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Teachers' Instructional Resilience amidst Class Disruptions: Predictors and Lived Experiences

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ABSTRACT

This study examined teacher readiness and technological competence as predictors of instructional resilience amidst class disruptions among 290 public secondary school teachers from eight schools in Tagbilaran City Division during School Year 2025–2026. Anchored in Adaptive Expertise Theory, the Technological Pedagogical Content Knowledge (TPACK) Framework, and Resilience Theory, the study employed an explanatory sequential mixed-methods design. Data were gathered using adapted questionnaires and semi-structured interviews and analyzed through descriptive statistics, independent samples t-tests, one-way ANOVA, multiple linear regression, and thematic analysis. Findings revealed high levels of teacher readiness (M = 3.05), technological competence (M = 3.12), and instructional resilience (M = 3.32). Significant differences were observed in instructional resilience according to gender ($p = .037$) and technological competence according to teaching experience ($p = .003$) and ICT-related training ($p = .042$). Teacher readiness ($\beta = .180$, $p = .005$) and technological competence ($\beta = .418$, $p < .001$) significantly predicted instructional resilience, jointly explaining 30.1% of its variance, with technological competence demonstrating the stronger contribution. Qualitative findings identified preparedness, perseverance, communication, collaborative support, and instructional flexibility as essential practices for sustaining learning despite disruptions. Limited resources and technical troubleshooting remained challenges. The study recommended strengthening professional development, technological support, and implementing the proposed Instructional Resilience and Learning Continuity Enhancement Training (IRLCET) program. The study supports Sustainable Development Goal 4 (Quality Education) and Sustainable Development Goal 13 (Climate Action) by promoting instructional continuity and preparedness for disruptions, including climate-related emergencies. Its findings contribute to educational and institutional sustainability by informing adaptive teaching practices, professional development, and resilient learning delivery systems.

Keywords: *Class Disruptions, Instructional Resilience, Learning Continuity, Sustainable Development Goals, Teacher Readiness, Technological Competence*

1. INTRODUCTION

Instructional resilience is essential for sustaining quality education during class disruptions caused by natural disasters, technological difficulties, public health emergencies, and other unexpected circumstances. Such disruptions require teachers to demonstrate instructional preparedness, technological competence, and flexibility in adapting learning activities. UNICEF (2025) reported that at least 242 million students across 85 countries or territories experienced climate-related educational disruptions in 2024, emphasizing the continuing need for learning continuity measures. UNESCO (2023) likewise highlighted the importance of teacher preparation, equitable technological access, and appropriate digital integration in maintaining effective educational delivery. In the Philippines, recurring typhoons, power interruptions, and other emergencies continue to challenge regular instruction. Department of Education (2024) emphasized the implementation of learning continuity plans and appropriate alternative delivery modalities during emergencies. Consequently, teacher readiness and technological competence have become increasingly important in supporting instructional resilience. This study examined these factors among public secondary school teachers in Tagbilaran City Division during School Year 2025–2026 to provide an empirical basis for strengthening instructional continuity.

Research Problem

Class disruptions present continuing challenges to educational delivery, particularly when teachers must adjust instructional strategies, learning materials, communication methods, and assessment activities. Although alternative learning modalities provide opportunities to maintain instruction, their effectiveness depends on teachers' preparedness and ability to respond to changing circumstances. Bercasio (2023) identified flexible teaching strategies, technological capabilities, institutional support, and collaboration as important considerations in managing educational disruptions in the Philippines. Teacher readiness involves instructional planning, classroom management, learning design, and proficiency in alternative teaching approaches. Vergonia and Mombas (2022) examined Filipino high school teachers' readiness for blended learning and identified relevant areas of preparedness and instructional challenges. Similarly, De Guia and Solomon (2024) emphasized adaptability, ICT facilities, and teachers' experiences in managing online teaching requirements. Çemçem et al. (2024) further established the multidimensional nature of blended-learning readiness, particularly in teaching and learning processes, management, designing, and proficiency. Technological competence also influences how teachers organize instruction and maintain communication with learners. Skantz-Åberg et al. (2022) emphasized that teachers' professional digital competence extends beyond technical skills to the pedagogical application of digital technologies. Peng et al. (2023) identified attitudes, self-efficacy, digital competence, and digital tool utilization as significant factors associated with teachers' technology integration. Moreover, Valle et al. (2024) highlighted the relationship of technological, pedagogical, and content knowledge with relevant educational and institutional factors. Instructional resilience involves teachers' capacity to adapt, persevere, and maintain teaching responsibilities despite challenging conditions. Lu et al. (2024) emphasized the importance of personal and contextual resources in understanding teacher resilience. Likewise, Mu et al. (2024) established a positive relationship between teacher self-efficacy and resilience, reinforcing the importance of strengthening teachers' professional capabilities and support systems. Despite these findings, limited context-specific evidence has examined teacher readiness and technological competence simultaneously as predictors of instructional resilience among public secondary school teachers in Tagbilaran City Division. Furthermore, teachers' lived experiences in maintaining instruction during disruptions require closer examination. Addressing these gaps provides a basis for identifying appropriate professional development and instructional continuity interventions.

Assumptions of the Study

The study examined teacher readiness and technological competence as potential predictors of instructional resilience amidst class disruptions. It also considered whether teachers' characteristics were associated with differences in these variables. The investigation was guided by two null hypotheses. First, there is no significant difference in teacher readiness, technological competence, and instructional resilience when respondents are grouped according to their profiles. Second, teacher readiness and technological competence do not significantly predict instructional resilience among public secondary school teachers in Tagbilaran City Division. These hypotheses were examined through quantitative analysis, while teachers' lived experiences provided contextual explanations of their instructional practices during disruptions.

Objectives of the Study

The study aimed to determine the levels of teacher readiness, technological competence, and instructional resilience amidst class disruptions among public secondary school teachers in Tagbilaran City Division during School Year 2025–2026. Specifically, it sought to describe respondents' profiles according to age, gender, highest educational attainment, number of years in teaching, area of specialization, and ICT-related training attended within the previous five years; assess teacher readiness in terms of teaching and learning processes, management, designing, and proficiency; determine technological competence across technology, content, pedagogical, technological content, and technological pedagogical content knowledge; and evaluate instructional resilience in terms of personal competencies and persistence, spiritual influences, family cohesion, and social skills and peer support. Furthermore, the study examined significant differences across respondent profiles, determined whether teacher readiness and technological competence significantly predicted instructional resilience, explored teachers' lived experiences, and integrated quantitative and qualitative findings. The results served as the basis for proposing an Instructional Resilience and Learning Continuity Enhancement Training (IRLCET) program.

Theoretical or Conceptual Basis

The study was grounded in three complementary theoretical perspectives: Adaptive Expertise Theory, the Technological Pedagogical Content Knowledge (TPACK) Framework, and Resilience Theory. These perspectives explain how teachers' preparedness, technological capabilities, and adaptive resources contribute to sustaining instruction during disruptions. Adaptive Expertise Theory emphasizes the capacity of professionals to adjust established practices and develop appropriate responses to unfamiliar situations. In educational settings, this perspective highlights teachers' flexibility in modifying instructional strategies and selecting alternative learning activities. Bercasio (2023) demonstrated the importance of context, competence, collaboration, and flexible pedagogical practices in responding to educational disruptions. Similarly, Çemçem et al. (2024) identified essential dimensions of teachers' readiness for blended learning, supporting the role of instructional preparation and adaptability. The TPACK Framework explains the integration of technological knowledge, pedagogical knowledge, and content knowledge in effective instruction. Skantz-Åberg et al. (2022) emphasized the pedagogical dimensions of professional digital competence, while Valle et al. (2024) examined TPACK in relation to school climate, digital nativity, and cyber wellness among basic education teachers. Masry-Herzallah (2025) further established associations among TPACK, technological self-efficacy, and perceived online teaching effectiveness. These findings support the importance of technological competence in helping teachers adjust instructional delivery during disruptions. Resilience Theory explains how individuals respond effectively to adversity through personal strengths, adaptive practices, and available support systems. Lu et al. (2024), using the Job Demands–Resources perspective, emphasized the importance of resources and contextual

conditions in understanding teacher resilience. Mu et al. (2024) likewise demonstrated a positive association between teacher self-efficacy and resilience, suggesting the importance of professional confidence and supportive educational environments. Collectively, these perspectives support the study's conceptual framework, in which teacher readiness and technological competence served as predictor variables, while instructional resilience was the outcome variable. Teachers' demographic and professional characteristics provided the basis for group comparisons, and their lived experiences offered additional explanations of how instructional resilience was demonstrated during disruptions. The integrated findings informed the proposed IRLCET program.

The study supports SDG 4 (Quality Education) and SDG 13 (Climate Action) by promoting instructional continuity and resilience during class disruptions. For SDG 4, it emphasizes teacher preparedness, technological competence, and flexible instruction to sustain quality learning (UNESCO, 2023, 2024). For SDG 13, it highlights teachers' adaptability in maintaining education during climate-related emergencies (UNICEF, 2025). Overall, the study contributes to educational and institutional sustainability by strengthening teachers' instructional resilience, digital competence, and capacity to respond to disruptions.

2. METHODOLOGY

Research Design

The study utilized an explanatory sequential mixed-methods design, beginning with quantitative data collection and analysis, followed by a qualitative phase to explain and elaborate on the statistical findings. The quantitative component employed a descriptive-comparative and predictive approach to examine the levels, differences, and relationships among teacher readiness, technological competence, and instructional resilience. The qualitative component adopted a phenomenological approach to explore teachers' lived experiences in sustaining instruction during class disruptions. Braun and Clarke (2006) emphasized thematic analysis as a method for identifying and interpreting patterns in qualitative data. Integrating both approaches provided a more comprehensive understanding of the factors contributing to instructional resilience.

Research Locale or Study Setting

The study was conducted in eight public secondary schools in the Schools Division of Tagbilaran City, Bohol, Philippines, during School Year 2025–2026. These schools operated under the supervision of the Schools Division Superintendent and provided an appropriate setting for examining teachers' preparedness, technological competence, and instructional resilience. The locale was selected because teachers experienced various instructional disruptions requiring adjustments in teaching strategies, learning materials, and delivery modalities.

Participants or Data Sources

The study involved 290 public secondary school teachers from a population of 352 teachers across eight participating schools. Eligible respondents were full-time teachers with at least one year of teaching experience. Teachers on long-term leave, substitute teachers, and personnel without teaching responsibilities were excluded. For the qualitative phase, participants were purposively selected from the quantitative respondents based on their willingness to participate and the patterns observed in the survey results, including typical and outlying responses. Selection continued until data saturation was achieved. This approach allowed the researcher to obtain diverse experiences and explanations of how teachers sustained instruction during class disruptions.

Research Instruments or Materials

The study employed an adapted four-part questionnaire and a semi-structured interview guide. The first part gathered respondents' demographic and professional profiles, including age, gender, highest educational attainment, teaching experience, specialization, and ICT-related training attended within the previous five years. The second part utilized the Teachers' Readiness Scale for Blended Teaching developed by Cemcem et al. (2024). The adapted instrument contained 23 items covering Teaching and Learning Process, Management, Designing, and Proficiency. Responses were measured using a four-point Likert scale ranging from Strongly Disagree (1) to Strongly Agree (4). The third part adopted Denise A. Schmidt, Evrim Baran, Ann D. Thompson, Matthew J. Koehler, Punya Mishra, and Tae Shin's Survey of Teachers' Knowledge of Teaching and Technology to assess technological competence across Technology Knowledge (TK), Content Knowledge (CK), Pedagogical Knowledge (PK), Technological Content Knowledge (TCK), and Technological Pedagogical Content Knowledge (TPACK). The fourth part utilized the Teachers' Resilience Scale by Maria Platsidou and Athena Daniilidou (2018), measuring Personal Competencies and Persistence, Spiritual Influences, Family Cohesion, and Social Skills and Peer Support. Both technological competence and instructional resilience were assessed using four-point Likert scales. A semi-structured interview guide was also employed to explore teachers' experiences, coping strategies, instructional adjustments, and use of technological resources during disruptions. The instruments underwent expert validation and pilot testing, while the interview guide was reviewed for clarity, relevance, and alignment with the study objectives.

Data Gathering Procedure

Data collection followed three phases: preliminary preparation, actual data collection, and data retrieval and processing. Initially, the researcher reviewed relevant literature, adapted the instruments, conducted expert validation and pilot testing, and secured permission from the appropriate university officials, Schools Division Superintendent, and school principals. Participants were informed about the study's objectives, procedures, voluntary participation, and confidentiality safeguards. During the quantitative phase, questionnaires were distributed personally or through designated school representatives, including Master Teachers, without interrupting regular teaching activities. Respondents were given approximately two weeks for directly administered questionnaires and up to five weeks for other distributions. Completed questionnaires were reviewed for completeness, and invalid or incomplete responses were excluded. For the qualitative phase, purposively selected participants underwent semi-structured interviews conducted face-to-face or online over an eight-week period. Each interview lasted approximately 30–45 minutes. Responses were audio-recorded with consent; otherwise, field notes were taken. Interview questions were refined based on quantitative findings to explore significant patterns and teachers' instructional experiences. The collected responses were transcribed, organized, and prepared for thematic analysis, after which the quantitative and qualitative findings were integrated.

Data Analysis

Quantitative data were processed using Microsoft Excel and Jamovi statistical software. Frequencies and percentages were used to describe respondents' demographic and professional profiles, while weighted means determined the levels of teacher readiness, technological competence, and instructional resilience. Mean scores were interpreted using four-point intervals: 3.50–4.00 (Very High), 2.50–3.49 (High), 1.50–2.49 (Low), and 1.00–1.49 (Very Low). Independent Samples t-tests and One-Way Analysis of Variance (ANOVA) were employed to determine significant differences in the three variables when respondents were grouped according to their profiles. Multiple Linear Regression was used to determine the individual and combined predictive influence of teacher readiness and technological competence on

instructional resilience. Model significance was evaluated through F-tests and t-tests at a .05 level of significance. Qualitative data were analyzed using the six-phase thematic analysis model of Braun and Clarke (2006, 2021), involving data familiarization, initial coding, searching for themes, reviewing themes, defining and naming themes, and report writing. Emerging themes were supported by participants' narratives and examined alongside the quantitative findings to explain statistical patterns and provide a deeper understanding of instructional resilience during class disruptions.

Ethical Consideration

The study adhered to established ethical principles, including informed consent, confidentiality, voluntary participation, beneficence, non-maleficence, and protection from harm. Participants received information about the study's objectives, procedures, and potential benefits and were informed of their right to withdraw without consequences. Only respondents who provided informed consent participated. Personal identifiers were excluded from the research records, and participant codes were used to maintain anonymity. All collected information was treated confidentially and used exclusively for academic purposes. The researcher maintained control over the data and provided for their eventual anonymization or disposal. Data collection was scheduled to avoid interfering with teachers' responsibilities, while reasonable precautions were implemented to minimize physical, emotional, and professional risks. These measures protected participants' dignity, privacy, and welfare throughout the research process.

3. RESULTS AND DISCUSSION

3.1 Profile of the Respondents

3.1.1 Demographic and Professional Characteristics

Among the 290 respondents, the largest age group was 31–40 years (35.17%), followed by 41–50 years (33.79%). Most were female (84.48%), had earned master's degree units (59.66%), and had 6–10 years of teaching experience (30.00%). Mathematics teachers comprised the largest specialization group (18.62%), while 71.72% had attended one to five ICT-related training programs within the previous five years. However, 17.24% reported no ICT-related training during the same period. These findings reflect respondents with varied professional backgrounds, educational qualifications, and exposure to technological development. Wong et al. (2025) found that teachers' digital competence was associated with generational differences, access to technology, training, and institutional support. Similarly, Baybay and Lantaka (2025) emphasized the relevance of age, teaching experience, and professional development to teachers' digital competence and readiness. Tome and Naparota (2026) further highlighted the contribution of continuing professional development to teaching competence. These studies underscore the importance of sustained professional learning in responding to changing instructional demands.

3.2 Levels of Teacher Readiness, Technological Competence, and Instructional Resilience

3.2.1 Level of Teacher Readiness

The respondents demonstrated a high level of teacher readiness (M = 3.05). Teaching and Learning Process obtained the highest mean (M = 3.09), followed by Designing (M = 3.06), Management (M = 3.04), and Proficiency (M = 2.93). The highest-rated indicator was readiness to shift to appropriate digital learning platforms (M = 3.17), while access to necessary school and personal resources received the lowest rating (M = 2.85). These results indicate that teachers generally felt prepared to adjust instructional delivery, although resource availability remained a concern. The findings support Vergonia and Mombas (2022), who reported that Philippine high school teachers demonstrated readiness for blended learning. Cemcem et al. (2024) likewise

emphasized teaching and learning processes, management, designing, and proficiency as dimensions of blended-learning readiness. De Guia and Solomon (2024) identified adaptability and ICT-related capabilities as important components of online teaching readiness. However, Bercasio (2023) highlighted limitations involving internet connectivity and instructional support, suggesting that teacher preparedness must be accompanied by accessible learning resources and institutional assistance.

3.2.2 Level of Technological Competence

The respondents demonstrated high technological competence (M = 3.12). Content Knowledge obtained the highest mean (M = 3.38), followed by Pedagogical Knowledge (M = 3.23), Technological Content Knowledge (M = 3.16), Technological Pedagogical Content Knowledge (M = 3.15), and Technology Knowledge (M = 2.89). Understanding subject concepts and their curricular connections received the highest individual rating (M = 3.39), while independently solving technical problems obtained the lowest (M = 2.78). The findings indicate stronger confidence in subject knowledge and pedagogical practices than in technical troubleshooting. These results are consistent with Valle et al. (2024), who emphasized the significant contribution of Content Knowledge to Technological Content Knowledge among Philippine basic education teachers. Bunuan et al. (2024) similarly identified differences across TPACK dimensions, particularly in technological knowledge and technology-content integration. Skantz-Åberg et al. (2022) emphasized that professional digital competence requires pedagogically appropriate technology use rather than technical knowledge alone. Chiu et al. (2024) further demonstrated the importance of professional support in developing teachers' digital competence. These findings highlight the relevance of strengthening technical problem-solving and integrated technology-supported instruction.

3.2.3 Level of Instructional Resilience

The respondents demonstrated high instructional resilience (M = 3.32). Spiritual Influences obtained the highest mean (M = 3.48), followed by Family Cohesion (M = 3.36), Social Skills and Peer Support (M = 3.34), and Personal Competencies and Persistence (M = 3.21). The highest-rated indicator concerned faith in managing stressful situations (M = 3.49), while solving instructional problems during disruptions obtained the lowest mean (M = 3.16). These findings indicate that teachers relied on personal beliefs, family support, professional relationships, and persistence when facing instructional difficulties. The results align with Lu et al. (2024), who identified personal and contextual resources as important factors in teacher resilience. Mu et al. (2024) established a significant positive relationship between teacher self-efficacy and resilience, emphasizing the importance of professional confidence and adaptive capacity. Yang et al. (2023) further demonstrated that collaborative professionalism and shared resources supported teachers in responding to educational disruptions. Likewise, Sarmiento and Badiang (2024) emphasized the relevance of social support to teachers' well-being and resilience. These findings suggest that resilience involves both individual coping capacities and available support systems.

3.3 Differences in Teacher Readiness, Technological Competence, and Instructional Resilience According to Profile

3.3.1 Differences According to Demographic and Academic Characteristics

No significant differences were found in teacher readiness, technological competence, or instructional resilience according to age (p = .065, .128, and .580, respectively), highest

educational attainment (p = .328, .506, and .595), and area of specialization (p = .363, .178, and .158). Gender showed no significant difference in teacher readiness (p = .132) or technological competence (p = .347). However, instructional resilience differed significantly according to gender (p = .037). These findings indicate that most demographic and academic characteristics were not associated with statistically significant differences in the three variables. Varilla et al. (2024) similarly reported no significant gender differences in the overall TPACK competencies of college teachers. However, Rodríguez-Hidalgo et al. (2024) identified gender-related differences in teacher resilience during emergency remote teaching. The present findings support the relevance of examining resilience across gender groups, although the reported statistical results do not establish the direction or causes of these differences.

3.3.2 Differences According to Teaching Experience and ICT-Related Training

Teaching experience showed no significant differences in teacher readiness (p = .160) or instructional resilience (p = .390), but technological competence differed significantly according to years in teaching (p = .003). Similarly, ICT-related training showed no significant differences in teacher readiness (p = .097) or instructional resilience (p = .594), while technological competence differed significantly across training groups (p = .042). These results highlight the relevance of teaching experience and ICT-related professional development to technological competence. Baybay and Lantaka (2025) reported differences in teachers' digital competence according to teaching experience and training. Wong et al. (2025) likewise identified training opportunities and institutional support as important factors associated with digital competence. Chiu et al. (2024) further emphasized supportive professional learning environments in developing teacher digital competence. However, the present findings establish differences between groups rather than causal effects of experience or training.

3.4 Predictive Influence of Teacher Readiness and Technological Competence on Instructional Resilience

Both teacher readiness (B = .152, β = .180, p = .005) and technological competence (B = .407, β = .418, p < .001) significantly predicted instructional resilience. Together, these variables explained 30.1% of the variance in instructional resilience (R^2 = .301). Technological competence demonstrated the stronger standardized predictive contribution, indicating that both predictors were positively associated with teachers' capacity to sustain instruction during disruptions. These findings suggest that preparedness and technological capability are important resources for maintaining instructional continuity. Mu et al. (2024) established a positive association between teacher self-efficacy and resilience, while Lu et al. (2024) highlighted the relevance of personal and professional resources in responding to educational challenges. Masry-Herzallah (2025) further demonstrated associations among TPACK, technological self-efficacy, and perceived online teaching effectiveness. Collectively, these studies support the importance of strengthening teachers' pedagogical adaptability and technological capabilities, although the predictive findings do not establish causation.

3.5 Teachers' Lived Experiences in Sustaining Instruction Amidst Class Disruptions

3.5.1 Preparedness and Alternative Activities

Teachers described preparing backup learning activities, printed instructional materials, and alternative teaching strategies to sustain instruction during disruptions. They emphasized the importance of planning ahead, remaining organized, and providing learning activities when regular classroom arrangements were interrupted. These experiences support Bercasio (2023),

who identified flexible learning arrangements, alternative platforms, and resource sharing as important practices during educational disruptions. De Guia and Solomon (2024) similarly emphasized adaptability and instructional preparedness in managing alternative teaching environments. The findings demonstrate how advance preparation provided teachers with practical options for continuing instruction.

3.5.2 Calmness, Patience, and Perseverance

Participants emphasized remaining calm, patient, flexible, and committed despite unexpected classroom challenges. They described managing disruptions without panic, maintaining focus on instructional responsibilities, and encouraging learners even when teaching conditions became difficult. These experiences reflect the multidimensional nature of teacher resilience identified by Lu et al. (2024), particularly the importance of personal resources in responding to professional demands. Mu et al. (2024) likewise emphasized the relationship between self-efficacy and resilience. The findings suggest that emotional regulation, confidence, and perseverance supported teachers' ability to maintain instructional responsibilities during disruptions.

3.5.3 Communication and Support

Teachers maintained communication with learners through clear instructions, regular guidance, and available learning delivery methods. They also sought assistance, shared teaching strategies, and collaborated with colleagues to address instructional challenges during disruptions. These findings align with Yang et al. (2023), who emphasized collaborative professionalism and collective resilience in responding to unexpected educational challenges. Sürmeli et al. (2024) similarly found that collegial relationships and supportive teacher communities helped educators manage sudden instructional changes. Such findings reinforce the importance of communication and professional collaboration in sustaining learning continuity.

3.5.4 Flexible Adjustment of Instruction

Participants described modifying lesson plans, simplifying activities, and selecting alternative instructional approaches according to learners' needs and available resources. When digital technologies were unavailable or unsuitable, teachers used printed materials and other accessible learning methods to continue instruction. These experiences are consistent with Bercasio (2023), who emphasized flexible pedagogical practices during educational disruptions. Vergonia and Mombas (2022) likewise highlighted teachers' readiness to implement alternative and blended learning arrangements. The findings demonstrate that instructional resilience involves selecting feasible teaching strategies and adjusting delivery methods according to changing learning conditions.

3.6 Integration of Quantitative and Qualitative Findings

3.6.1 Readiness Through Preparation and Experience

The quantitative findings established a high level of teacher readiness ($M = 3.05$) and its significant predictive relationship with instructional resilience ($p = .005$). Qualitative accounts explained that preparation, teaching experience, backup activities, and alternative learning materials helped teachers respond confidently to unexpected disruptions. These integrated findings indicate that readiness was demonstrated through practical instructional planning and flexibility. Cemcem et al. (2024) emphasized the multidimensional nature of teacher readiness,

while De Guia and Solomon (2024) highlighted adaptability in managing changing instructional conditions. The qualitative experiences therefore provide contextual explanations of how preparedness contributed to instructional continuity.

3.6.2 Technological Competence as a Resource for Instructional Continuity

Technological competence obtained a high overall mean (M = 3.12) and demonstrated a significant predictive contribution to instructional resilience ($\beta = .418$, $p < .001$). Participants described using online platforms, digital communication tools, and electronic learning materials to maintain instruction. However, some experienced hesitation when using unfamiliar technologies, consistent with the lower ratings for Technology Knowledge (M = 2.89) and technical problem-solving (M = 2.78). These findings reflect Valle et al. (2024), who emphasized the interaction among technological, pedagogical, and content knowledge. Skantz-Åberg et al. (2022) likewise highlighted the importance of integrating digital competence with instructional practice. The findings suggest that technology expanded teachers' instructional options, although technical difficulties and unfamiliar digital tools remained challenges requiring further professional support.

3.6.3 Combined Contribution of Readiness, Technological Competence, and Support Systems

The quantitative findings demonstrated that teacher readiness and technological competence jointly explained 30.1% of the variance in instructional resilience ($R^2 = .301$). Qualitative findings showed that teachers combined preparation, technological skills, flexible instruction, perseverance, communication, and social support to maintain learning activities. The remaining 69.9% of the variance was not explained by the two-predictor model. These integrated findings indicate that instructional resilience involved both professional capabilities and contextual resources. Lu et al. (2024) highlighted the importance of personal and environmental resources, while Yang et al. (2023) emphasized collaborative approaches to resilience. The findings support the development of the proposed Instructional Resilience and Learning Continuity Enhancement Training (IRLCET) program, particularly in instructional preparedness, technical problem-solving, alternative learning delivery, and professional collaboration. The qualitative accounts provide contextual explanations but do not establish additional statistical predictors.

4. CONCLUSIONS AND RECOMMENDATIONS

The study concluded that public secondary school teachers in Tagbilaran City Division demonstrated high levels of teacher readiness (M = 3.05), technological competence (M = 3.12), and instructional resilience (M = 3.32) amidst class disruptions. Both teacher readiness and technological competence significantly predicted instructional resilience, jointly explaining 30.1% of its variance, with technological competence demonstrating the stronger predictive contribution. Significant differences were observed in instructional resilience according to gender and in technological competence according to teaching experience and ICT-related training. Teachers' lived experiences revealed that preparedness, perseverance, flexible teaching strategies, technological skills, and support from family, colleagues, and school administrators contributed to maintaining instructional continuity. However, difficulties in technical troubleshooting emphasized the need to strengthen teachers' technological capabilities and adaptive instructional practices.

Teachers are encouraged to participate in professional development programs, peer mentoring, and Learning Action Cell (LAC) sessions to strengthen instructional preparedness, technological competence, and adaptive teaching strategies. Students should develop independent learning habits, improve digital skills, and maintain communication with teachers during disruptions. School heads, Tagbilaran City Division, and Department of Education officials should provide practical ICT training, accessible technological resources, reliable internet connectivity where feasible, alternative learning materials, and technical assistance. The proposed Instructional Resilience and Learning Continuity Enhancement Training (IRLCET) program should be implemented through existing professional development and school improvement initiatives to strengthen instructional flexibility, technology integration, crisis management, and professional collaboration. Future researchers are encouraged to conduct similar investigations in other educational settings and explore additional factors influencing instructional resilience.

The study was limited to 290 public secondary school teachers from eight schools in Tagbilaran City Division during School Year 2025–2026. Its predictive analysis focused on teacher readiness and technological competence, which explained 30.1% of the variance in instructional resilience, leaving other potential influencing factors unexamined. The qualitative findings were also based on the lived experiences of purposively selected participants within the same division. These boundaries should be considered when interpreting the findings and extending their applicability to other educational contexts.

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