IJGGSD
International Journal of Global Goals and Sustainable Development
RESEARCH | INNOVATION | INCLUSION | SUSTAINABLE FUTURES
ISSN: 3155-7716
DOI: https://doi.org/10.65339/ijggsd.V1.I1.54

Teachers' Perceptions of Leadership Practices, Teacher Leadership, and Artificial Intelligence Acceptance: An Explanatory Sequential Mixed-Methods Study in the Schools Division of Kidapawan City

Ma. Ricel B. Purugganan[1], Maria Estrellita P. Bolasa[1], Deza C. Bolivar[1], Lovely A. de la Cruz[1], Lynwel B. Bacea[1], Pinky P. Gillado[1], Michel Mae T. Faja[1], Eduardo III M. Tejeros[1], Axil Jame A. Mauna[2], Dr. Jaymie A. Rellon[3]

[1]Student, Doctor of Philosophy in Education, Major in Educational Leadership, Central Mindanao Colleges, Kidapawan City, Cotabato, Philippines

[2]Executive Assistant to the Vice President, Office of the Vice President, Central Mindanao Colleges Administration, Kidapawan City, Cotabato, Philippines

[3]Faculty, Graduate School Education, Central Mindanao Colleges, Kidapawan City, Cotabato, Philippines

Email: jaymierellon1020@gmail.com

ABSTRACT

This study examined the relationships between teachers' perceptions of schoolwide Leadership Practices, peer-level Teacher Leadership, and artificial intelligence (AI) acceptance in the Schools Division of Kidapawan City, Philippines. An explanatory sequential mixed-methods design involved 200 public-school teachers surveyed using selected digital leadership subscales and a 15-item AI Acceptance Scale, followed by interviews with 18 purposively selected teachers. Data were examined through descriptive statistics, correlation, exploratory hierarchical regression, thematic analysis, and mixed-methods integration. Results revealed high Leadership Practices (M = 5.12), very high Teacher Leadership (M = 5.37), and very high perceived usefulness, ease of use, behavioral intention, and self-efficacy (M = 4.21–4.53), alongside high AI-related anxiety (M = 3.73). Both leadership dimensions demonstrated significant positive relationships with all five AI-acceptance dimensions, with moderate-to-strong associations for favorable outcomes but weak positive associations with anxiety. Teacher Leadership showed a particularly clear association with behavioral intention. Qualitative findings identified institutional guidance, peer collaboration, technological access, workload, trust, and professional autonomy as relevant influences. The study concluded that digital leadership enables but does not determine AI acceptance. Differentiated professional development, ethical guidelines, peer mentoring, and equitable technological access are recommended. The cross-sectional design, elementary-heavy sample, and unavailable school identifiers limited causal interpretation and broader generalizability. The findings provide context-specific evidence distinguishing schoolwide and peer-level leadership contributions, informing human-centered AI implementation and educational leadership decisions in public schools.

Keywords: *AI Acceptance, Digital Leadership, Educational Leadership, Explanatory Sequential Design, Public School Teachers, Teacher Leadership, Technology Acceptance*

1. INTRODUCTION

Digital leadership has become increasingly important in educational institutions as schools integrate technology into instruction, professional collaboration, and decision-making. Digital leadership encompasses schoolwide Leadership Practices and peer-level Teacher Leadership, which support instructional improvement through participation, knowledge sharing, and collaborative problem-solving (Kokkonos et al., 2025). As artificial intelligence (AI) becomes more prevalent in education, understanding how these leadership dimensions relate to teachers' acceptance of AI is essential for responsible technology integration. Recent studies identify leadership support, professional learning, institutional resources, and collaborative school cultures as important conditions for AI adoption (Zeng et al., 2025). School-level ICT leadership influences teachers' behavioral intentions (Wu et al., 2025), while distributed and transformational leadership are associated with AI-related teaching beliefs and technology use (Chen et al., 2026; Chassida, 2026). However, AI acceptance involves multiple dimensions, including perceived usefulness, perceived ease of use, behavioral intention, self-efficacy, and anxiety (Guo et al., 2025). Institutional support and teacher confidence contribute to adoption (Hazzan-Bishara et al., 2025), although Filipino teachers continue to express reservations despite favorable attitudes toward AI (Sibug et al., 2024). In the Philippines, DepEd Order No. 003, s. 2026 emphasizes human-centered AI integration, data protection, professional judgment, and responsible implementation (Department of Education, 2026). Accordingly, this study examined the relationships between teachers' perceptions of Leadership Practices, Teacher Leadership, and AI acceptance in the Schools Division of Kidapawan City using an explanatory sequential mixed-methods approach.

Research Problem

Although educational leadership is increasingly recognized as an important condition for AI integration, existing studies commonly emphasize principal-centered leadership, institutional support, or general school conditions without clearly distinguishing schoolwide Leadership Practices from peer-level Teacher Leadership. Previous investigations have examined ICT leadership and behavioral intention (Wu et al., 2025), transformational and distributed leadership (Chassida, 2026; Chen et al., 2026), institutional support and AI acceptance (Hazzan-Bishara et al., 2025), and school-management influences on technology adoption (Tasić et al., 2026). However, these approaches provide limited explanations of how distinct leadership dimensions relate to teachers' multidimensional AI acceptance. Furthermore, teachers may perceive AI as useful and demonstrate willingness to adopt it while experiencing anxiety concerning accuracy, privacy, ethical responsibility, and professional accountability (Guo et al., 2025). Philippine evidence similarly indicates that positive attitudes toward AI coexist with reservations about its educational application (Sibug et al., 2024). Limited explanatory qualitative research further restricts understanding of how leadership, professional learning, resource availability, workload, and prior experience contribute to these contrasting perceptions. This study addressed these gaps by examining the separate relationships of Leadership Practices and Teacher Leadership with five AI-acceptance dimensions and exploring teachers' experiences to explain significant, contrasting, and unexpected quantitative patterns in the Schools Division of Kidapawan City.

Assumptions of the Study

The study was guided by the assumption that schoolwide Leadership Practices and peer-level Teacher Leadership represent distinct but complementary dimensions of digital leadership that may be associated with teachers' acceptance of AI (Kokkonos et al., 2025). Leadership support, professional collaboration, and access to learning opportunities were considered relevant

organizational conditions for technology integration (Zeng et al., 2025). It was further assumed that AI acceptance is multidimensional, with perceived usefulness, perceived ease of use, behavioral intention, self-efficacy, and anxiety reflecting different aspects of teachers' responses to educational AI (Guo et al., 2025). Institutional support and teacher confidence may accompany favorable acceptance, while concerns about responsible use and professional autonomy may persist (Hazzan-Bishara et al., 2025; Miao & Cukurova, 2024). The study also recognized that leadership-related associations may vary according to teachers' work contexts, including professional experience, AI-related training, access to technology, and frequency of AI use. Because the quantitative investigation was cross-sectional and observational, relationships were interpreted as statistical associations rather than causal effects.

Objectives of the Study

The study generally aimed to determine the relationships between teachers' perceived Leadership Practices, Teacher Leadership, and AI acceptance in the Schools Division of Kidapawan City and to explain the quantitative findings through qualitative inquiry. Specifically, it sought to describe teachers' work-context characteristics; determine the levels of perceived Leadership Practices and Teacher Leadership; assess AI acceptance in terms of perceived usefulness, perceived ease of use, behavioral intention, self-efficacy, and anxiety; examine the relationships between the two leadership dimensions and each AI-acceptance dimension; and determine their joint statistical contributions after accounting for relevant work-context variables. The study also aimed to explore teachers' experiences and school conditions influencing AI acceptance, identify non-leadership factors explaining contrasting quantitative patterns, and integrate quantitative and qualitative findings to inform leadership development and responsible AI implementation.

Conceptual and Theoretical Framework

The study was anchored in Distributed Leadership Theory, the Technology Acceptance Model (TAM), and computer self-efficacy theory. Distributed Leadership Theory conceptualizes leadership as a practice shared among formal leaders, teachers, and organizational contexts, supporting the distinction between schoolwide Leadership Practices and peer-level Teacher Leadership (Spillane et al., 2004). The Technology Acceptance Model explains technology adoption through perceived usefulness, perceived ease of use, and behavioral intention (Davis, 1989), while computer self-efficacy theory emphasizes individuals' confidence in performing technology-related tasks (Compeau & Higgins, 1995). Contemporary AI-acceptance research extends these perspectives by recognizing anxiety, institutional support, ethical responsibility, and professional agency as relevant considerations in teachers' technology acceptance (Guo et al., 2025; Hazzan-Bishara et al., 2025; Miao & Cukurova, 2024). Conceptually, the study treated Leadership Practices and Teacher Leadership as separate explanatory variables associated with five AI-acceptance dimensions. The Questionnaire for Digital Technologies and Leadership Practices provided the operational distinction between schoolwide and peer-level leadership (Kokkonos et al., 2025). Quantitative relationships guided subsequent qualitative inquiry, while integrated findings provided contextual explanations of teachers' AI acceptance. The framework regarded digital leadership as an enabling organizational condition rather than a direct or deterministic cause of technology acceptance.

Sustainable Development Goal and Multidisciplinary Sustainability Relevance

The study primarily aligns with Sustainable Development Goal 4 (Quality Education) by examining how digital leadership, professional learning, and teachers' AI acceptance relate to responsible technology integration in public schools. Its emphasis on collaborative instructional

improvement, teacher development, and professional judgment supports educational sustainability through continued capacity-building and informed technology use (Zeng et al., 2025; Miao & Cukurova, 2024). The research also relates to SDG 9 (Industry, Innovation and Infrastructure) by examining organizational and technological conditions supporting AI integration, particularly digital resources, connectivity, and institutional readiness. Understanding these conditions contributes to technological sustainability by identifying factors relevant to the effective and responsible use of educational innovations (Wu et al., 2025). Additionally, the study supports SDG 16 (Peace, Justice and Strong Institutions) through its emphasis on ethical AI governance, data protection, transparent institutional guidance, and human-centered decision-making. These considerations are consistent with the Philippine education sector's policy direction toward responsible AI implementation (Department of Education, 2026). Overall, the study contributes to educational, technological, and institutional sustainability by providing context-specific evidence that may guide school leaders, teacher-leaders, and education policymakers in strengthening professional learning, equitable technological access, collaborative leadership, and responsible AI adoption.

2. METHODOLOGY

Research Design

The study utilized a pragmatic explanatory sequential mixed-methods design with quantitative priority (QUAN → qual). The first phase employed a cross-sectional correlational survey to assess teachers' perceptions of Leadership Practices, Teacher Leadership, and AI acceptance. The second phase involved follow-up interviews to explain significant, contrasting, and unexpected quantitative patterns. Integration occurred through connecting, building, and merging, wherein quantitative findings guided interview questions and qualitative themes were compared with statistical results to develop integrated interpretations (Creswell & Plano Clark, 2018; Fetters & Tajima, 2022; Jackson-Gordon & Plano Clark, 2024).

Research Locale or Study Setting

The study was conducted in public elementary, secondary, and integrated schools within the Schools Division of Kidapawan City, Philippines. Based on the Division Office records, the study population comprised 1,362 teachers across 77 schools, including 820 elementary teachers (60.2%) and 542 secondary/integrated school teachers (39.8%). The setting provided an educational context for examining digital leadership and teachers' acceptance of AI in public-school instruction.

Participants or Data Sources

The quantitative phase involved 200 public-school teachers. The initial sample-size estimate used the finite-population formula, $n = N/[1 + N(e^2)]$, with a population of 1,362 and a margin of error of .065, yielding approximately 202 respondents. Proportionate planning targeted approximately 122 elementary and 80 secondary/integrated teachers. However, the achieved sample comprised 173 elementary teachers (86.5%) and 27 secondary/integrated teachers (13.5%). The reason for this imbalance was not established, and no post-hoc sampling weights were applied because unequal selection probabilities were undocumented. School level was instead included as a covariate in exploratory regression. Eligibility was determined through screening questions concerning full-time public-school teaching status, instructional responsibilities, tenure in the current school, and non-school-head status. AI-use frequency was not an eligibility requirement, although all respondents reported using AI at least monthly, limiting generalizability to rare or non-users. The qualitative phase involved 18 teachers selected through purposive maximum-variation sampling based on school context, connectivity,

leadership responsibilities, teaching experience, and AI familiarity. Participants were identified as IDI 1 through IDI 18. Because interview records were not linked to individual survey scores, qualitative findings explained overall quantitative patterns rather than individual statistical profiles.

Research Instruments or Materials

Data were collected using an online questionnaire and a semi-structured interview guide. The questionnaire included eligibility screening, work-context characteristics, digital leadership measures, and AI-acceptance measures. Work-context variables included school level, district or zone, teaching experience, tenure, AI-related training, AI-use frequency, technological access, and teacher-leader or coordinator assignments. Leadership Practices and Teacher Leadership were assessed using eight selected items from the Questionnaire for Digital Technologies and Leadership Practices (QDTLP), consisting of five Leadership Practices items (A09–A12, A18) and three Teacher Leadership items (A13–A15), rated on a six-point agreement scale (Kokkonos et al., 2025). The study examined only the administered two-factor structure and did not claim validation of the complete 22-item instrument. AI acceptance was measured using a researcher-developed 15-item AI Acceptance Scale (AIAS), comprising three items each for perceived usefulness, perceived ease of use, behavioral intention, self-efficacy, and AI-related anxiety, rated on a five-point agreement scale. These dimensions were informed by technology-acceptance and self-efficacy constructs and contemporary teacher-AI research (Guo et al., 2025). Higher anxiety scores represented greater apprehension rather than stronger acceptance. The questionnaire was pilot-tested with 31 teachers, whose responses were retained in the main dataset because no revisions were made. Possible prior-exposure effects were acknowledged as a limitation. The semi-structured interview guide contained five core questions addressing digital leadership experiences, AI use or avoidance, acceptance and hesitation, non-leadership influences, and recommendations for responsible implementation. Individual survey scores were not disclosed during interviews.

Data Gathering Procedure

Following ethical clearance, the online survey was administered from September 25 to October 5, 2026. Participation was voluntary, and identifying information was not requested. Responses were intended for aggregate or de-identified reporting. Quantitative findings guided the selection of interview participants and the development of qualitative probes. Follow-up interviews were conducted from October 6 to 10, 2026, lasting approximately 35 minutes each. The qualitative dataset consisted of de-identified written interview response records organized according to the core and probing questions. Interviews explored how schoolwide and peer leadership influenced AI use, why favorable acceptance coexisted with anxiety, and how training, connectivity, workload, prior experience, technical support, and ethical concerns contributed to teachers' perceptions. Contrasting experiences, including AI use despite limited leadership support and hesitation despite supportive conditions, were also examined to clarify quantitative patterns.

Data Analysis

Quantitative data were analyzed using descriptive and inferential statistics. Frequencies and percentages summarized respondents' work-context characteristics, while means, standard deviations, and 95% confidence intervals described leadership perceptions and AI-acceptance dimensions. Equal-width descriptive bands were applied, with anxiety interpreted according to its actual level. Instrument reliability was evaluated using Cronbach's alpha and coefficient omega. Confirmatory factor analysis assessed the two-factor QDTLP structure and five-factor AIAS structure. Model fit was evaluated collectively using chi-square, comparative fit index (CFI),

Tucker–Lewis index (TLI), root mean square error of approximation (RMSEA) with its 90% confidence interval, and standardized root mean square residual (SRMR) (Kline, 2023). Pearson correlation analysis examined relationships between the two leadership dimensions and five AI-acceptance outcomes, with 95% confidence intervals and Holm adjustment across ten comparisons. Spearman correlations served as robustness checks. Exploratory individual-level hierarchical ordinary least squares regression models with HC3 robust standard errors assessed the joint statistical contributions of Leadership Practices and Teacher Leadership. Categorical work-context variables were dummy-coded. Model A controlled for school level, teaching experience, tenure, and teacher-leader assignment, while Model B additionally accounted for AI-related training, AI-use frequency, and technological access. HC3 robust Wald tests assessed joint leadership contributions, with Holm adjustment across five outcomes. Because reliable school identifiers were unavailable, the regression findings were interpreted as exploratory individual-level evidence rather than cluster-aware or multilevel inference. Qualitative data were analyzed thematically through repeated reading, coding, identification of recurring meanings, theme development, review, and interpretation, guided by the principles of quality thematic analysis discussed by Braun and Clarke (2021). Contrasting and negative cases were retained to strengthen the analysis. Credibility was supported through multiple participant accounts, while dependability and confirmability were addressed by preserving de-identified records, participant codes, and documented theme development. Contextual descriptions supported transferability. Formal member checking and independent double-coding were not documented and therefore were not claimed. Quantitative and qualitative findings were integrated to identify convergence, complementarity, expansion, and divergence. Integrated interpretations were limited to conclusions supported by both strands (Fetters & Tajima, 2022; Jackson-Gordon & Plano Clark,

Ethical Consideration

The study observed voluntary participation, confidentiality, and responsible data handling throughout both research phases. Participation was independent of employment decisions and performance evaluations. Survey responses were anonymous, interview participants were identified through codes, and findings were reported in aggregate or de-identified form. No learner information was collected. Ethical clearance was granted by the Central Mindanao Colleges Research Ethics Committee under protocol GS-EC-2026-015 on September 21, 2026, valid for one year. Data collection and management followed the approved consent and confidentiality procedures and complied with the Data Privacy Act of 2012 (Republic Act No. 10173).

3. RESULTS AND DISCUSSION

3.1 Quantitative Findings on Digital Leadership and AI Acceptance

3.1.1 Work-Context Profile of the Respondents

The study involved 200 public-school teachers, predominantly from elementary schools (86.5%), compared with the elementary proportion of the Division teaching population (60.2%). Nearly half had at least 15 years of teaching experience (49.5%) and had served in their current schools for 10 years or more (49.0%). Only 42.0% had received formal AI-related training, although all respondents reported using AI at least monthly, with 58.0% using it weekly and 22.5% daily. Most had reliable internet and device access (63.5%), while 36.5% relied on shared or limited devices. Furthermore, 41.0% held teacher-leader or coordinator assignments, including 22 Master Teachers, 17 Grade Leaders, and 31 coordinators or teachers-in-charge, while 12 did not specify their roles. These findings indicate an experienced teaching workforce with uneven AI preparation and technological access. The absence of rare or non-users limits the findings

primarily to teachers already exposed to AI. Sibug et al. (2024) similarly identified positive attitudes among Filipino teachers alongside reservations, while Hazzan-Bishara et al. (2025) emphasized institutional support and self-efficacy in technology adoption. Tasić et al. (2026) further demonstrated that prior experience and contextual conditions do not necessarily produce uniform acceptance. These findings emphasize the importance of differentiated professional development and caution when generalizing results to secondary and integrated-school teachers.

3.1.2 Reliability and Measurement of Research Variables

The research instruments demonstrated good internal consistency. Leadership Practices obtained Cronbach's alpha and omega coefficients of .89, while Teacher Leadership recorded .84 for both measures. The five AI-acceptance dimensions also demonstrated satisfactory reliability, ranging from .82 to .90. Confirmatory factor analysis indicated good fit for the two-factor digital leadership measure. The five-factor AI Acceptance Scale showed acceptable CFI, TLI, and SRMR values but elevated RMSEA, with considerable overlap among perceived ease of use, self-efficacy, and behavioral intention. The findings support the reliability of the administered measures while indicating that the AI Acceptance Scale requires further validation. The digital leadership results are consistent with Kokkonos et al. (2025), while Guo et al. (2025) emphasizes the multidimensional measurement of teachers' AI acceptance. Kline (2023) cautions against interpreting individual model-fit indices or single-sample findings as definitive evidence of construct validity. Consequently, the five AI-acceptance dimensions were interpreted separately.

3.1.3 Levels of Leadership Practices and Teacher Leadership

Teachers perceived schoolwide Leadership Practices as high (M = 5.12, SD = 0.63) and Teacher Leadership as very high (M = 5.37, SD = 0.60). The higher Teacher Leadership rating indicates more favorable perceptions of peer collaboration, instructional resource sharing, and practical assistance than of schoolwide digital leadership arrangements. These findings highlight the importance of distributed leadership in educational technology integration. Kokkonos et al. (2025) identifies Teacher Leadership as a distinct digital leadership dimension, while Zeng et al. (2025) emphasizes professional learning communities and collaborative support in AI integration. Similarly, Chen et al. (2026) associated distributed leadership with teachers' AI teaching beliefs. The results suggest that strengthening peer mentoring and collaborative professional learning alongside schoolwide leadership arrangements may support responsible AI implementation.

3.1.4 Levels of Teachers' Artificial Intelligence Acceptance

Teachers reported very high levels of perceived usefulness (M = 4.53, SD = 0.55), behavioral intention (M = 4.39, SD = 0.56), self-efficacy (M = 4.24, SD = 0.65), and perceived ease of use (M = 4.21, SD = 0.58). However, AI-related anxiety was also high (M = 3.73, SD = 1.01), indicating that favorable acceptance and apprehension coexisted among respondents. The findings demonstrate that AI acceptance cannot be interpreted solely through positive attitudes or willingness to use technology. Guo et al. (2025) recognizes anxiety as a distinct dimension of teacher AI acceptance, while Sibug et al. (2024) reported favorable attitudes among Filipino teachers despite substantial reservations. Hazzan-Bishara et al. (2025) also identified

usefulness, ease of use, self-efficacy, and institutional support as interconnected adoption factors. These findings emphasize the need for professional learning that addresses AI accuracy, privacy, authorship, bias, and professional accountability alongside technical skills.

3.1.5 Relationships Between Digital Leadership and AI Acceptance

Both Leadership Practices and Teacher Leadership demonstrated significant positive correlations with all five AI-acceptance dimensions after Holm adjustment, leading to rejection of H01 for each dimension. Leadership Practices correlated with perceived usefulness (r = .44), ease of use (r = .55), behavioral intention (r = .41), self-efficacy (r = .58), and anxiety (r = .17). Teacher Leadership showed corresponding correlations of .44, .54, .44, .59, and .19. Associations with the four favorable dimensions were moderate to strong, whereas anxiety relationships were weak but statistically significant. The two leadership factors were also strongly correlated (r = .71). These findings support the role of digital leadership as an enabling organizational condition for AI acceptance, consistent with Wu et al. (2025), Zeng et al. (2025), and Chassida (2026). However, the weak positive correlations with anxiety indicate that stronger leadership perceptions were not associated with reduced apprehension. Greater organizational attention to AI may coexist with heightened awareness of accuracy, privacy, and accountability concerns. Thus, leadership encouragement should be accompanied by ethical guidance, safeguards, and opportunities for professional consultation.

3.1.6 Joint Contributions of Leadership Practices and Teacher Leadership

Exploratory hierarchical regression showed that Leadership Practices and Teacher Leadership jointly explained significant additional variance in all five AI-acceptance dimensions after adjusting for school level, teaching experience, tenure, and teacher-leader assignment. The largest incremental contribution was observed for self-efficacy (ΔR^2 = .325), followed by perceived ease of use (.231), usefulness (.192), behavioral intention (.151), and anxiety (.096). Teacher Leadership demonstrated the clearest unique association with behavioral intention (β = .344, 95% CI [.156, .533]). After additionally controlling for AI training, use frequency, and technological access, leadership contributions to favorable acceptance decreased (ΔR^2 = .043–.092), while the contribution to anxiety increased (ΔR^2 = .148). All joint leadership tests remained significant after Holm adjustment. These findings suggest that leadership operates alongside AI-related experience, resources, and contextual conditions. Hazzan-Bishara et al. (2025) similarly emphasized the combined influence of institutional support and self-efficacy, while Wu et al. (2025) demonstrated the relevance of school leadership and resources. Chen et al. (2026) further identified professional and emotional pathways associated with distributed leadership. The distinct association between Teacher Leadership and behavioral intention highlights the potential importance of peer-level support. However, because reliable school identifiers were unavailable, the regression findings remain exploratory individual-level evidence and cannot establish causal or school-cluster-aware relationships.

3.2 Qualitative Findings on Teachers' Experiences and AI Acceptance

3.2.1 School Leadership as an Enabling Condition

Teachers described formal school leadership as providing legitimacy, guidance, training opportunities, ethical boundaries, and access to assistance. However, participants emphasized that leadership encouragement did not automatically determine their willingness to use AI.

Teachers retained responsibility for selecting appropriate technologies and evaluating their instructional relevance. These experiences suggest that school leadership facilitates AI acceptance by establishing supportive organizational conditions rather than requiring adoption. This interpretation is consistent with Chassida (2026), which positions leadership as a contextual enabler, and Chen et al. (2026), which emphasizes distributed influence. Zeng et al. (2025) likewise identifies institutional support and professional learning as important conditions for AI integration.

3.2.2 Peer Leadership and Collaborative AI Learning

Teachers identified colleagues, ICT coordinators, Master Teachers, peer demonstrations, and group chats as important sources of practical AI learning. Peer interactions provided immediate assistance in exploring tools, generating instructional materials, and addressing technical difficulties. These experiences demonstrated how teacher-level collaboration supported day-to-day AI use. The findings reinforce the complementary roles of formal leadership and peer-level support. While school leaders establish institutional direction, colleagues help translate guidance into practical classroom applications. The qualitative evidence offers a plausible explanation for the statistical relationship between Teacher Leadership and behavioral intention, although peer-learning experiences do not independently establish a direct effect on intention.

3.2.3 Leadership Support and Continuing AI-Related Anxiety

Despite supportive leadership, teachers reported concerns about AI-generated inaccuracies, privacy, ethical responsibility, mistakes, and pressure to adopt technology. Some participants remained hesitant to use AI for particular tasks even when training or assistance was available. Others indicated that expectations for widespread AI adoption increased their caution. These experiences help explain the weak positive relationship between leadership perceptions and AI-related anxiety. Organizational encouragement may increase opportunities for AI use while also drawing attention to professional risks and responsibilities. Consequently, supportive leadership does not necessarily eliminate apprehension, emphasizing the importance of responsible-use guidance and teacher discretion.

3.2.4 Technological Access, Workload, and Trust

Teachers identified unstable connectivity, shared devices, workload demands, verification time, and uncertainty about AI reliability as practical barriers to technology use. Participants reported that institutional encouragement could be insufficient when access was limited or when verifying AI-generated information required substantial additional effort. Trust in AI tools, institutional policies, and data-handling practices also influenced their decisions. These findings demonstrate that digital leadership must be considered alongside operational conditions. Tasić et al. (2026) identified contextual differences that complicate technology-acceptance expectations, while Hazzan-Bishara et al. (2025) emphasized the interaction between institutional support and individual confidence. Sibug et al. (2024) similarly documented reservations among Filipino teachers despite openness toward AI. Effective implementation therefore requires accessible resources, adequate time, and credible institutional guidance.

3.2.5 Independent AI Adoption and Prior Experience

Some teachers reported exploring and adopting AI independently before receiving substantial formal leadership support. Their decisions were influenced by personal interest, previous technological experience, and the immediate usefulness of AI for instructional tasks. These experiences indicated that AI adoption could occur even when schoolwide guidance was limited. The findings demonstrate that leadership support is not the only condition associated with AI acceptance. Teachers' existing competencies, motivation, and professional needs may also influence their willingness to explore technology. Independent adoption illustrates the limits of interpreting leadership as a necessary condition for every teacher's AI-related decision.

3.2.6 Professional Judgment and Selective AI Use

Other participants deliberately limited or avoided AI use for certain instructional tasks despite supportive leadership. Their decisions reflected concerns about accuracy, ethical appropriateness, instructional relevance, and professional identity. Teachers emphasized that responsible technology integration sometimes required choosing not to use AI. These experiences distinguish independent adoption from deliberate non-use and demonstrate that professional autonomy can influence technology decisions in different directions. Leadership support may create favorable conditions, but teachers continue to evaluate whether AI use is appropriate for specific educational responsibilities.

3.2.7 Teacher Voice, Policy Clarity, and Professional Autonomy

Teachers emphasized the importance of consultation, clear institutional policies, flexible learning opportunities, and freedom to exercise professional judgment. Participants preferred leadership approaches that involved teachers in technology-related decisions rather than imposing uniform adoption expectations. They also expressed the need for clear ethical boundaries and recognition of differences in technological readiness. These findings identify teacher participation and professional discretion as important conditions for trusted AI implementation. Leadership approaches that combine policy clarity with consultation and choice may better accommodate differences in teacher experience, confidence, and instructional requirements. The results further reinforce the importance of treating AI acceptance as a professional decision rather than a compulsory response to institutional encouragement.

3.3 Integration of Quantitative and Qualitative Findings

3.3.1 Convergence Between Leadership Support and Favorable AI Acceptance

Quantitative findings showed high to very high leadership perceptions and very high favorable AI-acceptance ratings, with moderate to strong positive relationships between leadership and usefulness, ease of use, behavioral intention, and self-efficacy. Qualitative findings similarly identified formal leadership as a source of guidance, legitimacy, training, and institutional support. However, interviews also revealed reservations and differing levels of readiness that were not fully reflected in average scores. The convergence supports the interpretation that digital leadership provides enabling conditions for AI acceptance without determining individual use. This interpretation aligns with Chassida (2026) and Zeng et al. (2025), which emphasize leadership and organizational support as contextual influences on technology integration.

3.3.2 Complementary Roles of Teacher Leadership and Contextual Conditions

Teacher Leadership demonstrated a significant positive relationship with behavioral intention and the clearest unique association with this dimension in exploratory regression. Qualitative accounts identified peer mentoring, demonstrations, and collaborative troubleshooting as practical sources of AI learning. Additional quantitative adjustments showed reduced leadership contributions to favorable acceptance after accounting for AI training, use frequency, and technological access. Interviews similarly identified workload, connectivity, experience, trust, and professional autonomy as influences on AI-related decisions. These findings indicate that peer support may help translate organizational guidance into practical technology engagement, although the qualitative accounts do not independently establish effects on behavioral intention. They also demonstrate that leadership operates alongside individual and contextual conditions. Tasić et al. (2026) illustrates how qualitative findings can identify contextual differences that are not fully explained by quantitative relationships.

3.3.3 Anxiety, Contrasting Experiences, and Limits of Leadership Influence

Both leadership dimensions demonstrated weak positive correlations with AI-related anxiety, while exploratory regression identified a significant joint leadership contribution to anxiety after adjustment. Qualitative accounts explained that supportive leadership could coexist with concerns about accuracy, privacy, professional responsibility, and adoption pressure. Some teachers adopted AI independently despite limited formal guidance, while others remained selective despite institutional support. These contrasting findings expand the interpretation of AI acceptance by demonstrating that favorable perceptions and professional caution can coexist. The integration of statistical patterns and qualitative explanations reflects the mixed-methods principles discussed by Fetters and Tajima (2022) and Jackson-Gordon and Plano Clark (2024). Overall, the findings indicate that digital leadership enables AI acceptance but does not determine it. Responsible implementation requires clear institutional safeguards, practical peer support, equitable access, and recognition of teachers' professional judgment.

4. CONCLUSIONS AND RECOMMENDATIONS

The study established that teachers' perceptions of schoolwide Leadership Practices and peer-level Teacher Leadership were positively associated with artificial intelligence (AI) acceptance among 200 public-school teachers in the Schools Division of Kidapawan City. Both leadership dimensions were rated favorably and demonstrated significant relationships with perceived usefulness, ease of use, behavioral intention, self-efficacy, and AI-related anxiety. However, favorable acceptance coexisted with considerable apprehension, indicating that willingness to use AI does not eliminate professional concerns. Exploratory regression further demonstrated significant joint leadership contributions after accounting for work-context characteristics, with Teacher Leadership showing a particularly clear association with behavioral intention. Interviews with 18 teachers revealed that formal leadership provided guidance and institutional support, while peer leadership facilitated practical learning. Nevertheless, access, workload, prior experience, trust, ethical concerns, and professional autonomy influenced teachers' decisions. Collectively, the findings demonstrate that digital leadership enables AI acceptance but does not determine it, contributing contextual evidence for responsible, teacher-centered AI integration.

The Schools Division Office of Kidapawan City should prioritize differentiated AI professional development that addresses teachers' varying training experiences, technological access, and instructional responsibilities. Training should integrate practical classroom applications with verification procedures, data privacy, ethical considerations, and responsible AI use. School

heads should establish clear institutional guidelines identifying acceptable, caution-required, and prohibited AI applications while consulting teachers before implementing new expectations. ICT coordinators, Master Teachers, and other teacher-leaders should strengthen peer mentoring, Learning Action Cell sessions, demonstrations, and practical troubleshooting to support collaborative professional learning. Division administrators should also address connectivity and device limitations and monitor participation across school levels. Teachers should critically verify AI-generated outputs, protect sensitive learner information, and maintain professional judgment when determining appropriate applications. Future researchers should examine more balanced samples, include teachers with limited AI exposure, improve school-level data identification, and further validate the AI Acceptance Scale to strengthen the evidence supporting educational leadership and responsible AI implementation.

The study employed a cross-sectional, self-reported design within one school division, preventing causal interpretation and limiting generalizability. Elementary teachers were overrepresented, and all respondents reported at least monthly AI use, restricting representation of other teaching contexts and adoption experiences. Inconsistent school identifiers prevented cluster-aware analysis, making regression findings exploratory. The AI Acceptance Scale demonstrated preliminary construct validity, with overlap among several dimensions. Retaining pilot participants may have introduced prior-exposure effects. Additionally, written interview records were not linked to individual survey profiles, limiting person-level integration. Future studies should employ balanced sampling, longitudinal approaches, improved measurement, and stronger multilevel analyses.

5. REFERENCES

Braun, V., & Clarke, V. (2021). One size fits all? What counts as quality practice in (reflexive) thematic analysis? *Qualitative Research in Psychology, 18*(3), 328–352. https://doi.org/10.1080/14780887.2020.1769238

Chassida, Y. (2026). Transformational leadership as a contextual enabler of teachers' AI use. *Education Sciences, 16*(4), Article 572. https://doi.org/10.3390/educsci16040572

Chen, J., Dang, M., & Zhang, M. (2026). Distributed leadership as a catalyst for change: Building emotional capital to enhance teachers' beliefs in AI-integrated teaching. *The Asia-Pacific Education Researcher, 35*, 847–858. https://doi.org/10.1007/s40299-026-01082-5

Compeau, D. R., & Higgins, C. A. (1995). Computer self-efficacy: Development of a measure and initial test. *MIS Quarterly, 19*(2), 189–211. https://doi.org/10.2307/249688

Creswell, J. W., & Plano Clark, V. L. (2018). *Designing and conducting mixed methods research* (3rd ed.). SAGE Publications.

Data Privacy Act of 2012, Republic Act No. 10173 (2012). https://officialgazette.gov.ph/2012/15/republic-act-no-10173

Davis, F. D. (1989). Perceived usefulness, perceived ease of use, and user acceptance of information technology. *MIS Quarterly, 13*(3), 319–340. https://doi.org/10.2307/249008

Department of Education. (2026). *Foundational guidelines on artificial intelligence (AI) in basic education* (DepEd Order No. 003, s. 2026). https://www.deped.gov.ph/wp-content/uploads/DO_s2026_003r.pdf

Fetters, M. D., & Tajima, C. (2022). Joint displays of integrated data collection in mixed methods research. *International Journal of Qualitative Methods, 21*, 1–13. https://doi.org/10.1177/16094069221104564

Guo, S., Shi, L., & Zhai, X. (2025). Developing and validating an instrument for teachers' acceptance of artificial intelligence in education. *Education and Information Technologies, 30*(10), 13439–13461. https://doi.org/10.1007/s10639-025-13338-6

Hazzan-Bishara, A., Kol, O., & Levy, S. (2025). The factors affecting teachers' adoption of AI technologies: A unified model of external and internal determinants. *Education and Information Technologies, 30*(11), 15043–15069. https://doi.org/10.1007/s10639-025-13393-z

Jackson-Gordon, R., & Plano Clark, V. L. (2024). Using a joint display for building integration in a sequential study: Informing data collection for a participatory second phase. *Journal of Mixed Methods Research, 18*(2), 137–146. https://doi.org/10.1177/15586898231179848

Kline, R. B. (2023). *Principles and practice of structural equation modeling* (5th ed.). Guilford Press.

Kokkonos, A., Travlos, A., Antonopoulou, P., & Pavlis Korres, M. (2025). Questionnaire for digital technologies and leadership practices: The validity and reliability study. *International Journal for Evaluation and Research in Education, 14*(1), 133–145. https://doi.org/10.11591/ijere.v14i1.29885

Miao, F., & Cukurova, M. (2024). *AI competency framework for teachers*. UNESCO. https://doi.org/10.54675/ZJTE2084

Sibug, V. B., Vital, V. P., Miranda, J. P. P., Fernando, E. Q., Gamboa, A. B., Hernandez, H. E., Bansil, J. A., Penecilla, E. M., & Gonzales, D. D. (2024). Teachers' perspectives on integrating AI tools in classrooms: Insights from the Philippines. In *Proceedings of the 32nd International Conference on Computers in Education* (pp. 743–748). Asia-Pacific Society for Computers in Education. https://doi.org/10.58459/icce.2024.4964

Spillane, J. P., Halverson, R., & Diamond, J. B. (2004). Towards a theory of leadership practice: A distributed perspective. *Journal of Curriculum Studies, 36*(1), 3–34. https://doi.org/10.1080/0022027032000106726

Tasić, N., Glušac, D., Jokić, S., Pardanjac, M., Makitan, V., Ljubojev, N., & Amižić, V. (2026). Subject teachers' behavioral intention to use generative artificial intelligence in rural Serbian primary schools (Grades 5–8): An extended UTAUT mixed-methods study. *Electronics, 15*(19), Article 4465. https://doi.org/10.3390/electronics15194465

Wu, D., Zhang, X., Wang, K., Wu, L., & Yang, W. (2025). A multi-level factors model affecting teachers' behavioral intention in AI-enabled education ecosystem. *Educational Technology Research and Development, 73*(1), 135–167. https://doi.org/10.1007/s11423-024-10419-0

Zeng, M., Cheah, K. S. L., & Abdullah, Z. (2025). The influence of school principals' digital leadership on teachers' competency in integrating artificial intelligence: A systematic thematic review. *Frontiers in Education, 10*, Article 1655967. https://doi.org/10.3389/feduc.2025.1655967