025). The differing words used to describe the sense of community among teachers reflect the school's social and organizational experiences. The best schools create a strong sense of community among teachers through relationship-building, social support, and encouragement from leaders.

The study is anchored in Social Capital Theory and, more specifically, the work of Dufur and Parcel (2001), who clarified that strengthening communities and institutions requires trust, shared values and norms, social networks, and participation, along with a balance in reciprocity. The theory posits that social relationships and networks provide the critical resources for the group to work together and accomplish the common objective. In the school context, social capital is defined by the relationships and interactions among teachers, school leaders, parents, and community stakeholders. Thus, strengthening the sense of community among teachers requires that trust and reciprocity be evident, valued, and supported. Moreover, the school creates opportunities for collaboration among its stakeholders. Somers (2022) indicates that social connections and support networks define a sense of identity and belonging among group members.

Social Capital Theory explains how the key variables in this study are related to one another. In this context, the school environment represents the relational and organizational context in which trust, shared norms, and social networks can form. A school environment characterized by respect, support, and inclusion is one in which teachers are likely to develop ties with their colleagues and feel a sense of belonging. Some elements of transformational leadership are likely to help build social capital by fostering trust, a shared vision, collaboration, and caring relationships between school leaders and teachers. A support system refers to the resources and reciprocal support available within professional, emotional, and social networks that may help build teachers' relationships and connectedness. Community involvement refers to the active participation of teachers and stakeholders in the communication and collaboration required to accomplish a shared goal in the educational process. Social Capital Theory was the primary theoretical framework for this research because it explained how trust, relationships, support, and participation (represented by the four main variables) could foster teachers' sense of community.

The Ecological Systems Theory, as outlined by Bronfenbrenner and addressed by Hong and Espelage (2012) in educational contexts, was complementary to Social Capital Theory in describing teachers' experiences, given the interrelated environmental systems. In the context of teaching, the social environment was represented by the school climate, leadership, collegial relationships, and available support. The outer relationships were represented by the school's parent and community stakeholders. The linked

environments described opportunities for teachers to form relationships, engage in collective activities, and feel a sense of belonging. Thus, the Ecological Systems Theory helped to contextualize the conditions of teachers' experienced sense of community. At the same time, Social Capital Theory focused more on the relationships and networks within contexts, which produced trust and a sense of community.

The study also utilized Transformational Leadership Theory as a support theory, derived from Burns (1978) and advanced by Bass and Avolio (1994). According to the theory, leaders create a shared vision, motivate and build trust through relationships, and consider each follower individually. In the context of teaching, transformational leadership fosters a collaborative partnership that strengthens social relationships, collective participation, and support. This theory also provides opportunities to strengthen the community's social networks. While Transformational Leadership Theory emphasized the leadership aspect of the study, Social Capital Theory was the primary theory of the study; other frameworks, like the school's environment, the attributes of transformational leadership, the support offered, participation of community stakeholders, and the salient community, combined to frame teachers' sense of community.

The conceptual framework of this study outlines the potential associations of the variables that may reflect the sense of community among public elementary school teachers in Region XI. It refers to the school environment, transformational leadership attributes, support system, and community involvement as the exogenous variables. The sense of community is the endogenous variable.

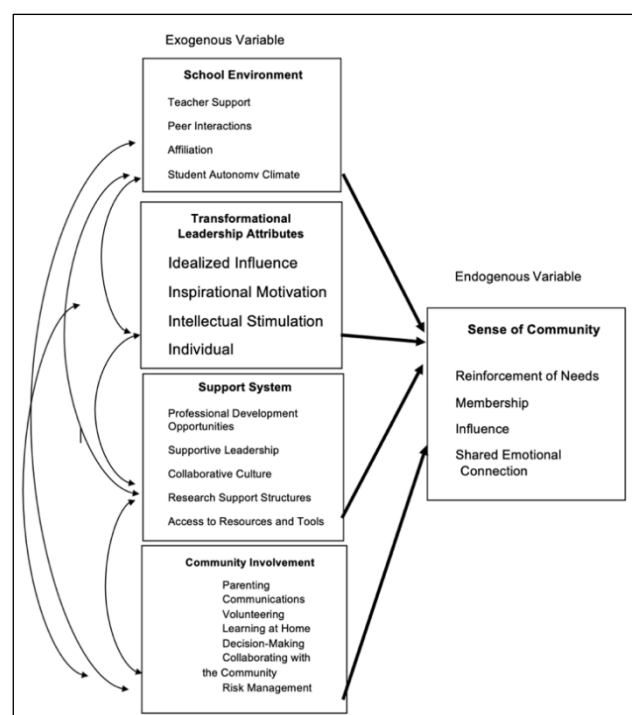


Figure 1: The Conceptual Framework

The arrows point from the independent variables to the dependent variable and show the assumed influence that the study is concerned with. Relative to the expression from the school setting, the quality of the school climate, as well as the relationships and the structure of the school organization, may influence teachers' sense of belonging and connectedness to the school community. The expression of transformational leadership attributes also suggests that leadership practices that inspire, support, and foster collaboration may strengthen teachers' sense of community.

The support system indicates that institutional support, as well as collaborative and participatory activities, whether professional development or not, positively impact teachers' sense of inclusion and engagement. The sense of community created is participatory, collaborative, and shared with stakeholders. The relationships that the study will test and analyze will be examined using Structural Equation Modeling (SEM). The framework indicates the sense of community that results from integrating the factors of the organization, leadership, support system, and community.

Current literature has identified the school environment, transformational leadership attributes, support systems, and community involvement as factors that impact educational and organizational outcomes, as well as teacher effectiveness, commitment, engagement, and performance (AlAli & Al-Barakat, 2022; Santos, 2024). However, most previous studies have either considered these factors separately or examined outcomes related to teachers' sense of community. While the currently available literature suggests that each factor can enhance relationships, support, involvement, and a sense of community within educational contexts, findings remain disconnected because the factors have rarely been studied as an integrated system. Thus, the school environment, transformational leadership attributes, support system, and community involvement have not been studied together, and their relationship to the sense of community for public elementary school teachers has been neglected.

Furthermore, previous studies have largely employed correlational and regression analyses to examine multiple cases and provide associations or predictive relationships. However, these techniques are limited to describing multiple interconnection variants. More recent studies have begun to use SEM to analyze these relationships (Aprilianda *et al.*, 2026; Saksaengwijit *et al.*, 2026). Of particular concern is the absence of studies on the structural interactions among the school environment, transformational leadership characteristics, support system, community involvement, and teachers' sense of community in Philippine public elementary schools. This is most prominent in Region XI, where the contextual data are the least developed. This study set out to fill this gap by proposing the best structural model of teachers' sense of community and analyzing the structural relationships among the organizational, leadership, support, and community factors in public elementary schools in Region XI, Philippines.

Null hypotheses were tested at the 0.05 level of significance. It was expected that there would be no significant correlations among public elementary school teachers between the school environment and sense of community; transformational leadership

attributes and sense of community; support system and sense of community; and community involvement and sense of community. It was also expected that the structural model would not significantly describe the sense of community among public elementary school teachers in Region XI.

The goal of the present study was to assess the school environment with respect to teacher support, peer involvement, student autonomy, school climate and structure, and harsh school environments. Secondly, the degree and type of transformative leadership were assessed, including idealized influence, inspirational motivation, intellectual stimulation, and individualized consideration, as well as the types of leadership embodied in reward, management-by-exception, and laissez-faire. Thirdly, the degree and type of the support system were measured, including the provision of professional development, supportive leadership, a culture of collaboration, research support, the availability of research tools and resources, research ethics and integrity, and the time-workload balance. Lastly, the degree of community involvement was assessed. It included the roles of parents, community collaboration, and the extent of community participation, active community involvement, and self-initiated learning at home.

Furthermore, the present study sought to determine the relationships among the school environment, community sense, transformative leadership, and community involvement, and to examine the structural model of the community sense that best fits the school environment, transformative leadership, and community involvement.

This research focused on SDG 4: Quality Education by examining factors affecting the teacher community. The study provided a basis for designing school communities that are more supportive, inclusive, and collaborative, thereby enhancing teacher well-being, relationships, and practices. The study also focused on SDG 8: Decent Work and Economic Growth by emphasizing supportive conditions and the meaningful involvement of teachers to enhance well-being and sustain educational communities of practice. Overall, these contributions helped schools develop an environment where quality teaching and learning can be sustained over the long term.

This study is significant given the lack of empirical research on the school environment, transformational leadership, support systems, community involvement, and teachers' sense of community in public elementary schools in Region XI.

For the Department of Education and policymakers, the findings can help develop evidence-based policies and recommend programs to support transformational leadership, strengthen a supportive school environment, and strengthen partnerships between schools and communities. The findings also suggested strategies focused on strengthening participation and the school culture, which is based on trust, belonging, collaboration, and shared responsibility.

For school administrators, the findings suggested a framework of leadership practices that strengthen teachers' sense of community. The findings also suggested strengthening collaborative school climates and stakeholder participation. For teachers,

the findings focused on the school and relational factors that contribute to community and practice and help enhance collaboration and professional connection.

For community stakeholders, such as parents, local governments, and community organizations, the findings underscore the importance of their involvement in building and maintaining community-school relationships through collaboration, engagement, and communication. This involvement has the potential to enhance educational communities that are more inclusive, responsive, and supportive.

For future researchers, the construction of the structural model may serve as a foundation for replicating or extending the model and for conducting comparative and/or longitudinal research. Additionally, the model may be extended to other contexts and settings (e.g., educational contexts across various geographical regions and at different school levels), and other variables relevant to teachers' sense of community and school development may be added, thereby contributing to this area of research.

2. Methodology

This section explains the types of respondents, the materials and instruments, the design, and the methodology used in the research.

2.1 Research Respondents

The participants of the study were public elementary school teachers from Region XI, Philippines. The study analyzed public elementary school teachers from Region XI to assess the school environment, transformational leadership attributes, support system, community involvement, and sense of community, and their relationships with one another. Participation helped address the research question regardless of the size and limitations of teachers' public elementary schools in Region XI.

The researcher had a sample size of 350 public elementary school teachers from among the estimated 21,650 teachers across ten school divisions of the DepEd Region XI. The sample was considered adequate for the SEM analysis because the sample size was determined using an appropriate sample size formula. The sample remained large enough to enable the researcher to provide stable parameter estimates and to yield robust statistics that challenged the researcher's beliefs about the relationships among the focal research variables. Thus, the sample size of 350 was deemed sound to confirm the structural model of teachers' sense of community.

To include teachers from the ten school divisions, stratified sampling was used. The population was divided into strata based on school division, and respondents were selected from each stratum. Proportional allocation was used based on the number of public elementary school teachers in each division. This allowed participating divisions with larger numbers of teachers to provide more respondents, while divisions with fewer teachers were also represented. This lowered the risk of overrepresentation or

underrepresentation of divisions and increased the representativeness of the sample in Region XI.

At the time of the study, the DepEd Region XI reported there were 21,650 elementary school teachers. This study covered the ten (10) school divisions in the Davao Region. The teachers selected from each division were distributed as follows: Davao City, 115 (32.86%); Davao del Norte, 43 (12.29%); Davao del Sur, 42 (12.00%); Davao Oriental, 46 (13.14%); Davao Occidental, 33 (9.43%); Tagum City, 18 (5.14%); Panabo City, 15 (4.29%); Digos City, 14 (4.00%); Mati City, 14 (4.00%); and Island Garden City of Samal, 10 (2.86%).

Rank-wise analysis of respondents shows that most public elementary school teachers hold entry-level or mid-level positions. The largest group comprises 134 Teacher I respondents (38.29%), followed by 86 Teacher III respondents (24.57%) and 85 Teacher II respondents (24.29%). The group holding higher-level positions, consisting of Teacher IV, V, VI; Master Teacher I, II, III, and IV, includes 8 Teacher IV respondents (2.29%), 1 Teacher V respondent (0.43%), 1 Teacher VI respondent (0.57%), and 3 Master Teacher I respondents (3.71%). The other positions, consisting of Master Teacher II and Master Teacher III, also include 5 respondents each (1.43%). The teaching profession is also largely comprised of women, as evidenced by the 273 female respondents (78.00%) versus the 77 male respondents (22.00%). This also demonstrates that many respondents are in the early to mid-stages of their careers and that the dominant trend is a career primarily composed of women.

Participants' teaching experience varied and was largely mid-career, with the largest group having 11–15 years, at 27.71%, and the second-largest group having 7–10 years, at 24.57%. Participants with early-career teaching experience were represented by 4–6 years (10.57%) and 1–3 years (6.57%). Representation for longer teaching careers was substantially lower. The groupings of 16–20 years, 21–25 years, 26–29 years, and 30+ years had 13.71%, 9.71%, 5.14%, and 2.00%, respectively. From the presented data, the sample comprises the majority of early-- to mid-career teachers, as well as a predominance of females.

This study investigated public elementary school teachers in Region XI who had at least a full year of teaching experience, voluntarily participated in the study, and completed the Consent Form. Methodological constraints excluded teachers outside Region XI, private school teachers, teachers on leave, teachers in administrative positions, and teachers with less than a full year of public-school teaching experience. In addition, teachers who provided incomplete responses, implied the researcher's presence, or failed to provide the consent form were excluded. Participants were not penalized for withdrawing from the study, with the understanding that their responses would be excluded from the analysis.

Participation was voluntary. Teachers were informed about the study and that there would be no consequences for them, whether they decided to participate or not. Teachers were told they had the right to participate or not participate after being granted

permission. Participation was considered voluntary, as the requirement was to complete an informed consent form. Since all participants were adults, there was no need to obtain consent from guardians. Ethical concerns were addressed by informing participants that they could withdraw at any time.

2.2 Materials and Instruments

The study used five measurement tools, each based on a questionnaire. The tool for measuring the school environment was based on Jabeen *et al.* (2022). It comprised 30 items, focusing on teacher support, peer support, affiliation, autonomy, school structure, and school harshness. The tool demonstrated excellent internal consistency, as measured by a Cronbach's alpha of .918. The tool for measuring transformational leadership was built on the work of Adarkwah and Zeyuan (2020). It was designed to measure idealized influence, inspirational motivation, intellectual stimulation, individualized consideration, contingent reward, management by exception, and laissez-faire. The tool was also found to have excellent internal consistency, with a Cronbach's alpha of .948.

The support system tool was based on Tagadiad *et al.* (2024). It comprised 35 items on professional development, supportive leadership, and collaborative culture, as well as the availability of research support, required resources and tools, and research ethics and integrity. The tool also contained excellent internal consistency, yielding a Cronbach's alpha value of .979. The community involvement tool was adapted from Estigoy and Olua (2023). It consisted of 35 items of parental support and involvement, communication, volunteering, learning at home, participation in decision-making, collaboration with the community, and risk management. The tool had a Cronbach's alpha of .965 and demonstrated excellent internal consistency. The tool for measuring sense of community was adapted from Hensley (2021) and consisted of 20 items about the reinforcement of needs, membership, influence, and ties of an emotional nature. The tool was also found to have excellent internal consistency, with a Cronbach's alpha of .965 after the pre-test. Professional expert validators established content validity through a review of the instruments. The subsequent internal consistency tests of the modified instruments, conducted before administering them to real respondents, showed excellent reliability ranging from .918 to .979. All five instruments demonstrated excellent reliability for the study.

The same interpretation scale was applied consistently across all variables using a five-point response format. Mean scores were interpreted as follows from highest to lowest: 4.21–5.00 – Very High, indicating a very highly manifested variable; 3.41–4.20 – High, indicating a highly manifested variable; 2.61–3.40 – Moderate, indicating a moderately manifested variable; 1.81–2.60 – Low, indicating a low level of manifestation; 1.00–1.80 – Very Low, indicating a very low level of manifestation.

2.3. Design and Procedure

The study used a quantitative, non-experimental design to analyze the association between the school environment and characteristics of transformational leadership, the support system, community involvement, and the ensuing sense of community among public elementary school teachers. Several design options for non-experimental research were evaluated; this option satisfies the requirement to describe existing conditions without manipulating or controlling any study factors. A non-experimental design is best for answering descriptive-relational research questions that aim to understand and describe phenomena within a given context without requiring experimental manipulation (Srinivasan, Rentala, & Kumar, 2023).

Relationships among the study constructs and the best-fit community model among teachers were analyzed using SEM. SEM integrates path and factor analyses and enables researchers to analyze relationships and constructs in latent form using a set of observed variables (Owolabi, Ayendele, & Olaoye, 2020). This study was the first to use SEM to examine the relationships among the school environment, transformational leadership, the support system, and community involvement and sense of community among public elementary school teachers in Region XI. This approach enabled the study to evaluate the model's measurement and structural components within a unified framework. Structural models were evaluated for goodness of fit using χ^2/df , CFI, TLI, RMSEA, and SRMR. Different indices were used because no single index of model fit can be viewed in isolation (Hu & Bentler, 1999). The following cut-off values were used: $\chi^2/df \leq 3.00$, $CFI \geq .95$, $TLI \geq .95$, $RMSEA \leq .06$, and $SRMR \leq .08$, with values meeting or exceeding these criteria indicating acceptable to good model fit. The indices were interpreted and assessed in combination to determine the best-fit structural model.

Data collection occurred in a time-ordered sequence from January to March 2026. Upon gaining ethics approval and validating the research tools, the researcher obtained approval from the Office of the Regional Director of DepEd-Region XI and the Schools Division Superintendents and arranged meetings with the school principals. The selected respondents were invited to complete the questionnaires. The questionnaires were self-administered, and the respondents were allowed to ask for clarification. Where necessary, assistance was provided in the local language. The complete questionnaires were collected at the end of the day. Responses were checked for completeness, and the collected data were coded, organized, and counted. Questionnaires that did not meet the established standards were excluded. The dataset, along with the instructions for analysis, was submitted to the survey statistician.

Pearson's r was used to evaluate the strength of association among the variables. Linear regression was used to examine the dependent variable, and SEM was used to identify the best-fit model of sense of community among public elementary school teachers (Turney, 2024; Hitipeuw, 2023). The model's fit was evaluated using the set of indices. A CMIN/DF value less than 2 and a p -value greater than 0.05 implied a good fit. Additionally, TLI and CFI values greater than 0.95 and GFI and NFI values greater than

0.95 implied good model fit. An RMSEA value of 0.05 or less, in combination with a PCLOSE value greater than 0.05, also indicated good model fit (Obienu & Amadin, 2025). The study adhered to the ethical standards of the UMERC. It was conducted in accordance with the Data Privacy Act of 2012 (Republic Act No. 10173), with ethical clearance granted under UMERC Certificate No. UMERC-2025-528. Participation was voluntary and involved no financial incentives or coercion. Informed consent was obtained from all respondents. The researcher maintained confidentiality and integrity, adhered to responsible practices when handling participants' data, ensured originality via Turnitin, and avoided fabrication, falsification, or manipulation of data. The study's results were reported objectively and transparently, and potential conflicts of interest were disclosed. Impartiality was prioritized and maintained. The contributions of the participants and my research adviser were acknowledged. The data analysis was independently reviewed.

3. Results and Discussion

This section evaluates survey data on the school environment, attributes of transformational leadership, and elementary public-school systems regarding their support systems, community involvement, and sense of community. Survey data is described under the following subheadings: the school environment, the transformational leadership attributes, the school support system, community involvement, and the sense of community.

This section discusses the school environment and the sense of community; the transformational leadership attributes and the sense of community; the school support system and sense of community; and the community involvement and the sense of community. The last section discusses the results of structural equation modeling and the best-fit model explaining the sense of community among public elementary school teachers in Region XI.

3.1 School Environment

Table 1 presents the aspects of the school environment related to teacher support, peer interactions, affiliation, autonomy climate, school structure, and school harshness. The overall mean of 4.45 was considered very high, as a satisfactory school environment was apparent to the respondents. Among the indicators, perceived support from teachers had the highest mean of 4.56. The lowest among all the indicators was the autonomy climate, with a mean of 4.27 and a standard deviation of 0.522, yet it was still considered very high. So, while the school environment was rated highly, emphasis was relatively less on providing opportunities for autonomy and participation.

The findings showed supporting relationships, positive interactions, clear structures, and well-organized school practices. The respondents perceived high levels of support and guidance from teachers, and high levels of collaboration and participation

were evident in positive, respectful peer interactions and affiliations. High levels of school structure were evident from clear, consistent rules and effective classroom management. The focus on an autonomy climate was lower, and fostering greater autonomy and participation in school and classroom practices would benefit the school's overall environment.

Table 1: Level of School Environment

Indicators	SD	Mean	Descriptive Equivalent
Teacher Support	0.473	4.56	Very High
Peer Interactions	0.505	4.47	Very High
Affiliations	0.504	4.40	Very High
Autonomy Climate	0.522	4.27	Very High
School Structure	0.471	4.55	Very High
School Harshness	0.466	4.48	Very High
Overall	0.390	4.45	Very High

These results are in line with earlier literature where positive, supportive, respectful, and inclusive school environments promote connectedness, a sense of belonging, and supportive relationships (Sakellariou, 2025; Stremfel *et al.*, 2024). Likewise, the results were consistent with studies by Bouhlila and Hentati (2024), Chii and Wan (2023), Rafiq *et al.* (2022), and Dellosa and Guhao (2024), which linked positive school environments or climates to stronger relationships and a sense of community. Consequently, the very high-level school environments noted in this study confirmed the existing literature that supportive and formal school environments are important for creating a sense of community among teachers.

3.2 Transformational Leadership Attributes

Table 2 presents scores for the dimensions of transformational leadership, namely idealized influence, inspirational motivation, intellectual stimulation, individualized consideration, contingent reward, management by exception, and laissez-faire leadership. The overall mean was 4.510, with a standard deviation of 0.455, which was interpreted as being extremely high. This suggests that participants consistently practiced strong leadership. Of the scales, inspirational motivation scored the highest, at 4.570. This suggests that for school leaders, teachers understood the objectives, and participants saw their role and found satisfaction in their work. The lowest score, still in the extremely high range, was for laissez-faire leadership, at 4.43. This suggests that passive leadership was relatively less dominant.

Table 2: Level of Transformational Leadership Attributes

Indicators	SD	Mean	Descriptive Equivalent
Idealized Influence	0.521	4.55	Very High
Inspirational Motivation	0.516	4.57	Very High
Intellectual Stimulation	0.533	4.47	Very High
Individual Consideration	0.525	4.54	Very High
Contingent Reward	0.634	4.48	Very High
Management-By-Exception	0.500	4.52	Very High
Laissez-Faire Leadership	0.606	4.43	Very High
Overall	0.455	4.51	Very High

As the scores were in the extremely high range, school managers were likely practicing active and supportive leadership. Idealized influence was observed, as the teachers felt confidence and pride. Inspirational motivation was seen rooted in school leaders' belief in teachers who supported goal attainment and in an understanding of the shared purpose. Intellectual stimulation was observed in school leaders' encouragement of teachers not only to consider but also to reframe best practices and develop a different mindset when approaching work-related challenges. Individual consideration was observed in school leaders' affirmation and support of their professional progress. The relatively low observation of laissez-faire leadership suggests that school managers were practicing strong, active engagement, direction, and control, rather than passive leadership. These practices may increase informal relationships, trust, and connectedness among the teachers.

These findings are corroborated by Cakir and Ozgenel (2024), who indicated that strengthening an organization's culture through transformational leadership practices also improves the welfare of school staff. Heenan *et al.* (2024) emphasize the importance of transformational leadership in constructing social order in schools. Transformational leadership is associated with teachers' satisfaction and performance, as well as their engagement with the school community, according to Adriantoni *et al.* (2023). Overall, the social constructs that active, inspirational, and affirmative leadership creates for the teacher community are corroborated by the cited research.

3.3 Support System

Table 3 shows the overall level of support system for professional development opportunities, supportive leadership, collaborative culture, research support, resources and tools, research ethics and integrity, and time and workload balance. The overall mean is 4.08, with a standard deviation of 0.508, placing this indicator in the "high" range and suggesting that support systems are apparent to respondents. The highest mean among the indicators was supportive leadership, at 4.24. Leadership support for teachers is evident in staff who are seen as accessible, encouraging, and responsive. The lowest mean, at 3.94, was for resources and tools. Support was present, but it was less available or less adequate than other support systems.

Table 3: Level of Support System

Indicators	SD	Mean	Descriptive Equivalent
Professional Development Opportunities	0.691	4.19	High
Supportive Leadership	0.648	4.24	Very High
Collaborative Culture	0.656	4.20	Very High
Research Support Structures	0.646	4.03	High
Access to Resources and Tools	0.770	3.94	High
Research Ethics and Integrity	0.678	4.12	High
Time and Workload Balance	0.731	4.10	High
Overall	0.584	4.12	High

A high level of support systems in the school indicates that teachers experience collaborative servant leadership and have access to various forms of support to carry out their professional activities and research. In particular, the support was evident in encouragement through feedback, assistance, and recognition as the staff engaged in research activities. Participation in research and professional learning communities was part of the collaborative culture—opportunities to attend local and international meetings and presentations supported teachers' professional growth. The relatively low ratings of resources and tools underscore the need for improvements in support systems, particularly in providing necessary resources. In general, the support systems for leadership and collaborative culture were adequate and had improved, while the available resources and tools were somewhat lacking.

Tagadiad, Granaderos, and Paglinawan (2024) affirmed that supportive leadership is vital to developing teachers' research competencies and professional growth. Wator *et al.* (2025) highlighted leadership support, a positive school climate, constructive relationships, and a sense of belonging as contributory factors. The findings of the current study are corroborated by the recommendations from Wator *et al.* (2025) that, through collaborative leadership support, teachers' professional relationships and sense of community may be strengthened, but that the structures and relationships be well supported by the requisite resources.

3.4 Community Involvement

The results in Table 4 describe the extent of community engagement at the elementary school. With a mean of 4.50, the level of community engagement is high. Mean responses across all indicators were high, ranging from 4.28 to 4.69, indicating consistent engagement. Of all indicators, parental involvement was rated highest, with a mean of 4.69. Teachers engaged parents during homeroom PTA meetings, reported on learners' progress, and made home visits. The lowest engagement was observed in volunteering, with a mean of 4.28, which is still rated high. There were opportunities to engage the community, but direct volunteer involvement was less pronounced.

Table 4: Level of Community Involvement

Indicators	SD	Mean	Descriptive Equivalent
Parenting	0.427	4.69	Very High
Communications	0.538	4.50	Very High
Volunteering	0.619	4.28	Very High
Learning at Home	0.527	4.48	Very High
Decision Making	0.458	4.67	Very High
Collaborating with the Community	0.528	4.45	Very High
Risk Management	0.539	4.42	Very High
Overall	0.422	4.50	Very High

The high engagement of community members shows that schools successfully partnered with parents and community stakeholders. Parental engagement and communication were evident in routine reports, progress meetings, and focus group discussions aimed at identifying learners' needs. Decision-making, learning at home, collaboration, and risk management demonstrated that the schools engaged community members to support learners and address school issues. Volunteering, however, was rated the lowest among all indicators and may reflect opportunities to enhance community engagement and welcome collaboration.

These findings corroborate the empirical data of Egure *et al.* (2023), which add that when schools engage in equitable, two-way partnerships with families and community members, both social-emotional safety and school engagement can grow. Krijnen *et al.* (2022) underscore the importance of school-family partnerships in shaping collaborative responsibility for learners' development and achievement. These findings support the present findings, which indicate that the active involvement of parents and community engagement in schools can forge relationships, foster shared responsibility within the school community, and enhance teachers' sense of community.

3.5 Sense of Community

Table 5 reports the level of sense of community regarding reinforcement of needs, membership, influence, and shared emotional connection. The overall mean was 4.43 with a standard deviation of 0.492. This was interpreted as very high, indicating that respondents consistently reported a strong sense of community. Very high scores were observed for all four items, with mean scores ranging from 4.38 to 4.46. Of the four items, reinforcement of needs had the highest mean, at 4.46. This indicates that teachers perceived shared values, needs, priorities, and goals within their community. The lowest mean, still very high, among the four items was membership, at 4.38. This indicates that the teachers' sense of belonging and identification with the school community was the lowest of the four items.

Table 5: Level of Sense of Community

Indicators	SD	Mean	Descriptive Equivalent
Reinforcement of Needs	0.534	4.46	Very High
Membership	0.583	4.38	Very High
Influence	0.529	4.41	Very High
Shared Emotional Connection	0.518	4.46	Very High
Overall	0.492	4.43	Very High

The very high level of sense of community indicates that teachers generally perceived shared values and supportive relationships. This was evident in teachers' recognition of the school community's goals and priorities, as well as in their emotional connection to the community. It was also evident in the teachers' optimism about the community, their confidence in its ability to address challenges, and their confidence in its leadership. However, the view of membership as falling in the lower range across the four items indicates that practical steps should be taken to improve the school community's inclusion, participation, and teachers' attachment.

Hensley (2021) emphasized the importance of reinforcing the needs, membership, influence, and shared emotional connection to foster a strong community. Wator *et al.* (2025), in their literature review, emphasized relational support, affirmative leadership, the creation of a community of shared values, activities, decision-making, and community creation. Based on the results of these studies, the school's structure and environment enable teachers to feel a sense of community by sharing a common purpose and supporting relationships and activities in which they can fully participate.

3.6 Significance of the Relationship between Levels of School Environment and Sense of Community

Table 6 shows the sub-analysis for the school environment and sense of community. The results indicated that all dimensions of the school environment have positively and significantly correlated with all aspects of sense of community. This is evident from all the p-values being 0.000 or less and below the 0.05 level of significance. Among the dimensions, the overall school environment had the strongest association with the overall sense of community ($r = .626$). This was followed by school harshness ($r = .581$) and autonomy climate ($r = .574$). In essence, the overall school environment positively influenced teachers' sense of community.

Table 6: Significance on the Relationship between
School Environment and Sense of Community

School Environment	Sense of Community				
	Reinforcement of Needs	Membership	Influence	Shared Emotional Connection	Overall
Teacher Support	.565* (0.000)	.414* (0.000)	.430* (0.000)	.397* (0.000)	.497* (0.000)
Peer Interactions	.455* (0.000)	.397* (0.000)	.463* (0.000)	.420* (0.000)	.476* (0.000)
Affiliation	.431* (0.000)	.365* (0.000)	.418* (0.000)	.365* (0.000)	.434* (0.000)
Autonomy Climate	.491* (0.000)	.536* (0.000)	.550* (0.000)	.509* (0.000)	.574* (0.000)
School Structure	.469* (0.000)	.330* (0.000)	.371* (0.000)	.380* (0.000)	.425* (0.000)
School Harshness	.536* (0.000)	.518* (0.000)	.531* (0.000)	.531* (0.000)	.581* (0.000)
Overall	.616* (0.000)	.537* (0.000)	.580* (0.000)	.546* (0.000)	.626* (0.000)

*Significant at the 0.05 significance level.

The positive school environment, together with its scaffolding and supportive features, may help teachers feel a sense of belonging and enhance a shared commitment and connectedness with the community for which they work. Relationships and participation may also be encouraged by the school's supportive features and by functional peer support. Enhancing the school environment may also help address the gaps in teachers' sense of community. Thus, a school environment that is positive, encouraging, and supportive may help create a stronger sense of closeness to the school community for teachers.

Bouhlila and Hentati (2024) stated that a positive school climate fosters a sense of community among members. Chii and Wan (2023) also examined how school climate affects members' sense of community in schools. Rafiq *et al.* (2022) mentioned that a respectful, safe, and inclusive school climate makes community members feel valued and connected. Dellosa and Guhao (2024) described how school climate and school environments create respectful relationships and a sense of community. Overall, these studies indicated that school climate enhances members' sense of community.

3.7 Significance of the Relationship between Levels of Transformational Leadership Attributes and Sense of Community

Table 7 presents the significance test for the relationship between the dimensions of transformational leadership and sense of community. Results indicate that all dimensions of transformational leadership exhibited a positive and significant association with all facets of community sense, as all p-values were less than the significance level of 0.05. Overall, transformational leadership exhibited a positive association with community

sense, with an estimated correlation of $r = .604$. Among the various community sense dimensions, the strongest association was observed in the shared emotional connection domain ($r = .610$). In contrast, the association with the fulfillment of needs and membership was somewhat weaker but still positive and significant.

Table 7: Significance on the Relationship between Levels of Transformational Leadership Attributes and Sense of Community

Transformational Leadership Attributes	Sense of Community				
	Reinforcement of Needs	Membership	Influence	Shared Emotional Connection	Overall
Idealized Influence	.456* (0.000)	.447* (0.000)	.512* (0.000)	.568* (0.000)	.543* (0.000)
Inspirational Motivation	.371* (0.000)	.351* (0.000)	.393* (0.000)	.445* (0.000)	.428* (0.000)
Intellectual Stimulation	.489* (0.000)	.456* (0.000)	.508* (0.000)	.562* (0.000)	.552* (0.000)
Individual Consideration	.445* (0.000)	.432* (0.000)	.438* (0.000)	.517* (0.000)	.503* (0.000)
Contingent Reward	.408* (0.000)	.492* (0.000)	.421* (0.000)	.462* (0.000)	.492* (0.000)
Management-By-Exception	.403* (0.000)	.461* (0.000)	.493* (0.000)	.519* (0.000)	.516* (0.000)
Laissez-Faire Leadership	.363* (0.000)	.450* (0.000)	.455* (0.000)	.484* (0.000)	.482* (0.000)
Overall	.503* (0.000)	.534* (0.000)	.553* (0.000)	.610* (0.000)	.604* (0.000)

*Significant at the 0.05 significance level.

The results suggest that among teachers, higher levels of transformational leadership attributes were associated with a greater sense of community. Among the dimensions, significance was observed when visionary leadership and intellectual stimulation encouraged teachers to take charge of their own activities. The fulfillment of the leader's responsibilities and the teachers' needs were found to be weakly associated but still significant. Overall, the results suggest that leadership has a substantial influence on community relations and the common interests of school personnel.

According to the existing literature, the findings reinforce the point made by Cakir and Ozgenel (2024) that transformational leadership positively impacts the organization's culture and members' well-being in schools. Similarly, Heenan *et al.* (2024) noted the functioning of transformational leadership in creating positive social frameworks in schools, and Cabayag and Guhao (2024) reported that transformational leadership practices help stimulate teachers' motivation and performance. These studies confirm that effective leadership practices can strengthen the ties and connections to the community that members of the teaching profession feel.

3.8 Significance on the Relationship between Levels of Support System and Sense of Community

Table 8 reports the results of the significance test for the relationship between the support system and the sense of community. For all dimensions of the support system, positive and significant relationships with the different dimensions of sense of community were found; p-values were all 0.000, less than 0.05. Overall, the support system exhibited a positive, moderate relationship with the sense of community, with a correlation coefficient (r) of .526. Among the indicators, support for professional development opportunities was more related to sense of community, with r values of .483 and .482, respectively, for the dimensions of reinforcement of needs and overall sense of community, while research ethics and integrity was least related to sense of community, with an r value of .367, and even more so with the dimension of membership, with an r value of .305.

The results of this study provide evidence that, in the school context, the presence of an adequate support system for teachers is related to teachers' sense of community. Support for professional development opportunities, together with support for a collaborative culture and for the balance of time and workloads, was found to be related to teachers' sense of community, suggesting that teachers' sense of community and shared engagement are related to the supportive culture in schools. The relatively low level of support for research ethics and integrity may suggest that this area of support is least experienced by teachers in their work-related social interactions. However, the positive relationships in all dimensions also suggest that the support system is related to teachers' sense of belonging and connectedness.

Table 8: Significance on the Relationship between
Levels of Support System and Sense of Community

Support System	Sense of Community				
	Reinforcement of Needs	Membership	Influence	Shared Emotional Connection	Overall
Professional Development Opportunities	.483* (0.000)	.408* (0.000)	.445* (0.000)	.421* (0.000)	.482* (0.000)
Supportive Leadership	.405* (0.000)	.388* (0.000)	.421* (0.000)	.426* (0.000)	.450* (0.000)
Collaborative Culture	.460* (0.000)	.375* (0.000)	.446* (0.000)	.396* (0.000)	.460* (0.000)
Research Support Structures	.358* (0.000)	.403* (0.000)	.433* (0.000)	.442* (0.000)	.450* (0.000)
Access to Resources and Tools	.413* (0.000)	.421* (0.000)	.411* (0.000)	.395* (0.000)	.451* (0.000)
Research Ethics and Integrity	.348* (0.000)	.305* (0.000)	.336* (0.000)	.349* (0.000)	.367* (0.000)

Time and Workload Balance	.448* (0.000)	.404* (0.000)	.419* (0.000)	.399* (0.000)	.459* (0.000)
Overall	.492* (0.000)	.456* (0.000)	.490* (0.000)	.476* (0.000)	.526* (0.000)

*Significant at the 0.05 significance level.

According to Wator *et al.* (2025), in both theory and practice, these results align with supportive leadership, collegial relationships, recognition, and opportunities to participate, all of which contributed to teachers' feelings of belonging. This extends the present research by examining how supportive systems at the institutional, professional, and interpersonal levels provide teachers with a sense of community in the workplace.

3.9 Significance on the Relationship between Levels of Community Involvement and Sense of Community

Table 9 reports the results of the significance test of the relationship between community involvement and sense of community. Results show that community involvement dimensions were positively and significantly associated with the components of sense of community, as all p-values were 0.000, which is less than 0.05. Overall community involvement was strongly and positively associated with overall sense of community, with $r = .773$. Of the community involvement dimensions, the indicator "risk management" was positively associated with overall sense of community ($r = .727$), followed by "collaborating with the community" ($r = .721$). Of the community involvement dimensions, the indicator "parenting" was positively and statistically significantly associated with overall sense of community ($r = .402$).

From a contextual perspective, the results show that, for teachers, the involvement of community members was positively associated with their sense of community. Risk management and stakeholder collaboration may be linked to the development of the school community, as they involve teachers sharing responsibility and building mutual trust. Parental involvement was positively associated with teachers' sense of community; however, this association was relatively weaker than those with community involvement and collaboration on community activities. From a relational perspective, community involvement was an important factor in strengthening the sense of community among teachers.

Table 9: Significance on the Relationship between Levels
of Community Involvement and Sense of Community

Community Involvement	Sense of Community				
	Reinforcement of Needs	Membership	Influence	Shared Emotional Connection	Overall
Parenting	.388* (0.000)	.319* (0.000)	.372* (0.000)	.388* (0.000)	.402* (0.000)
Communications	.575* (0.000)	.536* (0.000)	.531* (0.000)	.536* (0.000)	.599* (0.000)
Volunteering	.596* (0.000)	.632* (0.000)	.604* (0.000)	.610* (0.000)	.672* (0.000)
Learning at Home	.576* (0.000)	.541* (0.000)	.577* (0.000)	.587* (0.000)	.627* (0.000)
Decision Making	.528* (0.000)	.483* (0.000)	.568* (0.000)	.558* (0.000)	.586* (0.000)
Collaborating with the Community	.635* (0.000)	.681* (0.000)	.681* (0.000)	.623* (0.000)	.721* (0.000)
Risk Management	.674* (0.000)	.687* (0.000)	.633* (0.000)	.648* (0.000)	.727* (0.000)
Overall	.707* (0.000)	.695* (0.000)	.705* (0.000)	.702* (0.000)	.773* (0.000)

*Significant at 0.05 significance level.

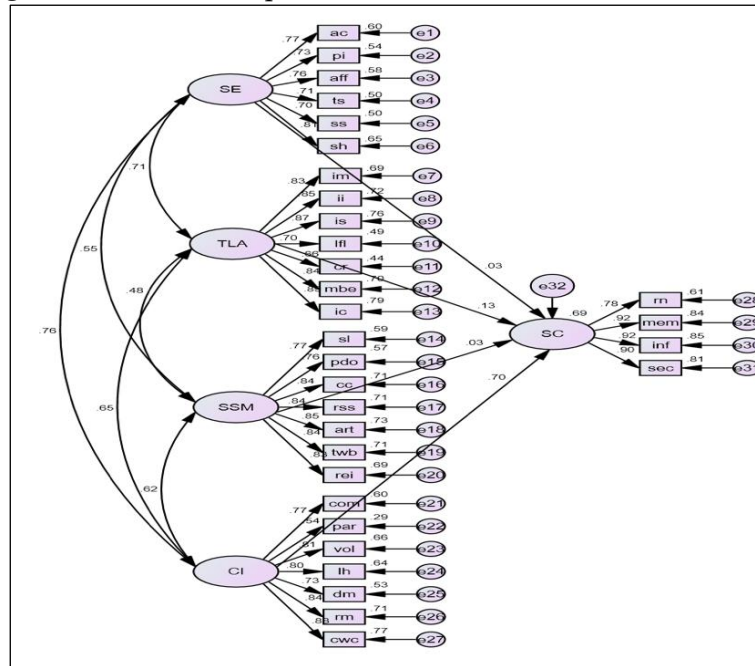
This finding is consistent with the literature, especially Egre *et al.* (2023). This study noted that community-school-family partnerships help create social-emotional safety and engagement. Likewise, Krijnen *et al.* (2022) stated that school-family partnerships provide a means for shared responsibility for students' learning and overall well-being. These studies provide evidence for the current finding that, with active participation, stakeholders create stronger relationships and a sense of shared responsibility, and teachers feel more like part of the community.

3.10 Best-Fit Structural Model of Sense of Community

The model in Figure 2 is not presently adequate to represent the data. Three models were constructed to assess the appropriateness of the data. Indices must fall within acceptable ranges to select the best-fit model. A p-value must be less than 0.05 for the value obtained by dividing the chi-square value by the degrees of freedom to be between zero and two. The approximation of the root mean square error should be less than 0.05, with the P-value being greater. The norm, Tucker-Lewis, comparative fit, and quality-of-fit indices should all exceed 0.95; these values primarily determine which model is the best fit.

Figure 2 shows the first version of the SEM, which represents the relationships among selected variables. In this version, all identified indicators were retained, resulting in a larger and more inclusive model. In the model, the SE construct comprises teacher support, peer interactions and involvement, affiliation, autonomy, school structures, and school harshness.

Figure 2: Structural Equation Model 1 in Standardized Solution



Legend: ts – Teacher Support; pi – Peer Interactions; aff – Affiliation; ac – Autonomy Climate; ss – School Structure; sh – School Harshness; SE – School Environment; ii – Idealized Influence; im – Inspirational Motivation; is – Intellectual Stimulation; ic - Individual Consideration; cr – Contingent Reward; mbe – Management-By-Exception; lfl – Laissez-Faire Leadership; TLA – Transformational Leadership Attributes; pdo – Professional Development Opportunities; sl – Supportive Leadership; cc – Collaborative Culture; rss – Research Support Structures; art - Access to Resources and Tools; rei – Research Ethics and Integrity; twb – Time and Workload Balance; SSM – Support System; par – Parenting; com – Communications; vol – Volunteering; lh – Learning at Home; dm – Decision-Making; cwc – Collaborating with the Community; rm – Risk Management; CI – Community Involvement; rn – Reinforcement of Needs; mem -Membership; inf – Influence; sec – Shared Emotional Connection; SC – Sense of Community.

The construct of TLA includes the concepts of idealized influence, inspirational motivation, intellectual stimulation, and individual consideration; the SSM includes the concepts of supportive leadership, collaborative culture, and research support; the construct of CI comprises involvement of parents, communications, volunteering, learning at home, involvement in decision-making, involvement in community collaboration, and risk management. The SEC comprises the elements of needs reinforcement, membership, and emotional connection.

The fit between the model and the data was assessed, and the results indicated that the model, in its current form, did not provide an adequate fit to the available data. Based on the results found in Table 10, many of the fit indices fell within the unacceptable range. The P-value of .000, whereas a value > 0.05 was expected, indicated that the model did not fit. In addition, the RMSEA of .085 exceeded the .05 threshold, indicating that the model did not fit the population covariance matrix. The relationships among the variables, as demonstrated by the model, were unsatisfactory.

Additionally, the CMIN/DF value of 3.527 is in the unacceptable range of 0 to 2 because the observed and estimated covariance matrices are large. 0.000 is the model's p-

value, which is less than 0.05, so the model and data differ. This means we can reject the null hypothesis of good model fit. The incremental fit indices indicate that the model is inadequate, as reflected by GFI (.766), CFI (.883), NFI (.845), and TLI (.872), all of which are below 0.95. The structural model needs to be adjusted to meet these criteria.

Table 10: Goodness of Fit Measures of Structural Equation Model 1

Index	Criterion	Model Fit Value
P-Close	> 0.05	.000
CMIN/DF	0 < value < 2	3.527
P-value	> 0.05	.000
GFI	> 0.95	.766
CFI	> 0.95	.883
NFI	> 0.95	.845
TLI	> 0.95	.872
RMSEA	< 0.05	.085

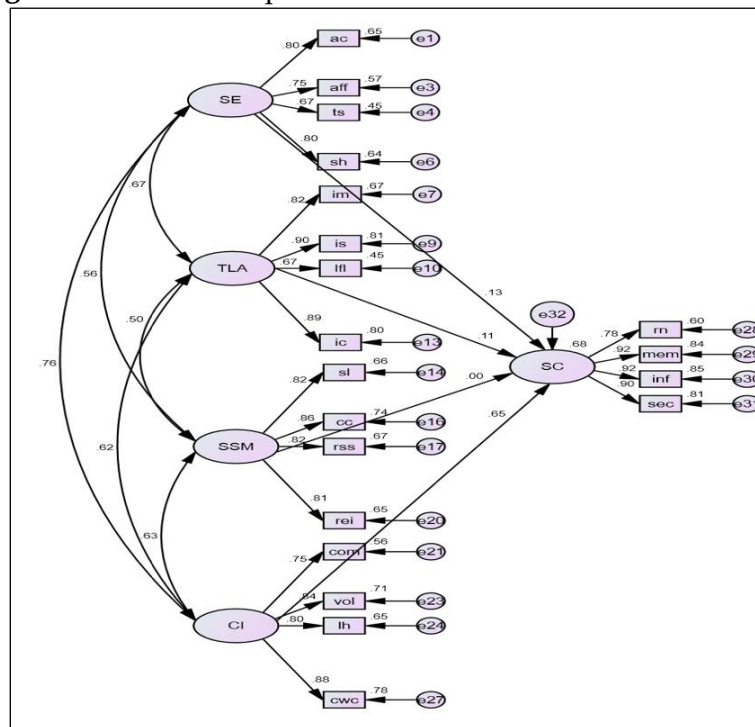
Legend: CMIN/DF - Chi-Square/Degrees of Freedom; NFI - Normed Fit Index; TLI - Tucker-Lewis Index; CFI - Comparative Fit Index; GFI - Goodness of Fit Index; RMSEA - Root Means Square of Error Approximation; Pclose - P of Close Fit; P-value - Probability Level.

The second structural model captures the relationships between variables with fewer, more important indicators for each latent variable. As a result, a more parsimonious structure is represented. Within this model, SE is represented by the variables autonomy climate, affiliation, teacher support, and school harshness. The variables for TLA are inspirational motivation, intellectual stimulation, individual consideration, and laissez-faire leadership.

As for the SSM, the variables are supportive leadership, a collaborative culture, research support, and research ethics and integrity. For CI, the variables are communication, volunteering, learning at home, and collaboration with the community. The endogenous variable, SC, is represented by the variable's reinforcement of needs, membership, influence, and sharing an emotional connection.

The second structural model was refined by considering the modification indices, their theoretical alignment, and parsimony. Within this model, indicators that made small contributions to the overall fit were systematically eliminated when they could be replaced with more theoretically defensible and relevant indicators. This model refinement yielded a better fit than the original model while preserving the constructs' integrity and explanatory power.

Figure 3: Structural Equation Model 2 in Standardized Solution



Legend: ts – Teacher Support; pi – Peer Interactions; aff – Affiliation; ac – Autonomy Climate; ss – School Structure; sh – School Harshness; SE – School Environment; ii – Idealized Influence; im – Inspirational Motivation; is – Intellectual Stimulation; ic - Individual Consideration; cr – Contingent Reward; mbe – Management-By-Exception; lfl – Laissez-Faire Leadership; TLA – Transformational Leadership Attributes; pdo – Professional Development Opportunities; sl – Supportive Leadership; cc – Collaborative Culture; rss – Research Support Structures; art - Access to Resources and Tools; rei – Research Ethics and Integrity; twb – Time and Workload Balance; SSM – Support System; par – Parenting; com – Communications; vol – Volunteering; lh – Learning at Home; dm – Decision-Making; cwc – Collaborating with the Community; rm – Risk Management; CI – Community Involvement; rn – Reinforcement of Needs; mem -Membership; inf – Influence; sec – Shared Emotional Connection; SC – Sense of Community.

The results in Table 11 suggest that, while not perfect, Structural Equation Model 2 demonstrates some improvement over the other models evaluated using typical goodness-of-fit criteria. In particular, the model is not considered to have a close P-value of .000 (with both P-values failing to exceed 0.05). Another indication that the model does not have a close fit is the CMIN/DF value of 2.813 (acceptable range: 0 to 2), indicating some model misfit.

In terms of incremental fit indices, the model shows improvement. The values of CFI, NFI, and TLI are approaching 0.95, and thus the model meets the standards of adequacy. Further, the GFI value of .888 indicates that the model is, at best, partially adequate.

Table 11: Goodness of Fit Measures of Structural Equation Model 2

Index	Criterion	Model Fit Value
P-Close	> 0.05	.000
CMIN/DF	0 < value < 2	2.813
P-value	> 0.05	.000
GFI	> 0.95	.888
CFI	> 0.95	.946
NFI	> 0.95	.919
TLI	> 0.95	.936
RMSEA	< 0.05	.072

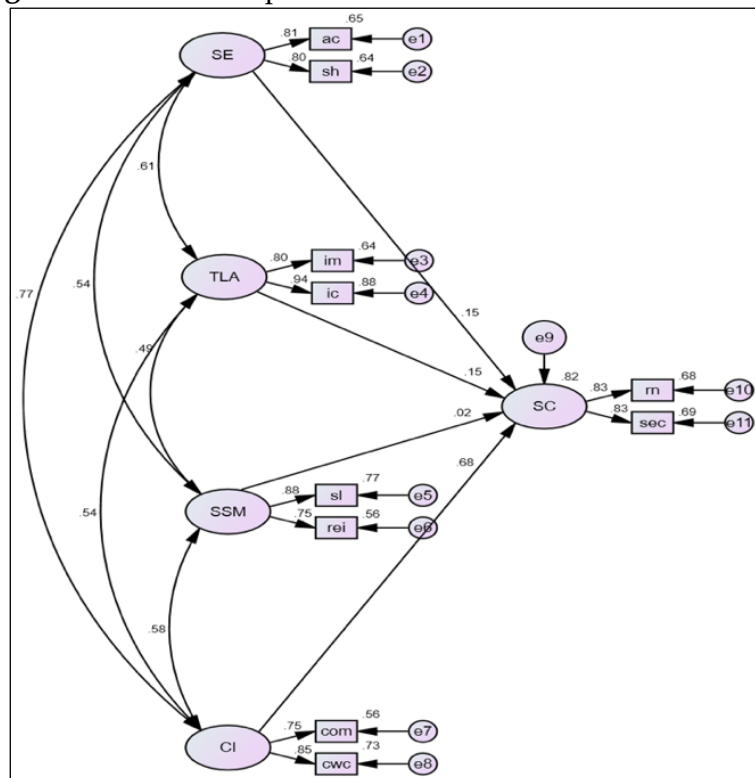
Legend: CMIN/DF - Chi-Square/Degrees of Freedom; NFI - Normed Fit Index; TLI - Tucker-Lewis Index; CFI - Comparative Fit Index; GFI - Goodness of Fit Index; RMSEA - Root Means Square of Error Approximation; Pclose - P of Close Fit; P-value - Probability Level.

The RMSEA value of .072, compared with the benchmark of less than 0.05, also indicates a mediocre fit. In summary, the fit of Model 2 is slightly improved compared to the other models; however, it still fails to meet the benchmarks for a well-fitted Structural Equation Model. For this reason, further work to fit the model is required.

The refined structural model simplifies the representation of the relationships among latent constructs by including only relevant indicators. The SE is represented by the indicators autonomy climate (ac) and school harshness (sh). The TLA indicators are inspirational motivation (im) and individual consideration (ic). The SSM is represented by supportive leadership (SL) and research integrity (REI). The indicators of CI are communication (com) and collaboration with the community (cwc).

The construct of SC measures endogeneity and is defined by reinforcement of needs (rn) and shared emotional connection (sec). SE, TLA, SSM, and CI are modeled as predictors of SC. Among these, CI has the strongest direct effect on SC, followed by SE and TLA, respectively, and SSM has a negligible effect. It should be noted that correlations exist among the exogenous constructs of SE, TLA, SSM, and CI, which shows that they are connected.

Figure 4: Structural Equation Model 3 in Standardized Solution



Legend: ac – Autonomy Climate; sh – School Harshness; SE – School Environment; im – Inspirational Motivation; ic – Individual Consideration; TLA – Transformational Leadership Attributes; sl – Supportive Leadership; rei – Research Ethics and Integrity; SSM – Support System; com – Communications; cwc – Collaborating with the Community; CI – Community Involvement; rn – Reinforcement of Needs; sec – Shared Emotional Connection; SC – Sense of Community

Although Model 3 was the most appropriate and had acceptable goodness of fit, it is important to note that it includes only the dimensions that remained and improved the model fit significantly. Dimensions that were excluded must not be interpreted as being of no importance or unrelated to the constructs in question. Quite the contrary, their removal was a necessary part of developing a statistically more acceptable model. Therefore, the model presented reflects the best of what characterizes the school environment, transformational leadership, support system, community engagement, and the sense of community within the study, with respect to the theory of each construct, rather than providing a complete representation. Other dimensions eliminated during model refinement were less significant for improving model fit. Their removal helped achieve a more parsimonious model that is also reasonable within the bounds of the study's conceptual structure. Other scholars can examine the dimensions that were removed in a new study that uses other populations and contexts and/or different methods to build a broader theory of these constructs.

As shown in Table 12, Model 3 obtains good fit indices. A P-Close value of 0.832 indicates a good fit, as it exceeds the acceptable threshold of 0.05. The CMIN/DF value of 1.422, which is between 0 and 2, also shows a good fit. In addition, the p-value of 0.079 also favors model adequacy because it is greater than 0.05. The incremental fit indices

also all exceed SFMAB (greater than 0.95), with GFI at 0.980, CFI at 0.994, NFI at 0.981, and TLI at 0.989, indicating an excellent fit. The RMSEA of 0.035 is below 0.05; therefore, the model provided a very good fit to the population.

The results generally indicate that Model 3 is the best of the three models and achieves parsimony. Thus, the null hypothesis of no best-fit model is rejected. The results indicate that, among the predictors, community involvement has the greatest impact in shaping the sense of community, whereas others have a less significant impact. This supports the notion that engaging in community activities is a basic requirement for enhancing a sense of belonging.

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

Index	Criterion	Model Fit Value
P-Close	> 0.05	.832
CMIN/DF	0 < value < 2	1.422
P-value	> 0.05	.079
GFI	> 0.95	.980
CFI	> 0.95	.994
NFI	> 0.95	.981
TLI	> 0.95	.989
RMSEA	< 0.05	.035

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

Table 13 shows the Squared Multiple Correlations for SEM. In this case, the SC estimate was 0.824; therefore, the included exogenous variables explained 82.4% of the variance. Of the indicators, Individual Consideration (IC) had the highest estimate of .879, meaning that it was the most observed variable in the transformational leadership construct. This was followed by Supportive Leadership (SL) and Collaborating with the community (CWC) at .769 and .731, respectively, showing substantial contributions to the support system and the community involvement constructs. In addition, Shared Emotional Connection (sec), Reinforcement of Needs (rn), Inspirational Motivation (im), Autonomy Climate (ac), and School Harshness (sh) also had substantial estimates and, therefore, made substantial contributions to their respective latent variables.

Meanwhile, Communications (com) and Research Ethics and Integrity (rei) were found to be .565 and .558, respectively. Although these figures may be considered moderate to low, they still provide an adequate level of explanatory power to the model. The variables included in Model 3 clearly explain the relationships among the school environment, transformational leadership, support system, community involvement, and sense of community.

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

	Estimate
SC	.824
sec	.694
rn	.683
cwc	.731
com	.565
rei	.558
sl	.769
ic	.879
im	.640
sh	.639
ac	.648

Table 14 presents both the regression weights and the structural relationships among variables. Among the exogenous variables examined, CI has the strongest and most significant positive influence on SC ($\beta = 0.677$, $p < 0.001$). Having TLA also has a significant positive influence on SC ($\beta = 0.149$, $p = 0.010$), although the influence is less pronounced. SE ($\beta = 0.151$, $p = 0.128$) and SSM ($\beta = 0.024$, $p = 0.690$) do not have significant positive influences on SC.

For the measurement model, all retained indicators show strong, significant loadings. For SE specifically, both autonomy climate ($\beta = 0.805$) and school harshness ($\beta = 0.799$, $p < 0.001$) load well. For TLA, both inspirational motivation ($\beta = 0.800$) and individual consideration ($\beta = 0.938$, $p < 0.001$) load well. For the support system (SSM), both supportive leadership ($\beta = 0.877$) and research integrity ($\beta = 0.747$, $p < 0.001$) load well. For community involvement (CI), both communication ($\beta = 0.752$) and collaboration with the community ($\beta = 0.855$, $p < 0.001$) load well. Finally, SC is indicated by both the reinforcement of needs ($\beta = 0.826$) and a shared emotional connection ($\beta = 0.833$, $p < 0.001$).

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

			B	S.E.	C.R.	BETA	P
SC	<---	SE	.159	.104	1.523	.151	.128
SC	<---	CI	.738	.117	6.336	.677	***
SC	<---	TLA	.159	.062	2.567	.149	.010
SC	<---	SSM	.019	.047	.399	.024	.690
ac	<---	SE	1.000			.805	
sh	<---	SE	.886	.064	13.884	.799	***
im	<---	TLA	1.000			.800	
ic	<---	TLA	1.193	.085	14.074	.938	***
sl	<---	SSM	1.000			.877	
rei	<---	SSM	.891	.083	10.690	.747	***
com	<---	CI	1.000			.752	
cwc	<---	CI	1.117	.075	14.796	.855	***
rn	<---	SC	1.000			.826	
sec	<---	SC	.977	.058	16.807	.833	***

Note: Chi-square = 35.553; Degrees of freedom =25; Probability level = .079

Regarding parsimony and robustness, our data support the conclusion that Model 3 fits our data best. The factors that reflect a sense of community are especially related to community involvement. In addition, transformational leadership is an important aspect of the sense of community. In contrast, school environment and support systems have been found to have no significant role in predicting sense of community in this model. For this reason, we are justified in rejecting the null hypothesis because we could not find a best-fit model.

4. Recommendation

Based on the study's findings, school principals are directed to adopt a more transformational leadership style to improve teachers' sense of community. This can be achieved by implementing administrative structures that facilitate monthly participative meetings and planning workshops, as well as forums that actively involve teachers in research, curriculum, or student support committees. Transformational leadership can be achieved by mentoring and rewarding innovative, transformative teaching.

DepEd officials and educational executives must implement strategies to improve access to resources and tools and to develop transformational leadership. One activity that DepEd may undertake is to regularly conduct assessments and resource mapping in schools. Based on the assessment results, schools that lack instructional materials, technology, and research may be prioritized for resource allocation. Schools may also choose to create learning resource centers or research hubs that provide access to research and digital databases and are supported by some level of technical assistance. Local government, higher education, and other partner organizations may strengthen the support for digital accessibility, research, and professionalism for schools with greater needs.

School heads should focus on developing community partnerships to build sustained collaboration among stakeholders, including teachers and parents. Stakeholder participation may be enhanced by community outreach and tutorial programs, supported by regular conferences, community outreach and participation, and strengthened Brigada Eskwela. School heads may also arrange for community representatives and parents' groups to provide community involvement and be supported by community outreach and participation.

Significant efforts should be taken to address the relatively low community involvement rating. School communities of practice may be implemented to enhance collaboration and develop school-based relationships among teachers. Regular peer reviews, collaborative learning, and a focus on organizational inclusion and participation may further develop a sense of belonging and community for teachers.

Among community stakeholders, parents, local government units, and partner organizations, formal partnerships, volunteer community projects, and school-based initiative support arrangements provide avenues for community stakeholders to engage

with school programs actively. Their sustained involvement has the potential to enhance school programs geared towards building community among teachers through co-responsibility and strengthening the school-community relationship.

As for future studies, the best-fit structural model may serve as a foundation for replication, extension, comparative, and longitudinal studies across different regions, school levels, and educational conditions. Additionally, future studies may consider other variables or add indirect pathways to explain the non-significant relationships between the school environment and support system and teachers' sense of community.

5. Conclusion

The combined effects of the school environment, transformational leadership attributes, support system, community involvement, and sense of community were generally high to very high among elementary public-school teachers in Region XI. In addition, the correlation analysis indicated that the four independent variables were positively and significantly related to the sense of community. In contrast, community involvement and transformational leadership attributes were, respectively, the strongest and second-best correlates, followed by the school environment and support system. Structural Equation Modeling, however, revealed that only community involvement and transformational leadership attributes had significant relationships with the sense of community. In contrast, the school environment and support system had no significant relationships in the final model. Of the three structural models, Model 3 was the best fit and retained community involvement and transformational leadership as significant exogenous predictors of teachers' sense of community. Overall, these results suggest that community-school partnerships and transformational leadership should be the focus in developing teachers' sense of community, belonging, and collective identity.

The study's primary theoretical elements were Social Capital Theory (Dufur & Parcel, 2001), focusing on community networks, trust, engagement, and social relationships. Significant participation in the study confirmed that social capital develops in communities through active engagement and social relationships. Findings also confirmed the Transformational Leadership Theory (Burns, 1978; Bass & Avolio, 1994), as the transformational leadership characteristics had predicted teachers' sense of community through leadership focused on building shared purpose, relationships, and engagement. Ecological Systems Theory (Hong & Espelage, 2012) was partially supported, as the sense of community was predicted by the school and community contexts; however, the school environment was not a significant direct predictor in the final model. The non-significant direct effects of the school environment and support system suggest that their relationship to teachers' sense of community may occur through pathways not included in the final structural model.

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Conflict of Interest Statement

The authors declare no conflicts of interest.

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References

- Adarkwah, M. A., & Zeyuan, Y. (2020). The paradoxical relationship between principals' transformational leadership styles and teachers' motivation. *International Journal of Educational Excellence*, 6(2), 15–46. <https://doi.org/10.18562/IJEE.056>.
- Adriantoni, A., Komariah, A., Nurdin, D., & Herawan, E. (2023). The Effect of Transformational Leadership and Madrasah Climate on Elementary School Teacher Performance. *Journal of Innovation in Educational and Cultural Research*, 4, 238-247. <https://doi.org/10.46843/jiecr.v4i2.647>.
- Bagga, T., Gera, S., & Haque, S. N. (2023). The mediating role of sense of belonging in leadership and organizational outcomes. *Journal of Organizational Psychology*, 23(2), 45–60.
- Bass, B. M., & Riggio, R. E. (2021). *Transformational leadership* (2nd ed.). Lawrence Erlbaum Associates Publishers. <https://doi.org/10.4324/9781410617095>
- Bouhlila, D. S., & Hentati, I. (2024). Exploring students' sense of school belonging among adolescents across Muslim countries. *Journal of Education in Muslim Societies*, 6(1), 32–54. <https://doi.org/10.2979/jems.00015>.
- Cabayag, J., & Guhao, E. S., Jr. (2024). Transformational leadership and teacher motivation: Implications for school management. *International Journal of Educational Leadership*, 8(1), 55–70.
- Cacciamani, S., Perrucci, V., Khanlari, A., & Balboni, G. (2024). The role of sense of community in enhancing student engagement and collaborative learning. *Computers & Education*, 194. <https://doi.org/10.1016/j.compedu.2023.104684>.
- Cakir, T., & Ozgenel, M. (2024). The Relationship Between Transformational Leadership and School Happiness: The Mediating Role of School Culture. *Research in Educational Administration and Leadership*, 9, 253-293. <https://doi.org/10.30828/real.1377849>
- Chii, S., & Wan, Z. (2023). The role of school climate in fostering positive relationships among students, teachers, and staff. *Journal of Educational Environment*, 15(2), 112–134. <https://doi.org/10.1016/j.jee.2023.05.004>
- Delloso, A. B., & Guhao, E. S., Jr. (2024). Parental involvement, classroom climate, and social support: A path model analysis on academic self-concept among senior high school students. *International Journal of Multidisciplinary and Current Educational Research*, 6(6).
- Dufur, M. J., & Parcel, T. L. (2001). Capital at home and at school: Effects on student achievement. *Social Forces*, 79(3), 881–911. <https://doi.org/10.1353/sof.2001.0021>.
- Egure, D. S., Curry, K., Fiegenger, A. M., Kim, Y., & Akinrinmade, B. (2023). TeleNGAGE: Promoting transformative equitable collaboration between families and schools. *School Community Journal*, 33(1), 143–172. <https://www.adi.org/journal/2023ss/EgureEtAlSpring2023.pdf>.

- Estigoy, B., & Olua, E. (2023). Community involvement practices of public secondary school teachers. *Psychology and Education: A Multidisciplinary Journal*, 11, 434–446. <https://doi.org/10.5281/zenodo.8196142>
- Gastanes, B. B., & Guhao, E. S., Jr. (2024). Empowering leadership and professional development among public school teachers. *International Journal of Research Publication and Reviews*, 5(7), 4823–4860.
- Geolina, M. E., & Guhao, E. S., Jr. (2021). Public service motivation and sense of community of school heads in Region XI. *International Journal of Scientific and Research Publications*. Retrieved from <https://www.ijsrp.org/monograph/Public-Service-Motivation.pdf>
- Gupta, M., & Verma, R. (2025). Safety in schools: A foundation for nurturing children's well-being. *International Journal of Research and Scientific Innovation*, 12(6), 445–448. <https://doi.org/10.51244/IJRSI.2025.12060039>.
- Heenan, I. W., Lafferty, N., & McNamara, P. M. (2024). An Applied Approach to Transformational Leadership for Whole School Communities: Perspectives of Primary School and System Leaders. *Societies*, 14, 275. <https://doi.org/10.3390/soc14120275>.
- Hensley, M. (2021). *Assessing the sustainability of virtual professional learning communities* (Doctoral dissertation, University of South Alabama).
- Hitipeuw, A., Lestari, A. D., Putra, R. M., & Santoso, I. (2023). Self-efficacy and academic performance: A structural equation modeling approach. *Philippine Social Science Journal*, 3(2), 45–60.
- Hong, J. S., & Espelage, D. L. (2012). A review of research on school climate and bullying. *Educational Psychology Review*, 24(1), 103–120. <https://doi.org/10.1007/s10648-011-9151-8>.
- Hurley, A. (2023). Facilitating a sense of belonging in the primary classroom: Translating research into practice. *Education Research and Perspectives*, 50, 36–77. Retrieved from https://www.erpjournals.net/wp-content/uploads/2023/12/02_ERPV50_Angela_Hurley.pdf
- Jabeen, S., Khalid, H., Mughal, K., & Siddique, M. (2022). School environment as a predictor of students' performance. *Journal of Positive School Psychology*, 6(10), 2528–2552.
- Johnson, L., & Lee, M. (2023). *Transformational leadership: Strategies for modern workplaces*. Sage Publications.
- Kareem, S., (2023). Transformational educational leaders inspire school educators' commitment. *Frontiers in Education*, 8. <https://doi.org/10.3389/feduc.2023.1159619>
- Krijnen, E., Steensel, R., Meeuwisse, M., & Severiens, S. (2022). Aiming for educational partnership between parents and professionals: Shared vision development in a professional learning community. *School Community Journal*, 32(1), 213–242. <https://www.adi.org/journal/2022ss/KrijnenEtAlSpring2022.pdf>

- McMillan, D. W., & Chavis, D. M. (2020). Sense of community: A definition and theory. *Journal of Community Psychology*, 48(1), 6–23. <https://doi.org/10.1002/jcop.2020>
- Obieniu, A. C., & Amadin, F. I. (2025). Evaluating goodness-of-fit indices of GUAM framework. *Journal of Education, Society and Behavioural Science*, 38(4), 1–23. <https://doi.org/10.9734/jesbs/2025/v38i41396>
- Owolabi, H. O., Ayandele, J. K., & Olaoye, D. D. (2020). A systematic review of structural equation modeling. *Open Journal of Educational Development*, 1(2), 27–39. <https://doi.org/10.52417/ojed.v1i2.163>
- Page, A., Anderson, J., & Charteris, J. (2024). Innovative Learning Environments and spaces of belonging for students with disability in mainstream settings. *Cambridge Journal of Education*, 54, 607–626. <https://doi.org/10.1080/0305764x.2024.2397398>.
- Peugh, J. (2020). Structural equation model fit evaluation. *CBE – Life Sciences Education*, 19(2). <https://doi.org/10.1187/cbe.20-01-0016>
- Rafiq, S., Afzal, A., & Kamran, F. (2022). Impact of school environment on teachers' sense of community. *VFAST Transactions on Education and Social Sciences*, 10(4), 19–30.
- Sakellariou, C. (2025). Reciprocal longitudinal effects between sense of school belonging and academic achievement: quasi-experimental estimates using United States primary school data. *Frontiers in Psychology*, 15. <https://doi.org/10.3389/fpsyg.2024.1478320>.
- Sparks, L., & Louw, L. (2023). Ubuntu and sense of community in education. *Perspectives in Education*, 41(3), 107–123. <https://doi.org/10.38140/pie.v41i3.6779>
- Somers, M. (2022). The importance of community in social psychology. *Journal of Social and Personal Relationships*, 39(5), 800–817.
- Stremfel, U., Sterman Ivancic, K., & Peras, I. (2024). Addressing the Sense of School Belonging Among All Students? A Systematic Literature Review. *European Journal of Investigation in Health, Psychology and Education*, 14, 2901–2917. <https://doi.org/10.3390/ejihpe14110190>.
- Tagadiad, J., Granaderos, R., & Paglinawan, J. (2024). School support systems and teachers' research competence. *Applied Research and Innovation*, 2(1). <https://doi.org/10.54536/ari.v2i1.2380>
- White, A., Braun, A., & Miller, S. (2025). Home-to-school contact and its impact on students' school belonging: A triadic, mixed-methods approach. *Journal of Educational Research and Practice*, 14(2), 112–128. <https://doi.org/10.1038/s41599-025-01662-6>