EPRA International Journal of Environmental Economics, Commerce and Educational Management
Journal DOI: 10.36713/epra0414 |ISI I.F Value: 0.815|SJIF Impact Factor (2026): 8.752 ISSN: 2348 – 814X
Volume: 13 | Issue:5 | May 2026 -Peer Reviewed Journal

TEACHER'S PERCEPTION ON SCHOOL HEADS INSTRUCTIONAL SUPERVISION AND ITS IMPACT ON SCHOOL CLIMATE: A MIXED METHOD STUDY

Odessa F. Fontanilla, Jestoni P. Trozo, Emelyn M. Laturgo, Lirome D. Osiba, Jessica D. Labandero, Alvin O. Cayogyog PhD

Article DOI: https://doi.org/10.36713/epra27937
DOI No: 10.36713/epra27937

ABSTRACT

This study explored the relationship between instructional supervision of school heads and teachers' perceptions of school climate in selected public secondary schools in Region XI, Philippines, using a convergent parallel mixed-methods design. The quantitative phase involved 400 teachers who completed a validated survey measuring instructional supervision concept and purpose, planning and preparation, organization and implementation, and dialogue and feedback and dimensions of school climate such as deviant behavior, school well-being, and subjective unsafety. Quantitative data were analyzed using descriptive statistics, Pearson correlation, and multiple regression, while qualitative data from semi-structured interviews with six teachers were thematically analyzed to explain and elaborate on the statistical findings. Results revealed that instructional supervision was rated high to very high, while school climate was rated moderate to high. A very weak but significant positive correlation ($r = 0.080$, $p = 0.05$) was found between instructional supervision and school climate. Regression analysis showed that concept and purpose and organization and implementation significantly influenced teachers' perceptions of school climate. Qualitative findings highlighted three key themes: (1) supportive supervision builds trust, (2) professional growth opportunities, and (3) impact on school relationships. Overall, the study concludes that while instructional supervision contributes to a positive school climate, its influence is limited and context-dependent. Supervision practices that are mentoring-oriented, purposeful, and consistently implemented promote trust, collaboration, and professional growth. It is recommended that school heads strengthen developmental supervision and adopt trust-based leadership approaches aligned with SDG 4: Quality Education to enhance both teacher morale and the school environment.

KEYWORDS: *Instructional Supervision, School Climate, Teachers' Perception, Sequential Explanatory Mixed-Methods, School Leadership*

I.INTRODUCTION

Supervision, often a tool for constructive growth, is consistently being twisted into a source of anxiety and dread by school heads. Instead of being a collaborative process that empowers educators, instructional supervision has become a weapon for finding fault and a mechanism for control. This toxic approach to leadership crushes teacher morale and creates a school environment that is more focused on blame than on growth (Awe,et.al,2022)

In Ghana, a study on public junior high schools' instructional supervision revealed that teachers strongly dislike the classic fault-finding approach by the supervisors, noting that negative practices such as poorly planned and irregular supervisory visits, insufficient time spent in classrooms, and advice that neglected teachers' professional realities contributed to widespread dissatisfaction and resistance among educators (Adje et.al 2021).On the other hand, In Malaysia, instructional supervision affects a negative climate often characterized by mistrust, lack of support, and poor leadership can undermine teacher performance and contribute to burnout (Hoque,et.al,2020).In the Philippine context particular in Batangas, there are several limitations in supervision practices among public secondary school heads. Many were preoccupied with administrative tasks, delegating instructional duties to teachers, and often neglected classroom evaluation, thereby compromising the intended developmental role of instructional supervision (Evangelista, 2023). In Mindanao a recent study in Surigao del Sur, examined that many principals devote more time to paperwork and compliance requirements than to classroom observation and coaching (Reyes & Oropa, 2025).

Over time, these circumstances weaken the instructional climate of schools, hinder academic performance, and compromise the overall goal of education (Andal,2025)..Previous studies emphasize deficiencies in supportive supervision and leadership effectiveness, while other point to a disconnection between supervision and measurable outcomes. Yet, no study has yet used a sequential explanatory mixed-methods approach to explore this study,

especially from teachers' perspectives. This study aims to fill that gap by examining how instructional supervision by school heads is experienced by teachers and how these perceptions shape the overall school climate.

1.1 Significance of the Study

This study provides empirical evidence on the link between school heads' instructional supervision and teachers' perceptions on school climate. By combining quantitative data with qualitative insights, it not only measures the strength of the relationship but also captures the lived experiences behind the numbers. The findings may inform policymakers, education authorities, and school leaders in designing supervisory practices that are developmental, supportive, and aligned with the goals of SDG quality education.

1.2 Statement of the Problem

The study aimed to determine the significance of. Mixed-Method Inquiry on Instructional Supervision of School Heads: A Teachers' Perceptions on School climate

Quantitative Phase

1. To determine the levels of instructional supervision in terms of concept and purpose, planning and preparation, organization and implementation, and dialogue and discussion, school climate in terms of, deviant behavior, school well-being, and subjective unsafety.
2. To determine the significance of the relationship between instructional supervision of school heads and school climate.
3. To determine the significance of the combined influence of between instructional supervision of school heads and school climate.

Qualitative Phase

1. What is the perception of teachers towards the instructional supervision of school heads on school climate?

1.3 Hypotheses

H_{01}: There is no significant relationship between instructional supervision and school climate.
H_{02}: Teachers' experiences of instructional supervision do not influence their perception of school climate.

1.4 Theoretical Construct

This study is anchored on Bronfenbrenner's Bio-Ecological Theory (1970), which emphasizes how human development is shaped by interactions between personal environment and immediate surroundings (Kaushik, et.al 2023). Which teachers' perception stands for the personal environment and school climate stands for immediate surrounding in the theory.

1.5 Conceptual Framework

Instructional supervision as independent variable is expected to influence teachers' perception of school climate which was the dependent variable. The relationship is mediated by aspects such as professional support, collegial trust, and opportunities for growth.

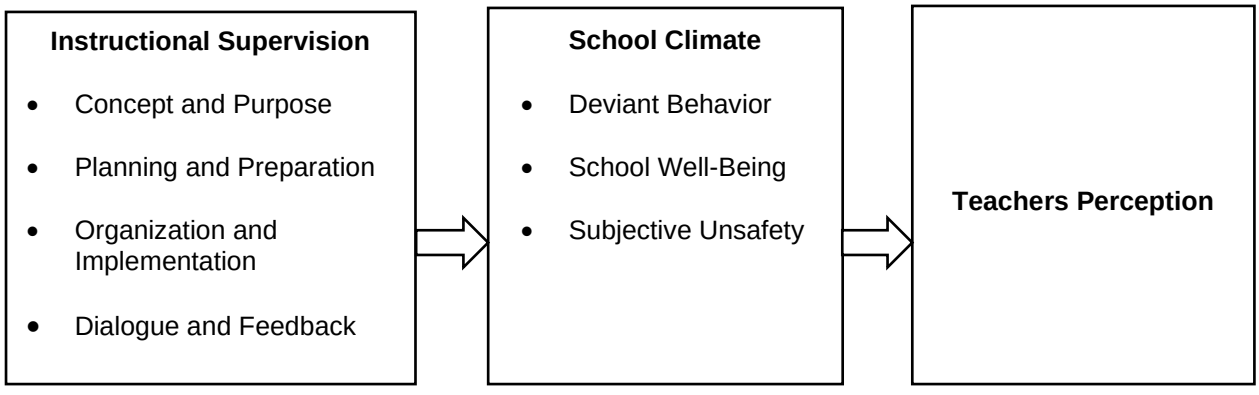


Figure 1. Conceptual Framework of the Study

II.METHODOLOGY

2.1 Research Design

This research adopted a convergent parallel mixed-methods design. In the first phase, quantitative data were collected through a survey of teachers to establish the relationship between instructional supervision and school climate. In the second phase, qualitative interviews were conducted with a smaller group of teachers and school

heads to provide richer explanations and insights into the survey results. This design was chosen because it allows the study to combine the breadth of quantitative analysis with the depth of qualitative exploration comprehensively (Fetters, & Molina,2020). Moreover, Creswell and Plano Clark (2018) describe this design as a mixed-methods approach where researchers first collect and analyze quantitative data, and then follow up with qualitative data to clarify and enrich the statistical findings. This approach is especially useful in educational research because it does not stop at numbers alone; instead, it uses teachers' voices to explain the patterns found in the qualitative phase. In this way, the design provides a more comprehensive understanding of the phenomenon under study by connecting measurable outcomes with perceptions.

2.2 Locale of the Study

The study was conducted in selected public secondary schools in Region XI, Philippines. These schools were chosen to represent diverse contexts in terms of size, location, and resources, allowing a more comprehensive picture of supervisory practices and school climate perceptions.

2.3 Sample and Sampling Techniques

In the quantitative phase 400 teachers were selected using cluster random sampling to ensure representation from different schools. The representative sample per school in every division was determined using proportional quota sampling by Glasgow (2015), as cited in Science Direct (2023). To do this, each division is proportional to the number of units in the stratum. Therefore, there were 100 teachers as respondents from each division. In the qualitative phase, 6 teachers were purposively selected based on survey responses, particularly those showing high or low perceptions of school climate, to provide contrasting perspectives during interviews.

2.4 Research Instrument

Quantitative Phase. In the study's first phase, the researcher utilized a quantitative Adapted Survey Questionnaire The survey questionnaire included two scales:

Instructional Supervision Scale, which measured perceptions of the supervisory practices of school heads, It was adapted from Cumighud et. al 2020. Most of the items from the original questionnaire were copied verbatim, while some of the content was revised to fit the study context. A pilot test and Cronbach Alpha test was conducted to measure the internal reliability of the survey questionnaire. Also, the questionnaire was validated by the research panel and an external validator to ensure that the questionnaire is sufficient and efficient in gathering quantitative data to achieve the research objectives.

Also, the items were also rearranged according to the appearance of variables in this study. The questions were answerable through 4-point Likert scale, with interpretation thresholds set as follows:

Range of Means	Description	Interpretation
3.5 – 4.00	Very High	The teacher strongly believe that the statement is highly relevant to their perspective.
2.5 – 3.49	High	The teacher believe that the statement or topic is generally accurate or holds some validity in their view.
1.5 - 2.49	Moderate	The teacher holds a belief that is contrary to the statement.
0.5 – 1.49	Low	The teacher strongly believe that the statement is false or entirely irrelevant to their perspective. They have a strong negative opinion about it.

To collect data for the dependent variable, which pertains to school climate, the researcher also employed (Buchaver et. al 2022). Integrative and Instrumental Motivation for Learning scale. When assessing school climate, respondents employed the following rating system in the table below:

Range of Means	Description	Interpretation
3.5 – 4.00	Very High	They are likely to be enthusiastic, highly committed b because of their environment.
2.5 – 3.49	High	They are generally supportive of academic goals and show favorable attitude toward their environment.
1.50 - 2.49	Moderate	The teachers lack enthusiasm, find it challenging to stay motivated in their environment.
0.5 - 1.49	Low	The teachers are likely to be demotivated, dis-engaged, or experiencing substantial barriers in their environment.

In summary, the research questionnaire consisted of 80 items. Part I, which covered the independent variables, included 65 items, while Part II, addressing the dependent variable, contained 15 items. The questionnaires were subjected to expert validation to ensure their appropriateness and clarity, followed by a pilot test to determine their reliability. The reliability of the survey instruments was assessed using Cronbach's Alpha, a widely recognized measure of internal consistency. A Cronbach's Alpha value above 0.70 is generally considered acceptable for research purposes. In this study, the obtained Cronbach's Alpha values were evaluated to ensure they exceeded this threshold, indicating a high level of internal consistency

Qualitative Phase. A semi-structured interview guide was developed. It focused on teachers experiences of supervision, the challenges they encountered, and how supervision practices influenced their sense of school climate. Also, the instrument was validated by an external validator. This is to ensure that the questionnaire is psychometrically sound, and efficient in gathering qualitative data to achieve the research objectives. Moreover, the interview was recorded for the researcher to listen to and replay the data. The recording was also for other researchers to review the material. The interview guide consists of questions tailored to the study's objectives.

2.5 Data Gathering Procedures

Quantitative Phase. The researcher secured a certificate from the Research and Ethics Committee that the study has passed the research standards Approval was secured from the school's division office and school principals. Teachers completed the survey questionnaire during scheduled sessions. Quantitative data were analyzed to identify trends and significant relationships. Participants for the interviews were chosen based on survey results. Semi-structured interviews were conducted, recorded, and transcribed for thematic analysis. The researcher tallied, collated, and tabulated the results for analysis using statistical techniques and software. Tables and figures were created to present the processed data visually. All responses and survey results were securely stored in password-protected local storage and a locked cabinet to ensure data confidentiality and prevent unauthorized access.

Qualitative Phase. The consent letter was sent to the participants, then the researcher oriented the participants on the nature and purpose of the study. Second, the researcher informed the participant that the interview will be recorded and assure the participant that their identity and responses will be kept confidential. Third, the interviews were stored, transcribed, and translated into a word processor. Then, the researcher transcribed the interview verbatim for accuracy during the data analysis. Finally, the researcher organized the transcripts following the research questions. Then, a thematic analysis was conducted with the adviser's assistance to ensure that the gathered data were dealt with accordingly and to safeguard the appropriateness and correctness of analyzing the data.

2.6 Data Analysis

Quantitative data were analyzed using descriptive statistics, Pearson correlation, and multiple regression to examine the relationship between supervision and school climate. Qualitative data were analyzed using thematic coding to identify recurring patterns in participants' experiences. Integration occurred during interpretation, where qualitative themes were used to explain and expand on the statistical findings.

2.7 Ethical Considerations

Participants were informed of the study's objectives and assured of confidentiality. Written consent was obtained, and participation was voluntary. Data were anonymized, and participants could withdraw from the study at any time.

III.RESULTS

This chapter presents the findings and narrative presentation based on the data gathered. The presentation was organized based on the sequence of the problem in the first chapter. Contained in this chapter are descriptive analyses of the data of the variables involved in the study, the correlation analysis between predictive and criterion variables, and the regression analysis of the predictive variables on the criterion variable.

EPRA International Journal of Environmental Economics, Commerce and Educational Management
Journal DOI: 10.36713/epra0414 |ISI I.F Value: 0.815|SJIF Impact Factor (2026): 8.752 ISSN: 2348 – 814X
Volume: 13 | Issue:5 | May 2026 -Peer Reviewed Journal

3.1Quantitative Findings

Table 1: Descriptive Analysis

Variables	N	Standard Deviation	Mean	Descriptive Level
1. Instructional Supervision	**400**	**0.171**	**3.52**	**Very High**
1.1 Concept and Purpose		0.380	3.61	Very High
1.2 Planning and Preparation		0.321	3.44	High
1.3 Organization and Implementation		0.054	3.52	Very High
1.4 Dialogue and Feedback		0.059	3.51	Very High
2. Character School Climate		**0.038**	**2.74**	**High**
2.1 Deviant Behavior	**400**			
2.2 School Well-Being		0.095	2.73	High
2.3 Subjective Unsafety		0.130	3.18	High
		0.054	2.31	Moderate

Table 1 presents the descriptive results on the level of instructional supervision and character school climate among the respondents. Instructional supervision was measured through its indicators: concept and purpose, planning and preparation, organization and implementation, and dialogue and feedback. The variable obtained an overall standard deviation of 0.059 and a mean of 3.52, which is described as very high. Among the indicators, concept and purpose garnered the highest mean of 3.61, followed by organization and implementation (3.52) and dialogue and feedback (3.51). This indicates that instructional supervision is excellently practiced, as manifested by the respondents, particularly in terms of clear objectives and well-executed supervision activities.

Similarly, character school climate was assessed through deviant behavior, school well-being, and subjective unsafety. The variable obtained an overall standard deviation of 0.095 and a mean of 2.74, described as high. Among the indicators, school well-being had the highest mean of 3.18, followed by deviant behavior (2.73), while subjective unsafety received the lowest mean of 2.31, described as moderate. This implies that the school climate is generally positive, promoting good behavior and well-being among students; however, there is still a need to enhance safety perceptions within the school environment.

Table. 2. Table of Correlation

	School Climate			
	R	**p-value**	**Decision on H_0 @ 0.05 level of significance**	**Interpretation**
Instructional Supervision	0.080	0.05	Reject H_0	Significant/ Very Weak Correlation

Table 2 is correlation table. It contains the correlation between instructional supervision and school climate among the respondents. The computed correlation coefficient (r) of 0.080 with a p-value of 0.05 indicates a very weak positive correlation, yet statistically significant at the 0.05 level. This means that there is a slight but meaningful relationship between the instructional supervision of school heads and the school climate as perceived by teachers. It translates to the idea that improvements in supervision practices, even in small measures, can positively influence the overall school climate, as manifested by the respondents.

Table 3. Regression Table

School Climate					
Standardized Coefficients					
Instructional Supervision Indicators	**Beta**	**t**	**Sig.**	**Decision on Ho**	**interpretation**
Concept and Purpose	-0.14607	-1.23963	0.215853	Reject	Significant
Planning and Preparation	0.517147	4.467269	1.043605	Fail to Reject	Not Significant
Organization and Implementation	-0.10091	-0.9896	0.32298	Reject	Significant
Dialogue and feedback	0.3584	65535	0.0018	Fail to Reject	Not Significant

Table 3 presents the regression analysis between instructional supervision and school climate. The findings show that among the indicators of instructional supervision, concept and purpose (β = -0.14607, t = -1.23963, p = 0.215853) and organization and implementation (β = -0.10091, t = -0.9896, p = 0.32298) were found to be significant, while planning and preparation (β = 0.517147, t = 4.467269, p = 1.043605) and dialogue and feedback (β = 0.3584, t = 65535, p = 0.0018) were found not significant. This indicates that specific aspects of supervision, particularly those focused on conceptual guidance and implementation, play a more meaningful role in shaping teachers' perceptions of the school climate. It translates to the conclusion that effective supervision anchored on clear purpose and proper implementation contributes to a better school climate, as manifested by the respondents.

Qualitative Findings

In the second phase of the study, the qualitative phase, the results were gathered from the interview responses of the participants which aimed to provide the explanations of the study. The discussion of the results presents a thematic analysis, based on the objective of the study and drawing on related studies to provide a comprehensive discourse on the gathered data.

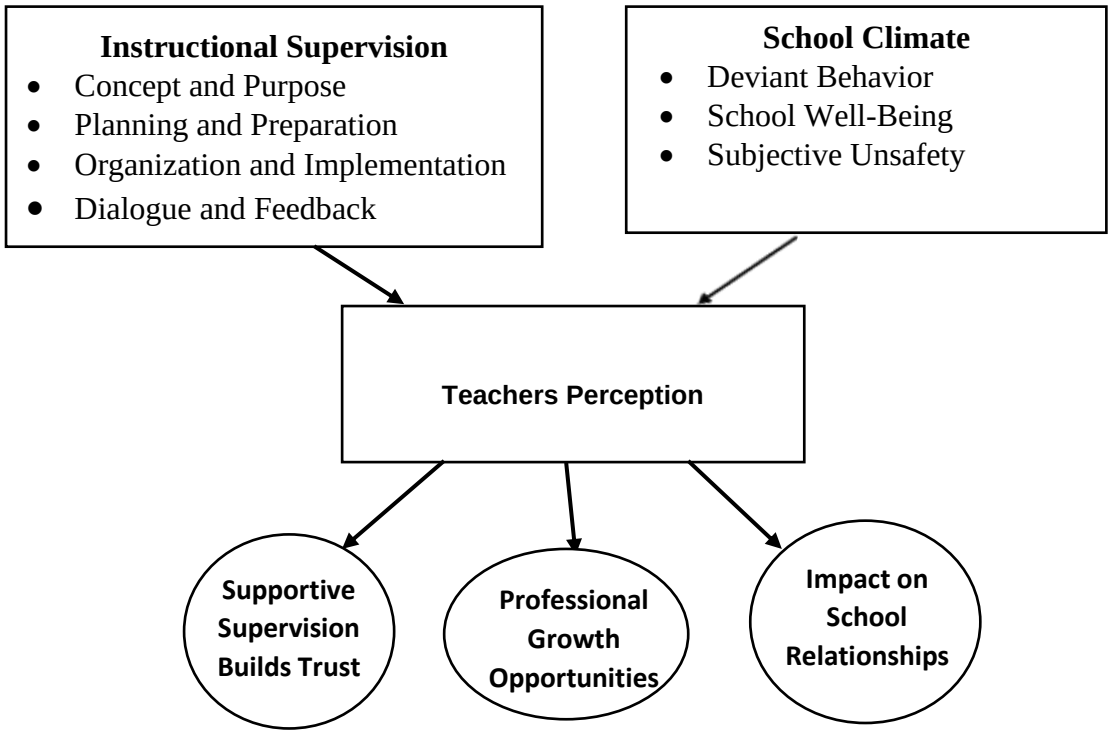


Figure 2 presents the three major themes emerged from the interviews

Supportive Supervision Builds Trust. Teachers emphasized that when school heads approached supervision as mentoring rather than policing, it fostered a sense of trust and openness.

> Our principal doesn't just check our work; she listens and helps us improve. Because of that, we're not afraid to be honest about our challenges. (IDI3, P8, L72-73)
>
> When my supervisor visits, it feels more like guidance than inspection. That kind of approach really builds my confidence. (IDI1, P2, L3-4)

The statements of the participants imply that they perceive supportive instructional supervision According to Rizada (2024), supervision that emphasizes mentoring rather than fault-finding enhances teachers' confidence and builds an atmosphere of mutual trust. Her study found that when school heads provided constructive and accurate feedback, teachers were more open to sharing challenges and more motivated to improve their teaching performance. Similarly, Alan (2022) explained that supportive supervision encourages open communication and reduces anxiety, which strengthens the professional bond between teachers and supervisors. When teachers feel that their supervisors are genuinely invested in their growth rather than merely evaluating them, they are more likely to view supervision as a partnership that fosters trust and continuous improvement.

Professional Growth Opportunities. Teachers valued feedback sessions that were coupled with opportunities for collaboration, training, or mentoring.

> After every observation, our head gives specific feedback and even invites us to join short trainings. Those small efforts make me feel supported. (IDI4, P3, L83-84)

I appreciate it when supervision comes with mentoring sessions. It makes the whole process more about learning than being judged. (ID3, P7, L68-68)

Transform supervision from a compliance mechanism into a collaborative process that enhances both teaching quality and professional growth. According to Hoque, et.al (2020), teachers value supervision that provides avenues for professional development, such as mentoring, collaborative learning, and post-observation training. Their study emphasized that supervision linked to growth-oriented feedback increases instructional competence and teacher satisfaction

Impact on School Relationships. Teachers noted that positive supervision improved collegial relationships, while negative or overly critical supervision created tension and mistrust.

Good supervision encourages teamwork. When our head recognizes our efforts, it improves how we work with each other. (ID5, P2, L96-97)

Sometimes, when the feedback feels harsh or unfair, it creates tension. You can really feel the distance between teachers and the supervisor. (ID6, P1, L102-103)

The nature of instructional supervision has a profound effect not only on individual teacher performance but also on the overall harmony and relational dynamics within the school community. School climate and supervision practices significantly affect teacher relationships and collegial trust. Their study indicated that supportive leadership and participative decision-making foster a collaborative environment, whereas authoritarian supervision tends to create distance and tension among teachers (Yang & Villanueva 2024).

Integrated Results

The qualitative findings explained why supervision influenced climate perceptions. Teachers saw supervision not merely as a task but as a relationship, when done with care and support, it created a positive climate; when perceived as punitive, it contributed to stress and negativity.

IV.DISCUSSION

This chapter contains the discussions, conclusion based on findings, and recommendations based on the conclusion of the study.

Descriptive Analysis

The findings of the study reveal significant insights into the instructional supervision of school heads and its relationship with school climate. As presented in Table 1, indicate that instructional supervision of the school heads is at a very high level it indicates that school heads generally demonstrate strong competence in implementing supervisory functions such as concept and purpose, planning and preparation, organization and implementation, and dialogue and feedback. These findings imply that teachers perceive the supervision they receive as effective and developmental. According to Evangelista (2023), effective supervision fosters collaboration and instructional support, allowing teachers to feel guided and motivated toward professional growth. Similarly, Reyes and Oropa (2025) found that supervision practices focusing on mentorship and continuous feedback strengthen teachers' instructional competence and foster a more positive school environment. In terms of school climate, the overall mean described as high, suggests that while the overall climate is satisfactory, certain areas, particularly those related to subjective unsafety, require improvement. A positive school climate is shaped not only by policies and resources but also by the relational dynamics between administrators and teachers (Voelkel,et al.,2024). Therefore, the moderately rated perception of school climate indicates that teachers may still experience occasional tensions or lack of consistency in supervisory approaches.

Correlation Analysis

The correlation result in Table 2 shows a very weak but significant positive relationship between instructional supervision and school climate. This implies that even minimal improvements in supervisory practices can influence how teachers perceive their school environment. This finding aligns with Creary (2021), who emphasized that supportive leadership styles, no matter how subtle, can positively impact teachers' sense of belonging and engagement. Similarly, Dewodo et al. (2020) underscored that regular, empathetic, and collaborative supervision enhances the organizational atmosphere and teacher motivation. Although the correlation is weak, its significance suggests that supervision remains a relevant predictor of climate perception, consistent with Bronfenbrenner's Bio-Ecological Theory, which posits that interactions in one's immediate environment such as supervision affect attitudes and behaviors (Kaushik et al., 2023).

Regression Analysis

Further supporting this relationship, Table 3 reveals that certain indicators of instructional supervision significantly influence the perception of school climate. Specifically, concept and purpose and organization and implementation yielded significant effects, whereas planning and preparation and dialogue and feedback were not significant predictors. This indicates that when school heads provide clear supervisory purposes and ensure organized implementation of supervisory activities, teachers are more likely to perceive the school climate positively. Adjei et al. (2021) similarly found that clarity of supervision and structured implementation promote teacher confidence and reduce professional anxiety. However,

Rohmah, e.al (2024) emphasized the non-significant result for planning and preparation suggests that while these are essential, they may not directly influence teachers' perception unless accompanied by consistent follow-through and feedback.

Qualitative Result

The study revealed that instructional supervision strongly influences teachers' attitudes, relationships, and professional growth. Supportive and mentoring-oriented supervision builds trust and encourages teachers to be open about their challenges. Supervision that offers opportunities for learning and collaboration promotes professional growth and motivation, while overly critical supervision creates tension and discouragement. Overall, teachers thrive when supervision is constructive, respectful, and focused on development rather than control, resulting in a more positive and harmonious school environment. The findings align with Bronfenbrenner's Bio-Ecological Theory, that when supervision within this environment is supportive, it nurtures teachers' growth and well-being; when it is harsh or unsupportive, it disrupts this balance, leading to stress and mistrust. This demonstrates that effective supervision depends on healthy, positive interactions between teachers and their school context.

V.CONCLUSION

Based on the findings, instructional supervision and school climate are positively related but only show a very weak correlation. This suggests that instructional supervision is not a strong predictor of school climate. Hence, Bronfenbrenner's Bio-Ecological Theory is only partially supported, as the interaction between supervision practices and teachers' perception of their environment was minimal in this study.

VI.RECOMMENDATIONS

Based on the conclusion, it is recommended that further research be conducted to validate or refute these findings, focusing on strengthening the role of instructional supervision in improving school climate. Future studies may include other variables such as teacher motivation, leadership style, and organizational support to explain the remaining variance in school climate. Moreover, training programs emphasizing developmental and trust-based supervision should be implemented to enhance the professional and emotional climate within schools.

Schools should encourage open feedback loops where teachers can also share their perspectives on supervision. Aligning supervisory practices with the Sustainable Development Goal on Quality Education (SDG 4) can help create school environments that support both teacher and student success.

REFERENCES

1. *Adjei, J. K., Musah, M. B., & Acquah, S. (2021). Challenges of instructional supervision of Social Studies lessons in the public basic junior high schools in Ghana. Universal Journal of Social Sciences and Humanities, 3(2), 36–45. https://doi.org/10.31586/ujssh.2021.090*
2. *Alan, M. (2022). Supportive supervision and teacher motivation in improving school performance. International Journal of Educational Leadership and Management, 10(2), 145–160. https://doi.org/10.1016/ijelm.2022.10.145*
3. *Andal, L. L. (2025). Challenges in instructional supervision: A phenomenological study of master teachers in Cabuyao. Journal of Interdisciplinary Perspectives, 3(1), 45–58. Retrieved from https://www.jippublication.com/challenges-in-instructional-supervision-a-phenomenological-study-of-master-teachers-in-cabuyao*
4. *Awe, B. A., Tilije, R. N., Fatimayin, F., & Adeyemi, V. O. (2022). Principals' supervisory practices and teachers' productivity in public secondary schools. Science Journal of Education, 10(3), 118–126. https://doi.org/10.11648/j.sjedu.20221003.16*
5. *Creary, S. (2021). Leadership behaviors and the development of trust in schools: Implications for school climate. Journal of Educational Leadership and Policy Studies, 5(2), 45–58.*
6. *Creswell, J. W., & Plano Clark, V. L. (2018). Designing and conducting mixed methods research (3rd ed.). SAGE Publications.*
7. *Dewodo, C. Y., Dzakpasu, P. E., & Agbetorwoka, A. (2020). Perception of teachers on instructional supervision at basic schools in Hohoe Municipality of Ghana. American Journal of Education and Information Technology, 4(1), 33–40. https://doi.org/10.11648/j.ajeit.20200401.15*
8. *Evangelista, A. L. (2023). Instructional supervision practices and technical assistance of public secondary school heads in Batangas Province: A precursor to enhancement training program. ResearchGate. https://www.researchgate.net/publication/370425701*
9. *Fetters, M. D., & Molina-Azorin, J. F. (2020). Mixed methods research: Foundational issues. Journal of Mixed Methods Research, 14(3), 1230–1245. https://doi.org/10.1177/1558689820931623*
10. *Hoque, K. E., Bt Kenayathulla, H. B., D/O Subramaniam, M. V., & Islam, R. (2020). Relationships between supervision and teachers' performance and attitude in secondary schools in Malaysia. SAGE Open, 10(2), 1–11. https://doi.org/10.1177/2158244020925501*
11. *Kaushik, D., Garg, M., & Mishra, A. (2023). Exploring developmental pathways: an in-depth analysis of Bronfenbrenner's bioecological model. Int. J. Multidiscip. Res, 5.*

12. *Reyes, R. C., & Oropa, D. A. (2025). Instructional supervision practices of master teachers in public elementary schools in the Division of Surigao del Sur, Philippines.*
13. *Rizada, M. C. S. (2024). Supervision of instruction: Teachers and school heads' perspective. American Journal of Education and Technology, 3(4), 78–85. https://doi.org/10.54536/ajet.v3i4.3862*
14. *Rohmah, S., Hadiyanto, Irsyad, Sulastri, & Nurjanah (2023). The Effect of Academic Supervision and School Climate on Teacher Performance in Islamic Junior High School. Journal of Education Research and Evaluation, 7(4), 636-643.*
15. *Science Direct. (2023). Stratified Sampling Types. Retrieved on October 1, 2023 from https://www.sciencedirect.com/topics/mathematics/proportional-allocation#:~:text=Proportional%20allocation%20sets%20the%20sample,to%20estimate%20unbiased%20population%20parameters*
16. *Voelkel, R. H., Jr., Prusak, K. J., & Van Tassell, F. (2024). Effective principal leadership behaviors that enhance teacher collective efficacy. Educ. Sci., 14(4), 431.*
17. *Yang, H., & Eugenio-Villanueva, L. (2024). The impact of school climate on teachers' self-efficacy towards a comprehensive program for professional development. Journal of Education and Educational Research. https://doi.org/10.54097/75sg9175*