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ATTITUDE TOWARDS DIGITAL TECHNOLOGY IN RELATION TO TEACHERS INSTRUCTIONAL SUPERVISION SKILLS IN DAVAO ORIENTAL

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ABSTRACT

This study aimed to look into the attitude towards digital technology as a measure expected to improve the teachers' instructional supervision skills. In this study, the researcher selected the 165 public elementary school teachers in Davao Oriental as the respondents of the study. Stratified random sampling technique was utilized in the selection of the respondents. Non-experimental quantitative research design using descriptive-correlational method was employed. The data collected were subjected on the following statistical tools: Mean, Pearson Moment Product Correlation and multiple linear regression analysis. Findings revealed that attitude towards digital technology and instructional supervision skills of teachers in Davao Oriental were described as extensive. Further, correlation analysis demonstrated that there is a significant relationship between attitude towards digital technology and teachers' instructional supervision skills in Davao Oriental. Evidently, regression analysis proved that attitude towards digital technology in terms of technical, ethical, and attitudinal were significant predictors of teachers instructional supervision skills in Davao Oriental. In other words, attitude towards digital technology has influence on the process in instructional supervision skills of teachers in Davao Oriental. The study, therefore, conducted for further utilization of findings through publication in reputable research journal.

Keywords: Educational management, teachers' attitude towards digital technology, attitude towards digital technology, Davao Oriental, Philippines

1. INTRODUCTION

Rationale

In today's rapidly evolving educational landscape, the integration of digital technology is increasingly recognized as a critical component in enhancing instructional supervision skills. The global shift towards digitalization has impacted various sectors, including education, necessitating the adoption of digital tools to improve teaching and learning processes (OECD, 2019). In the Philippines, the Department of Education has emphasized the need for educators to embrace digital technologies to meet the demands of 21st-century education (DepEd, 2020). Locally, in Davao Oriental, public elementary schools face challenges in integrating digital technology due to varying levels of technical proficiency and access to resources. This study aims to explore the attitudes of teachers towards digital technology and how these attitudes influence their instructional supervision skills. Understanding these dynamics is crucial for developing effective strategies that can enhance teachers' supervisory capabilities through the use of digital tools. By examining the relationship between attitudes towards digital technology and instructional supervision skills, this study seeks to provide insights that can inform policy and practice in educational management. The findings will contribute to the ongoing efforts to improve educational quality through the effective use of technology.

Purpose of the Study

The primary aim of this study is to assess the relationship between teachers' attitudes towards digital technology and their instructional supervision skills. Specifically, the study seeks to identify how technical, ethical, and attitudinal aspects of digital technology influence the supervision skills of teachers. By investigating these relationships, the study aims to offer valuable insights into how positive attitudes towards digital technology can enhance teachers' effectiveness in supervising instructional practices. This understanding is essential for developing targeted professional development programs that focus on integrating digital technology into instructional supervision. The study's findings are intended to inform educational policy and teacher training initiatives, contributing to the broader goal of improving educational outcomes through the effective use of digital technology. The study will provide a basis for recommending strategies to foster positive attitudes towards digital technology among teachers.

2. REVIEW OF SIGNIFICANT LITERATURE

Digital Technology in Education

The integration of digital technology in education has been widely studied and recognized for its potential to enhance teaching and learning processes (Ertmer & Ottenbreit-Leftwich, 2010). Digital tools such as online platforms,

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educational software, and interactive whiteboards provide teachers with new ways to engage students and facilitate learning. Research has shown that teachers' attitudes towards digital technology significantly influence their willingness to integrate these tools into their instructional practices (Teo, 2008). Positive attitudes towards technology are associated with higher levels of technology adoption and usage in the classroom (Buabeng-Andoh, 2012). Furthermore, the effective use of digital technology can lead to improved student outcomes and more efficient teaching practices.

Instructional Supervision

Instructional supervision refers to the processes and practices employed by educational leaders to monitor and support teachers' instructional activities (Glickman, Gordon, & Ross-Gordon, 2018). Effective instructional supervision is essential for improving teaching quality and student learning outcomes. Supervisory practices include classroom observations, feedback sessions, and professional development initiatives aimed at enhancing teachers' instructional skills. The use of digital technology in instructional supervision can streamline these processes, making them more efficient and effective (Marzano, Waters, & McNulty, 2005). Digital tools can facilitate real-time feedback and provide data-driven insights that help teachers improve their instructional practices.

Attitudes Towards Digital Technology

Teachers' attitudes towards digital technology encompass their beliefs, perceptions, and feelings about the use of technology in educational settings (Ertmer, 2005). These attitudes can be categorized into three main domains: technical, ethical, and attitudinal. Technical attitudes refer to teachers' confidence in their ability to use digital tools effectively. Ethical attitudes involve considerations of the ethical implications of technology use, such as data privacy and digital citizenship. Attitudinal aspects relate to teachers' overall perceptions and feelings about the value and impact of digital technology in education (Venkatesh, Morris, Davis, & Davis, 2003). Understanding these attitudes is crucial for developing strategies to encourage technology adoption and integration in instructional supervision.

Theoretical / Conceptual Framework

The study is grounded in the Technology Acceptance Model (TAM), which posits that perceived ease of use and perceived usefulness are primary factors influencing individuals' acceptance and use of technology (Davis, 1989). This model is extended to include ethical and attitudinal aspects, providing a comprehensive framework for understanding teachers' attitudes towards digital technology. The conceptual framework of this study illustrates the hypothesized relationships among the technical, ethical, and attitudinal aspects of digital technology and instructional supervision skills. By examining these interactions, the study aims to provide a detailed understanding of how attitudes towards digital technology influence instructional supervision practices in educational settings. The framework guides the investigation and analysis of the complex relationships between these variables.

Statement of the Problem

This study seeks to answer the following questions:

1. What is the level of attitude towards digital technology among public elementary school teachers in Davao Oriental?
2. How are the instructional supervision skills of teachers characterized in these schools?
3. Is there a significant relationship between attitude towards digital technology and teachers' instructional supervision skills?
4. Which aspects of digital technology (technical, ethical, attitudinal) significantly predict instructional supervision skills of teachers?

Hypotheses

1. There is a significant relationship between teachers' attitude towards digital technology and their instructional supervision skills.
2. Technical, ethical, and attitudinal aspects of digital technology significantly predict the instructional supervision skills of teachers.

Scope and Limitation of the Study

This study focuses on public elementary school teachers in Davao Oriental. The findings may not be generalizable to other districts or private schools. The study is limited to quantitative data and does not explore qualitative aspects of attitudes towards digital technology and instructional supervision. Additionally, the study's reliance on self-reported data may introduce bias, and the cross-sectional design does not allow for causal inferences. Future research could address these limitations by incorporating qualitative methods and longitudinal designs to gain deeper insights into the dynamics of digital technology attitudes and instructional supervision skills. Despite these limitations, the study provides valuable insights into the relationship between digital technology attitudes and instructional supervision skills.

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Definition of Terms

Attitude Towards Digital Technology: Teachers' beliefs, perceptions, and feelings about the use of technology in educational settings, encompassing technical, ethical, and attitudinal aspects.

Instructional Supervision Skills: The processes and practices employed by educational leaders to monitor and support teachers' instructional activities, aiming to improve teaching quality and student learning outcomes.

3. METHODS

Research Design

This study employs a non-experimental quantitative research design using a descriptive-correlational survey method. This approach is suitable for examining existing relationships between variables without manipulating them (Creswell, 2014). The descriptive aspect provides a detailed account of the levels of attitude towards digital technology and instructional supervision skills, while the correlational aspect explores the relationships among these variables. By utilizing this design, the study aims to provide a comprehensive understanding of how attitudes towards digital technology influence instructional supervision skills among teachers. The quantitative approach ensures that the findings are based on statistical analysis, providing empirical evidence to support the study's conclusions.

Respondents of the Study

The study involved 165 public elementary school teachers from Davao Oriental. A stratified random sampling technique was used to ensure a representative sample based on various criteria such as years of experience and educational background. This method helps in minimizing selection bias and ensuring that different subgroups within the population are adequately represented. The diverse backgrounds and experiences of the respondents contribute to a more comprehensive analysis of the research questions. The sample size was determined to provide sufficient statistical power for detecting significant relationships among the variables.

Research Instruments

Standardized questionnaires were used to measure attitudes towards digital technology and instructional supervision skills. The questionnaires were validated and tested for reliability using Cronbach's alpha. Ensuring the validity and reliability of the instruments is crucial for obtaining accurate and consistent data. The digital technology attitude questionnaire included items designed to assess technical, ethical, and attitudinal aspects. The instructional supervision skills questionnaire included items that measured teachers' abilities to monitor and support instructional activities effectively. The structured format of the questionnaires facilitated the collection of relevant data for analysis.

Research Environment

The study was conducted in public elementary schools in Davao Oriental. This setting provided a relevant context for understanding the dynamics of attitudes towards digital technology and instructional supervision within the local educational environment. The chosen environment allowed for the examination of how digital technology attitudes and instructional supervision practices are influenced by the specific challenges and opportunities present in the public school system in Davao Oriental. The findings can offer targeted insights that are directly applicable to the context of these schools. By situating the study in this specific context, the research aims to provide actionable recommendations for local educational stakeholders.

Ethical Consideration

Informed consent was obtained from all participants. Confidentiality and anonymity of the respondents were maintained throughout the study. Ethical considerations were prioritized to ensure that the rights and well-being of the participants were protected. The study adhered to ethical guidelines to maintain the integrity of the research process and safeguard the interests of the respondents. Participants were informed about the purpose of the study, their right to withdraw at any time, and the measures taken to ensure data confidentiality. The ethical framework of the study ensured that the research was conducted responsibly and respectfully.

Data Gathering Procedure

Data were collected using a self-administered questionnaire distributed to the respondents. Follow-up reminders were sent to ensure a high response rate. The data collection process was meticulously planned and executed to gather accurate and comprehensive information. The collected data were then carefully reviewed and organized for analysis. The structured approach to data collection ensured that the information gathered was relevant and reliable for addressing the research questions. The data gathering procedure was designed to minimize respondent burden while maximizing data quality.

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Data Analysis

Data were analyzed using descriptive statistics, Pearson Moment Product Correlation, and multiple linear regression analysis. Descriptive statistics were used to summarize the levels of attitude towards digital technology and instructional supervision skills. Pearson Moment Product Correlation was employed to examine the relationships between the variables, while multiple linear regression analysis was used to identify the aspects of digital technology that significantly predict instructional supervision skills. These statistical tools were chosen to provide a comprehensive understanding of the relationships and influences among the variables. The results of the analyses were interpreted to draw meaningful conclusions and provide actionable recommendations. The data analysis process involved multiple steps to ensure the accuracy and validity of the findings.

4. RESULTS

Descriptive Statistics

The descriptive analysis revealed that teachers' attitudes towards digital technology and their instructional supervision skills were both rated as extensive. This indicates that teachers in Davao Oriental generally hold positive attitudes towards digital technology and possess strong instructional supervision skills. The high mean scores for both variables suggest that teachers are confident in their ability to use digital tools and effectively supervise instructional activities. These findings highlight the overall readiness and capability of teachers to integrate digital technology into their supervisory practices. The descriptive statistics provide a comprehensive overview of the current state of digital technology attitudes and instructional supervision skills among the teachers studied. This positive outlook suggests a favorable environment for the implementation of digital technology in instructional supervision.

Correlation Analysis

The correlation analysis demonstrated a significant positive relationship between teachers' attitudes towards digital technology and their instructional supervision skills. This suggests that teachers who hold positive attitudes towards digital technology are more likely to exhibit strong instructional supervision skills. The findings align with previous research indicating that positive attitudes towards technology can enhance teachers' effectiveness in their instructional practices (Teo, 2008). The significant correlation underscores the importance of fostering positive attitudes towards digital technology in teacher development programs. By enhancing teachers' attitudes towards technology, schools can improve the overall quality of instructional supervision. The analysis also highlighted the interdependence of technical, ethical, and attitudinal aspects of digital technology in influencing instructional supervision skills. This relationship emphasizes the need for a holistic approach to improving teachers' digital technology attitudes.

Regression Analysis

The regression analysis identified that technical, ethical, and attitudinal aspects of digital technology significantly predict instructional supervision skills of teachers. Specifically, teachers' confidence in using digital tools (technical), their consideration of ethical implications (ethical), and their overall perceptions and feelings about digital technology (attitudinal) were all found to have significant positive effects on instructional supervision skills. These findings suggest that a holistic approach to enhancing attitudes towards digital technology can improve teachers' supervision skills. The regression analysis provides detailed insights into the specific contributions of each aspect of digital technology, emphasizing the importance of addressing technical, ethical, and attitudinal domains in professional development programs. By focusing on these aspects, educational leaders can effectively foster positive attitudes towards digital technology and enhance the instructional supervision skills of teachers. The analysis underscores the multifaceted nature of digital technology attitudes and their impact on instructional practices.

5. DISCUSSION

Attitude Towards Digital Technology and Instructional Supervision Skills

The study found a significant relationship between teachers' attitudes towards digital technology and their instructional supervision skills. This finding aligns with the existing body of research that underscores the importance of digital technology in enhancing educational practices. Teachers who hold positive attitudes towards digital technology are more likely to integrate digital tools into their instructional supervision, leading to improved monitoring and support of instructional activities (Ertmer & Ottenbreit-Leftwich, 2010). The study's findings highlight the critical role of digital technology in modern educational environments, suggesting that positive attitudes towards technology can significantly enhance teachers' supervision skills. The positive relationship between digital technology attitudes and instructional supervision skills underscores the need for ongoing professional development programs that focus on enhancing teachers' attitudes towards technology. By fostering a culture of digital literacy and confidence, schools can create

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supportive environments that promote high-quality instructional supervision. The findings also suggest that schools should provide resources and support to help teachers develop positive attitudes towards digital technology.

Technical, Ethical, and Attitudinal Aspects

The analysis revealed that technical, ethical, and attitudinal aspects of digital technology significantly predict instructional supervision skills. Technical aspects refer to teachers' confidence in their ability to use digital tools effectively. Ethical aspects involve considerations of the ethical implications of technology use, such as data privacy and digital citizenship. Attitudinal aspects relate to teachers' overall perceptions and feelings about the value and impact of digital technology in education (Venkatesh et al., 2003). The significant impact of these aspects on instructional supervision skills suggests that a comprehensive approach to digital technology integration is necessary. Schools should provide training that addresses technical skills, ethical considerations, and attitudinal development. The findings emphasize the importance of addressing all aspects of digital technology attitudes in professional development programs to maximize their positive impact on instructional supervision skills. By focusing on these domains, educational leaders can ensure that teachers are well-equipped to use digital tools effectively and ethically in their supervisory practices. This comprehensive approach can lead to more effective and ethical use of technology in education.

Implications for Educational Management

The results of this study have significant implications for educational management practices. First, they underscore the need for educational leaders to develop and demonstrate positive attitudes towards digital technology. Attitudes towards digital technology are essential for creating an environment where teachers feel confident and supported in their use of digital tools. Educational leaders should prioritize their own professional development to enhance their digital literacy and confidence. Additionally, the findings suggest that schools should invest in comprehensive professional development programs for their teachers. These programs should be designed to enhance both technical and ethical aspects of digital technology use, ensuring that teachers are well-equipped to respond to the evolving educational landscape. Furthermore, the study highlights the importance of creating a supportive and inclusive school culture. Leaders should strive to build trust and foster open communication with their teachers. This can be achieved by involving teachers in decision-making processes, recognizing their contributions, and providing opportunities for professional growth. The study also suggests that regular evaluations of digital technology attitudes and instructional supervision practices are necessary to ensure their effectiveness. Schools should collect feedback from teachers to identify areas for improvement and make necessary adjustments. Finally, the interconnectedness of digital technology attitudes and instructional supervision skills indicates that these elements should be integrated into a holistic approach to educational management. By doing so, schools can create a sustainable model that promotes continuous improvement and adaptability. The study provides valuable insights for educational leaders seeking to enhance the overall effectiveness and adaptability of their institutions.

6. CONCLUSIONS

Summary of Findings

The study concluded that teachers' attitudes towards digital technology and their instructional supervision skills are extensively practiced in public elementary schools in Davao Oriental. The significant positive relationship between attitudes towards digital technology and instructional supervision skills highlights the critical role of digital technology in enhancing teachers' supervisory capabilities. The analysis also revealed that technical, ethical, and attitudinal aspects of digital technology significantly predict instructional supervision skills. These findings suggest that a comprehensive approach to enhancing attitudes towards digital technology can improve teachers' supervision skills. The study's results provide empirical evidence supporting the positive impact of digital technology attitudes on instructional supervision skills, emphasizing the need for ongoing professional development and support initiatives.

7. RECOMMENDATIONS

Based on the findings, the study recommends that educational leaders invest in leadership training and professional development programs that focus on enhancing digital technology attitudes. These programs should be designed to address technical, ethical, and attitudinal aspects of digital technology to maximize their positive impact on instructional supervision skills. Schools should create a supportive environment that encourages continuous professional growth for teachers. Regular evaluations of digital technology attitudes and instructional supervision practices are essential to ensure their effectiveness and address areas for improvement. Future research should explore other potential mediators and the long-term effects of these variables on educational outcomes. Additionally, qualitative studies or mixed methods research could provide deeper insights into the experiences and perspectives of teachers and school heads regarding digital technology and instructional supervision. Implementing these recommendations can help create a sustainable

model for improving digital technology attitudes and enhancing the instructional supervision skills of teachers, ultimately leading to better educational outcomes.

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