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The Mediating Effect of School Identity on Teaching Confidence and ICT (Information and Communication Technology) Implementation Capability of Secondary School Teachers

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Abstract. The current study aimed to evaluate whether school identity mediates the relationship between teaching confidence and the ICT implementation capability of secondary school teachers. In this study, the researcher selected 205 secondary school teachers in Cluster 3 in Davao City as the respondents of the study. A stratified random sampling technique was utilized in the selection of the respondents. A non-experimental quantitative research design using a descriptive-correlational method was employed. The data collected were subjected to the following statistical tools: Mean, Pearson Moment Product Correlation, and Sobel z-Test. Findings revealed that teaching confidence and school identity were described as extensive. In contrast, the ICT implementation capability of secondary school teachers in Cluster 3 in Davao City was rated as moderately extensive. Further, correlation analysis demonstrated a significant relationship between teaching confidence, ICT implementation capability of secondary school teachers, and school identity in Cluster 3 in Davao City. Evidently, the Sobel z-test proved that school identity partially mediated the relationship between teaching confidence and ICT implementation capability of secondary school teachers in Cluster 3 in Davao City. In other words, school identity is a significant mediator in the relationship between teaching confidence and the ICT implementation capability of secondary school teachers in Cluster 3 in Davao City.

KEY WORDS

1. teaching confidence 2. ICT implementation capability 3. school identity

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1. Introduction

Information and Communications Technology (ICT) has gone through innovations and transformed our society that has changed the way people think, work and live. As part of this, schools and other educational institutions that was supposed to prepare students to live in a knowledge society need to consider ICT implementation in their curriculum. In conjunction with preparing students for the current digital era, teachers were key players in the use of ICT in their daily classrooms. This is due to the capability of ICT to provide a dynamic and proactive teaching-learning environment. However, teachers are confronted with many challenges in how to integrate ICT into their teaching. Teachers seem to be experiencing difficulty in effectively integrating technologies into existing curricula. What could be the reasons for these difficulties? The fundamental issue was whether teachers knew how to use

ICT effectively. Previous studies indicate a significant relationship between school identity, teacher confidence, and ICT implementation capability. For instance, Lucy (2018) found that a school with a strong identity often has a clear educational vision and mission. When this vision is committed to ICT integration, it provides a purpose and direction for teachers to embrace ICT in their teaching practices. A well-defined school identity that prioritizes ICT can allocate resources for teacher training and professional development in this area. Buchanan (2010) proposed that a strong school identity is often built on shared beliefs and values among the school community. When teachers share these values, it can lead to a sense of belonging and confidence in their alignment with the school's educational goals. More so, Gilakjani and Leong (2012) showed that confident teachers are more likely to experiment with new ICT tools and strategies. They are not afraid to try innovative approaches and integrate technology in different ways to enhance their teaching. As described by Giacometti (2005), school identity refers to the unique and distinct characteristics, values, culture, and reputation associated with a particular educational institution. Rossi (2018) found that schools with a different identity often seek teachers who align with their values and vision. This can lead to hiring educators who are experts in specific fields or possess teaching philosophies consistent with the school's identity. According to Djonko-Moore (2015), schools with distinct identities often seek teachers who align with their values and vision. This can lead to hiring educators who are experts in specific fields or possess teaching philosophies consistent with the school's identity. Professional development and training may also be tailored to reinforce this identity. School identity can significantly impact the overall student experience. As Kundu and Ghose (2016) pointed out, teaching confidence is the level of self-assurance and belief in their ability to effectively and positively impact their students' learning and development. Walter (2015), high teaching confidence contributes to creating a positive classroom environment. Students often respond positively to teachers who exude confidence and enthusiasm. They are more willing to take risks in their teaching, trying new approaches and adapting their methods to meet their students' needs better. Adding more, Kıran and Sungur (2012) affirmed that students are more likely to be engaged in the learning process when their teachers display high levels of confidence. This active engagement leads to better educational outcomes. Meanwhile, Roblyer and Doering (2013) reported that teachers with ICT capability can help students develop digital literacy and technology skills, which are essential for the modern workforce. Students benefit from access to a wider range of information and research materials, fostering independent learning and critical thinking. Further, Meel (2016) reported that ICT implementation allows for some differentiation in teaching, enabling teachers to address individual student needs and learning styles better. They can use technology to streamline administrative tasks, such as grading, attendance tracking, and communication with students and parents. Likewise, Mahajan (2016) reported that teachers with moderate ICT capability can participate in ongoing professional development to continuously improve their skills and adapt to changing educational technologies. However, Gul (2014) reported that inadequate use of technology in the classroom can result in lower student engagement. Students may become disinterested in lessons that lack interactive or multimedia elements, potentially leading to decreased motivation to learn. Similarly, Moalosi (2013) reported that poor ICT implementation can restrict the range of learning opportunities available to students. It may prevent access to educational resources, digital tools, and online platforms that could enhance their learning experiences. Students in

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classrooms with poor ICT implementation may have unequal access to educational resources. This digital divide can exacerbate educational inequalities and limit students' access to information and opportunities. Also, Shahzad and Naureen (2017) noted that inadequate ICT use may lead to less effective assessment methods. Teachers may rely on traditional assessment techniques, missing the potential for formative assessments, personalized feedback, and data-driven insights to enhance student learning. While there is existing research exploring the individual relationships between teaching confidence, ICT implementation capability, and school identity among teachers, there was a notable gap in the literature concerning the mediating role of school identity in the context of secondary school teachers' ICT integration. Specifically, the literature lacks comprehensive studies investigating how a strong or weak school identity, as it relates to ICT integration, may mediate or modify the relationship between teachers' self-assessed teaching confidence and their actual ICT implementation capability. Thus, in this context, the researcher felt the need to fill in the research gap by conducting a study in the Philippine setting, particularly in Davao City, using structural equation modeling. Specifically, the researcher used mediation analysis to better understand the role of school identity as a mediator in teaching confidence and the ICT implementation capability of teachers, which is found to be scarce. The present study intends to contribute to the limited body of knowledge regarding the ICT implementation capability of teachers in the context of teachers teaching at the secondary level.

2. Methodology

This section contains the research design, research respondents, research instrument, data gathering procedure, and data analysis.

2.1. Research Design—The researcher made use of quantitative research to gather data ideas, facts, and information related to the study researcher. The researcher specifically made use of the descriptive correlation approach in order to address the problems in the study and achieve its purpose. This approach measures two or more relevant variables and assesses a relationship between or among them (Schmitz, 2012). The relationship between teacher's self-efficacy, technology integration skills, and encouraging school culture was described and examined. Further, the main purpose of the study is to determine the mediating effect of encouraging school culture on the relationship between teacher's self-efficacy and technology integration skills. The survey method was employed using adapted survey questionnaires with a five-point Likert scale.

2.2. Research Respondents—The respondents of the study were the secondary school teachers in Cluster 3, Division of Davao City. In this study, the 205 respondents were selected through a stratified random sampling technique. Stratified random sampling is a method of sampling that involves the division of a population into smaller sub-groups known as strata. According to Shi (2015), in stratified random sampling, or stratification, the strata are formed based on members' shared attributes or characteristics, such as income or educational attainment. Stratified random sampling is appropriate in this study because there is heterogeneity in a population that can be classified with ancillary information. In this study, certain inclusion criteria were implemented in determining the respondents of the study. The primary consideration of this study was to select respon-

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dents who can provide information to achieve the purpose of this study. Hence, only those permanent-regular secondary school teachers, and who voluntarily signed the ICF were given the survey questionnaires. Moreover, the study was delimited only to the nature of the problem based on the research questions, and thus, it did not consider the gender and socio-economic status of the teachers.

2.3. Research Instrument—The study employed questionnaires adapted from different studies and was modified to fit the context of the respondents of this study. The instrument was divided into three parts. The scaling was done by having one-half of the value of 5 as the average cut-off point or the fair level, with a uniform interval of 0.80. Before the administration of the instrument, it was subject to validation by three experts and was revised according to their expert comments. The first part of the instrument concerns the school identity adapted from the study of Giacometti (2005). In the manner of answering the questionnaire, the respondents made use of the 5-Likert scale. The reliability of the new scale obtained Cronbach's alpha value of 0.944 interpreted as excellent, indicating high reliability and consistency among the items. As a guide in determining the extent of school identity, the researcher made use of the range of means, descriptions, and interpretations as presented below:

Range of Mean	**Descriptive Level**	**Interpretation**
4.20 - 5.00	Very Extensive	The school identity is always evident.
3.40 – 4.19	Extensive	The school identity is oftentimes evident.
2.60 – 3.39	Moderately Extensive	The school identity is sometimes evident.
1.80 – 2.59	Less Extensive	The school identity culture is evident.
1.00 – 1.79	Not Extensive	The school identity is never evident.

The second tool was about teaching confidence of secondary school teachers. This questionnaire was adapted from Page, Pendergraft, and Wilson's (2014) questionnaire for technology integration, which consists of 24 statements and was divided into student engagement with an original scale of 0.815, instructional strategies with an original scale of 0.848, and classroom management with an original scale of 0.859 which are quite high. The respondents made use the 5-Likert scale. As a guide in determining the extent of teaching confidence, the researcher made use of the range of means, descriptions, and interpretations as presented below:

The second part of the instrument is concerned with the ICT implementation capability. This questionnaire was adapted from Vannatta and Banister (2009). The respondents made use of the 5-Likert scale. The Cronbach alpha value for the new scale is 0.945, described as excellent, interpreted as reliable, and has internal consistency among items. As a guide in determining the extent of ICT implementation capability, the researcher made use of the range of means, descriptions and interpretations as presented below:

2.4. Data Gathering Procedure—Steps were undergone by the researcher in conducting the study after the validation of the research questionnaire. Permission to Conduct the Study.

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Range of Mean	Descriptive Level	Interpretation
4.20 - 5.00	Very Extensive	The teaching confidence of secondary school teachers is always observed.
3.40 – 4.19	Extensive	The teaching confidence of secondary school teachers is oftentimes observed.
2.60 – 3.39	Moderately Extensive	The teaching confidence of secondary school teachers is sometimes observed.
1.80 – 2.59	Less Extensive	The teaching confidence of secondary school teachers is rarely observed.
1.00 – 1.79	Not Extensive	The teaching confidence of secondary school teachers is never observed.

Range of Mean	Descriptive Level	Interpretation
4.20 - 5.00	Very Extensive	The teachers' ICT implementation capability is always manifested.
3.40 – 4.19	Extensive	The teachers' ICT implementation capability is oftentimes manifested.
2.60 – 3.39	Moderately Extensive	The teachers' ICT implementation capability is sometimes manifested.
1.80 – 2.59	Less Extensive	The technology integration skills are rarely manifested.
1.00 – 1.79	Not Extensive	The technology integration skills are never manifested.

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The researcher secured permission to conduct the study and endorsement from the Dean of the Graduate School in Rizal Memorial Colleges, Inc., Davao City. The endorsement letter from the Dean of the Graduate School was attached to the permission letters to be endorsed by the school's division superintendent and then the principals of the selected public secondary schools in Cluster 3, Davao City. Distribution and Retrieval of the Questionnaire. The researcher proceeded to distribute the research instrument to the respondents after the approval to conduct the study. Upon the distribution of the questionnaires, the benefits of the survey were briefly discussed and explained to the identified respondents of the study. For the administration of the questionnaire, the researcher conducted the survey in a face-to-face manner. The questionnaire was distributed following health protocols such as wearing face masks and face shields and following social distancing. The respondents of the study were given enough testing time for the questionnaires to be finished. After this, the data collected were subjected to quantitative analysis. Collation and Statistical Treatment of Data. After the questionnaire was retrieved, the scores of each respondent were tallied to organize the data per indicator. Then, each score was subjected to descriptive and inferential analysis using SPSS.

2.5. Data Analysis—The following were the statistical tools utilized by the researcher in processing the gathered data: Mean. This was useful in characterizing the school identity, teaching confidence, and ICT implementation capability of secondary school teachers. It was used to supply the answer for objectives 1, 2, and 3. Pearson Product Moment Correlation. It was used in this study to assess the significant relationship among independent (teaching confidence), dependent (ICT implementation capability), and mediating (school identity) variables. It was a statistical measure of the strength of a linear relationship between paired data. In a sample, it is usually denoted by r. Sobel z-Test. It was applied to evaluate the mediating effect of school identity on the relationship between teaching confidence and the ICT implementation capability of secondary school teachers.

3. Results and Discussion

This chapter presents the results generated from the data gathered. It is sequenced based on the objectives of the study as presented in the first chapter. Thus, it presents the extents of teaching confidence and ICT implementation capability of secondary school teachers in Cluster 3, Davao City; and relationship among the variables, and the mediating effect of school identity on the relationship between teaching confidence and ICT implementation capability of secondary school teachers in Cluster 3, Davao City.

Table 1 shows the summary of the extent of teaching confidence of secondary school teachers in Cluster 3, Davao City. As shown in the table, the overall mean of the teaching confidence of secondary school teachers is 3.46 which is described as extensive and interpreted as oftentimes observed. More so, the table indicated that teaching confidence of secondary school teachers in terms of classroom management acquired the highest mean score of 3.53 described as extensive and interpreted as oftentimes observed, while, teaching confidence of secondary school teachers in terms of classroom management got the lowest mean score of 3.41

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described as extensive and interpreted as oftentimes observed. This means that teachers' self-assurance and belief in their ability to effectively and positively impact their students' learning and development is oftentimes observed in Cluster 3 Public Secondary Schools in Davao City. The result agrees with the view of Rath and Nanda (2013) that teachers with high teaching confidence tend to deliver more effective and engaging instruction. They believe in their ability to convey information and facilitate learning effectively. They are more likely to experiment with innovative teaching methods and technologies, which can lead to dynamic and engaging educational practices. This also supports Slaugenhoup's (2016) view that confident teachers have the ability to inspire and motivate students. They serve as role models for self-belief and enthusiasm for learning.

Table 1. Summary on Teaching Confidence of Secondary School Teachers in Cluster 3, Davao City

Statement	**Mean**	**Descriptive Rating**
Student Engagement	3.44	Extensive
Instructional Strategies	3.41	Extensive
Classroom Management	3.53	Extensive
Overall Mean	3.46	Extensive

Table 2 shows the summary of the extent of ICT implementation capability of secondary school teachers in Cluster 3, Division of Davao City. The overall mean of the ICT implementation capability of secondary school teachers in Cluster 3 in Davao City attained a mean score that is 3.37 described as moderately extensive. More so, the table indicates that ICT implementation capability of secondary school teachers in terms of risk-taking behaviors and comfort in technology acquired the highest mean score of 3.49 described as extensive and interpreted as oftentimes observed, while, ICT implementation capability of secondary school teachers in terms of learning engagement got the lowest mean score of 3.49 described as moderately extensive and interpreted as sometimes observed.

Table 2. Summary on ICT Implementation Capability of Secondary School Teachers in Cluster 3, Davao City

Statement	**Mean**	**Descriptive Rating**
Risk-Taking Behaviors and Comfort in Technology	3.49	Extensive
Learning Engagement	3.18	Moderately Extensive
Perceived benefits in using technology in the classroom	3.43	Extensive
Overall	3.37	Moderately Extensive

This means that the ability of educators to effectively integrate technology, such as computers, software, digital resources, and communication tools, into their teaching practices is sometimes manifested in Cluster 3 Public Secondary Schools in Davao City. The result sup-

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ports Knolton's (2014) idea that teachers with moderate ICT implementation capability can provide students with access to digital learning resources, which can supplement and enrich traditional teaching materials. They can incorporate interactive activities and multimedia elements into their lessons, increasing student engagement and understanding of complex topics. This also agrees with the idea of Meel (2016) that moderate ICT implementation allows for some differentiation in teaching, enabling teachers to better address individual student needs and learning styles.

School Identity of Secondary School Teachers in Cluster 3 Davao City

Table 3 shows the extent of school identity of secondary school teachers in Cluster 3, Davao City. The table shows that school identity reflects an overall mean of 3.55, described as extensive and interpreted as oftentimes evident. The mean ratings of the items range from 3.15 to 4.21. The item, believing that work provides a powerful channel to express one's knowledge, ability and creativity reflects a mean rating of 3.15 described as moderately extensive, interpreted as item is sometimes evident. Meanwhile, the item, teaching career is one of the most important activities in my life that I consider shows a mean rating of 4.21, described as very extensive and interpreted as item always evident. Overall, the result suggests that the unique and distinct characteristics, values, culture, and reputation associated with a particular educational institution is oftentimes evident. This is congruent to the view of Kundu and Lata (2017) that school identity shapes the institution's educational philosophy and mission. High schools with a strong identity often have a clear vision of their goals and values, which in turn influence the curriculum and teaching methods they employ. This is also similar to the idea of Rossi (2018) that high schools with a distinct identity often seek teachers who align with their values and vision. This can lead to the hiring of educators who are experts in specific fields or who possess teaching philosophies consistent with the school's identity.

Table 3. School Identity of Secondary School Teachers in Cluster 3, Davao City

Statement	**Mean**	**Descriptive Rating**
Teaching career is one of the most important activities in my life that I consider.	4.21	Very Extensive
Believing that a person is known in society by the work he does.	3.56	Extensive
Believing that work provides a powerful channel to express one's knowledge, ability and creativity.	3.15	Moderately Extensive
Believing that one's work provides the best source of achieving perfection in life.	3.32	Moderately Extensive
Continuing work even if I don't have to work to earn a living, is what I prefer	3.52	Extensive
Mean	3.55	Extensive

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Relationship Between Teaching Confidence, ICT Implementation Capability, and School Identity of Secondary School Teachers in Cluster 3, Davao City

The results of the analysis of the relationship among teaching confidence, ICT implementation capability, and school identity of secondary school teachers in Cluster 3 in Davao City are presented. Bivariate correlation analysis using Pearson Product Moment Correlation was utilized to determine the relationship among the variables mentioned. Table 4 shows that teaching confidence has a significant positive relationship with the ICT implementation capability of secondary school teachers in Cluster 3 in Davao City with a p-value of .000 that is less than .05 level of significance (two-tailed) ($r = .953$, $p < 0.05$). It means that as the extent of the teaching confidence, ICT implementation capability of secondary school teachers also significantly changes. This leads to the rejection of null hypothesis of no significant relationship between teaching confidence and ICT implementation capability of secondary school teachers in Cluster 3 in Davao City. The result supports the idea of Gilakjani and Leong (2012) that confident teachers are more likely to experiment with new ICT tools and strategies. They are not afraid to try innovative approaches and integrate technology in different ways to enhance their teaching. Confidence in using ICT tools allows teachers to manage technology in the classroom more effectively. They can troubleshoot technical issues, ensure smooth operations, and maintain a productive learning environment. On the one hand, the result shows that the relationship between teaching confidence and school identity of secondary school teachers in Cluster 3 in Davao City has a significant positive relationship with a p-value of .00 that is less than the alpha set at .05 ($r = 0.972$ $p < 0.05$). This means that if the extent of teaching confidence changes, the extent of school identity of secondary school teachers also significantly changes. This leads to the rejection of the null hypothesis of no significant relationship between teaching confidence and school identity of secondary school teachers in Cluster 3 in Davao City. This is similar to the view of Schaefer et al. (2012) that a school with a strong identity often fosters a supportive and collaborative culture among teachers. When teachers feel supported by their colleagues and leadership, they are more likely to have confidence in their teaching abilities and willingness to take risks in the classroom. On the other hand, the result shows that the relationship between school identity has a significant positive relationship with the ICT implementation capability of secondary school teachers in Cluster 3 in Davao City with a p-value of .00 that is less than alpha set at .05 ($r = 0.974$ $p<.05$). This means that if the extent of school identity changes, ICT implementation capability of secondary school teachers also significantly changes. This leads to the rejection of the null hypothesis of no significant relationship between school identity and a significant positive relationship with the ICT implementation capability of secondary school teachers in Cluster 3 in Davao City. The findings are congruent with the view of Lucy (2018) that a school with a strong identity often has a clear educational vision and mission. When this vision is committed to ICT integration, it provides a purpose and direction for teachers to embrace ICT in their teaching practices. A well-defined school identity that prioritizes ICT can allocate resources for teacher training and professional development in this area. This equips teachers with the necessary skills and knowledge to effectively use ICT tools in the classroom.

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Table 4. Relationship among Teaching Confidence, ICT Implementation Capability, and School Identity of Secondary School Teachers in Cluster 3, Davao City

Variables	**ICT Implementation Capability**	**School Identity**
Teaching Confidence	0.953**	0.972**
	0.000	0.000
ICT Implementation Capability	1	0.974**
		0.000

**Significant @ p<0.05

Mediating Effect of School Identity on the Relationship Between Teaching Confidence and ICT Implementation Capability of Secondary School Teachers in Cluster 3, Davao City

The mediating effect of school identity (SI) on the relationship between teaching confidence (TC) and ICT implementation capability (ICT) of secondary school teachers in Cluster 3 in Davao City was tested on JASP software using mediation analysis. Results Table 5 shows that the total effect of teaching confidence (TC) as the independent variable on the ICT implementation capability (ICT), which is this study's dependent variable, is significant, is significant as evident in the estimated value of 0.963 and p<0.05. On one hand, it can be seen in the table that the direct effect of teaching confidence (TC) on the ICT implementation capability (ICT) of secondary school teachers in Cluster 3 in Davao City is significant, as indicated by an estimated value of 0.124, p<0.05. Lastly, teaching confidence (TC) on the ICT implementation capability (ICT) with school identity (SI) of secondary school teachers in Cluster 3 in Davao City as a mediator is significant, as indicated by the estimated value of 0.839 and p<0.05. Therefore, the null hypothesis of school identity (SI) does not mediate the relationship between teaching confidence (TC) and ICT implementation capability (ICT) of secondary school teachers in Cluster 3 in Davao City is rejected. Adding, the table indicates the results of the computation of the effect size in the mediation test conducted between the three variables. The effect size measures how much of the effect of teaching confidence (TC) on the ICT implementation capability (ICT) of secondary school teachers in Cluster 3 in Davao City can be attributed to the indirect path. As shown in the figure, the ratio index obtains a value of 0.871 indicating that about 87.10 percent of the total effect of the independent variable on the dependent variable goes through the mediator variable, school identity (SI), and about 12.90 percent of the total effect is either direct or mediated by other variables not included in the model. Through mediation analysis, the mediation model was shown in Figure 2 was generated. The significant role of school identity (SI) as mediator in relationship between relationship between teaching confidence (TC) and ICT implementation capability (ICT) of secondary school teachers in Cluster 3 in Davao City is contributed by the fact that there exists a relationship among these variables. It is emphasized in this study that school identity (SI) is an undeniable factor that has a positive relationship between teaching confidence (TC) and ICT implementation capability (ICT) of secondary school teachers in Cluster 3 in Davao City.

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Table 5. Mediating Effect of School Identity on the Relationship Between Teaching Confidence and ICT Implementation Capability of Secondary School Teachers in Cluster 3, Davao City

Effect Type	Path	Estimate	Std. Error	z-value	p-value
Indirect Effect Components	TC → SI → ICT	0.839	0.052	16.281	0.000
Direct Effect	TC → ICT	0.124	0.052	2.390	0.000
Total Effect	TC → ICT	0.963	0.026	58.786	0.000

4. Conclusions and Recommendations

This part of the paper presents the conclusion and recommendation of the researcher. The discussion is supported by the literature presented in the first chapters and the conclusion is in accordance with statements of the problem presented in this study.

4.1. Findings—The primary objective of this study was to determine the mediating effect of knowledge organization skills on the teachers' classroom assessment practices and students' learning engagement utilizing non-experimental quantitative design using structural equation modeling through mediation analysis. The researcher selected the 205 secondary school teachers in Cluster 3 in Davao City as the respondents through a random sampling method. The researcher made use of modified and enhanced adapted survey questionnaires, which were pilot-tested in a nearby school to ensure high reliability and internal consistency of the items in the instrument. Based on the results the summary of the findings was the following: The teaching confidence of secondary school teachers in Cluster 3 in Davao City has an overall mean of 3.46 with an extensive descriptive rating. Also, teaching confidence of secondary school teachers in terms of student engagement, instructional strategies, and classroom management obtained the mean scores of 3.44, 3.41, and 3.53, respectively. ICT implementation capability of secondary school teachers in Cluster 3 in Davao City has an overall mean of 3.37 with a moderately descriptive rating. Also, ICT implementation capability of secondary school teachers in terms of risk-taking behaviors and comfort in technology; learning engagement; and perceived benefits in using technology in the classroom obtained the mean scores of 3.49, 3.18, and 3.43, respectively. Moreover, school identity in Cluster 3 Public Secondary Schools in Davao City has an overall mean of 3.55 with a descriptive rating of extensive. On one hand, the result showed teaching confidence has a significant positive relationship with the ICT implementation capability of secondary school teachers in Cluster 3 in Davao City with a p-value of .000 that is less than .05 level of significance (two-tailed) ($r = .953$, $p<0.05$). On the one hand, teaching confidence has a significant positive relationship with the school identity with a p-value of .000, which is less than the .05 level of significance (two-tailed) ($r = .972$, $p<0.05$). On the other hand, school identity has a significant positive relationship with the ICT implementation capability of secondary school teachers in Cluster 3 in Davao City with a p-value of .000 that is less than .05 level of significance (two-tailed) ($r = .974$, $p<0.05$). On the other hand, school identity mediates the relationship between teaching confidence and ICT implementation capability of secondary school teachers in Cluster 3 in Davao City. The analysis ob-

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tained the estimates value of 0.839 with p<0.05, 0.124 with p<0.05, and 0.963 with p<0.05 for indirect, direct, and total effects, respectively. Moreover, the ratio index obtains a value of 0.871 indicating that about 87.10 percent of the total effect of the independent variable on the dependent variable goes through the mediator variable, and about 12.90 percent of the total effect is either direct or mediated by other variables not included in the model.

4.2. Conclusions—Based on the findings of this study and within the limitations and restrictions (such as the survey questionnaire and number of participants), several conclusions are generated: The teaching confidence of secondary school teachers in Cluster 3 in Davao City is extensive. The confidence of secondary school teachers in terms of student engagement, instructional strategies, and classroom management was rated as extensive. This indicates that the teachers' self-assurance and belief in their ability to effectively and positively impact their students' learning and development is often observed. The ICT implementation capability of secondary school teachers in Cluster 3 in Davao City was moderately extensive. The ICT implementation capability of secondary school teachers in terms of risk-taking behaviors comfort in technology and perceived benefits in using technology in the classroom were rated as extensive, while the ICT implementation capability of secondary school teachers in terms of learning engagement was rated as moderately extensive. This implies that the ability of educators to effectively integrate technology, such as computers, software, digital resources, and communication tools, into their teaching practices is sometimes manifested. School identity in Cluster 3 Public Secondary Schools in Davao City was extensive. This means that the unique characteristics, values, culture, and reputation associated with a particular educational institution are often evident. Teaching confidence has a positive significant relationship with school identity and the ICT implementation capability of secondary school teachers in Cluster 3 in Davao City. Also, school identity has a positive significant relationship with the ICT implementation capability of secondary school teachers in Cluster 3 in Davao City. School identity mediates the relationship between resource management strategies of school principals and teachers' cooperation in Cluster 3, Davao City. This affirmed that structural management is an undeniable factor that contributed to the relationship between teaching confidence and the ICT implementation capability of secondary school teachers in Cluster 3 in Davao City. This affirmed that school identity is an undeniable factor that has a positive relationship between teaching confidence and the ICT implementation capability of secondary school teachers.

4.3. Recommendations—Department of Education (DepEd) may ensure that schools have the necessary technological infrastructure, including access to high-speed internet and up-to-date devices. Address the digital divide by providing resources to underserved areas. Adding more, DepEd should develop clear and comprehensive policies that outline expectations for ICT integration in schools. These policies should provide guidelines, standards, and support mechanisms. School principals may promote a school culture that values and supports the effective use of ICT. They should encourage experimentation and innovation among teachers and provide the necessary resources and support. They should demonstrate a commitment to ICT by integrating it into administrative processes and communication with staff, students, and parents. By embracing technology, they should set an example for teachers. Teachers may embrace a growth mindset and be open to learning and adapting to new technologies. They should participate in professional development opportunities and seek out resources for improving their ICT skills. Moreover, teachers should regularly reflect on their

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teaching practices, including their use of technology. They should consider how technology can enhance their lessons and make adjustments as needed. Future researchers may conduct research on best practices for enhancing teaching confidence, ICT implementation, and school identity. They should identify strategies and interventions that have the most significant positive impact. Moreover, researchers should conduct further analysis on the factors that may contribute to the relationship between teaching confidence and ICT implementation capability of secondary school teachers since only 87.10 percent of the total effect of the independent variable on the dependent variable goes through the mediator variable.

5. References

Abdi, S., Taban, S., & Ghaemian, A. (2012). Cognitive emotion regulation questionnaire: Validity and reliability of persian translation of cerq-36 item. *Procardia-Social and Behavioral Sciences*, *32*, 2–7. https://core.ac.uk/download/pdf/82563710.pdf

Abdullah, B., & Singh, K. (2019). Social support as predictor of student engagement among secondary school students. *International Journal of Innovative Technology and Exploring Engineering*, *8*(7), 3037–3042. https://www.ijitee.org/wp-content/uploads/papers/v8i7/G5687058719.pdf

Abdullah, Z. D., Ziden, A. B., Aman, R. B., & Mustafa, K. I. (2015). Students' attitudes towards information technology and the relationship with their academic achievement. *Contemporary Educational Technology*, *6*(4), 338–354. https://files.eric.ed.gov/fulltext/EJ1105658.pdf

Abedalaziz, N., Jamaluddin, S., & Leng, C. H. (2013). Measuring attitudes toward computer and internet usage among postgraduate students in malaysia. *The Turkish Online Journal of Educational Technology*, *12*(2), 200–216. http://www.tojet.net/articles/v12i2/12219.pdf

Aboshady, O. A., Radwan, A. E., Eltaweel, A. R., Azzam, A., Aboelnaga, A. A., & Hashem, H. A. (n.d.). Perception and use of massive open online courses among medical students in a developing country: Multicentre crosssectional study. http://www.ncbi.nlm.nih.gov/pubmed/25564149

Adodo, S. (2012). A predictive study of pre-service teachers' gender, self-concept, interest and attitude towards interactive computer technology (icts) in nigeria universities faculties of education. *Journal of Educational and Social Research*, *2*(3), 145–150. https://www.semanticscholar.org/paper/A-Predictive-Study-of-Pre%E2%80%93Service-Teachers%E2%80%99-Gender%2C-Adodo/1a7769284375892f3dedab113b555d8ea46a6ee4

Al Bataineh, M., & Anderson, S. (2015). Jordanian social studies teachers' perceptions of competency needed for implementing technology in the classroom. *Contemporary Educational Technology*, *6*(1), 38–61. https://files.eric.ed.gov/fulltext/EJ1105608.pdf

Alenezi, A. R., Abdul Karim, A. M., & Veloo, A. (2010). An empirical investigation into the role of enjoyment, computer anxiety, computer self-efficacy and internet experience in influencing the students' intention to use e-learning: A case study from saudi arabian governmental universities. *The Turkish Online Journal of Educational Technology*, *9*(4), 22–34.

ISSN 3028-1261
10.5281/zenodo.11644911/NIJSE.2024

Ali, Q. I. (n.d.). Information technology tools as a key for the development of educational institutions. https://www.coursehero.com/file/p265qou/Students-attitude-towards-IT-and-the-association-with-their-academic/

Allameh, S. M., Alinajimi, S., & Kazemi, A. (2013). The effect of self-concept and organizational identity on organizational citizenship behavior (a case study in social security organization of isfahan city). *International Journal of Human Resource Studies*, *2*(1), 175–187. http://citeseerx.ist.psu.edu/viewdoc/download?doi=10.1.1.685.1895&rep=rep1&type=pdf

Alufohai, P. J., & Akinlosotu, T. N. (2016). Knowledge and attitude of secondary school teachers towards continuous assessment practices in esan central senatorial district of edo state. *Journal of Education and Practice*, *7*(10), 71–78. https://files.eric.ed.gov/fulltext/EJ1099655.pdf

Archana, K., & Chamundeswari, S. (2013). Self-concept and academic achievement of students at the high school. *Journal of Sociological Research*, *4*, 105–113. http://shodhganga.inflibnet.ac.in/jspui/bitstream/10603/77888/12/13_bibliography.pdf

Aye, E. N., Agbangwu, R., Oforka, T. O., Onumonu, J. A., Chinweuba, N. H., Ohia, N. C., Eze, C. O., Eze, N. E., & Akaneme, I. N. (2019). Family variables as predictors of self-concept and academic achievement of secondary school students in benue state, nigeria. *Global Journal of Health Science*, *11*(8), 86–95. https://pdfs.semanticscholar.org/e5b0/b7b529ea4f1a1160473ae40e490885a5dd15.pdf

Barni, D., Danioni, F., & Benevene, P. (2019). Teachers' self-efficacy: The role of personal values and motivations for teaching. *Frontiers in Psychology*, *10*, 1645. https://doi.org/10.3389/fpsyg.2019.01645

Battersby, S. L., & Cave, A. (2014). Preservice classroom teachers' preconceived attitudes, confidence, beliefs, and self-efficacy toward integrating music in the elementary curriculum. *Applications of Research in Music Education*, *32*(2), 52–59. https://eric.ed.gov/?id=EJ1022366

Beers, J. C. (2012). Teacher stress and coping: Does the process differ according to years of teaching experience? https://core.ac.uk/download/pdf/37772292.pdf

Beheshtifar, M., & Rahimi-Nezhad, Z. (2012). Role of self-concept in organizations. *European Journal of Economics, Finance and Administrative Sciences*, *44*, 159–164. http://www.flexmanager.ir/sites/default/files/download/EJEFAS_44_15.pdf

Briz-Ponce, L., Pereira, A., Carvalho, L., Juanes-Méndez, J. A., & García-Peñalvo, F. J. (2017). Learning with mobile technologies—students' behavior. *Computers in Human Behavior*, *72*, 612–620. https://pubmed.ncbi.nlm.nih.gov/27098779/

Bukhari, S. R., & Afzal, F. (2017). Perceived social support predicts psychological problems among university student. *The International Journal of Indian Psychology*, *4*(2), 18–27. https://ijip.in/articles/perceived-social-support-predicts-psychological-problems-among-university-students/

C., M. (2013). Students' perception of the effectiveness of ict use in improving teaching and learning in surgery. http://www.academia.edu/15192210/Students_Perception_of_the_Effectiveness_of_ICT_use_in_Improving_Teaching_and_Learning_in_Surgery

Caproni, P. (2019). *Practical coach: Management skills for everyday life*. https://www.oreilly.com/library/view/practical-coach-management/0138491429/0138491429_ch02lev1sec6.html

ISSN 3028-1261
10.5281/zenodo.11644911/NIJSE.2024

Cherry, K. (2020). Self-efficacy and why believing in yourself matters. https://www.verywellmind.com/what-is-self-efficacy-2795954

Conner, M., McEachan, R., Taylor, N., O'Hara, J., & Lawton, R. (2015). Role of affective attitudes and anticipated affective reactions in predicting health behaviors. https://pdfs.semanticscholar.org/e416/ce34faea7b2d065503090cc61320184dafad.pdf

Dalanon, J., & Matsuka, Y. (2017). Filipino teachers sense of efficacy in inclusion classes. *Asia Pacific Journal of Research*, *1*(58), 339–343.

Diaz, E. R., Fernandez, A. R., Zabala, A. F., Revuelta, L. R., & ReyBaltar, A. Z. (2016). Perceived social support, self-concept and school involvement of adolescent students. *Journal of Psychodidactics*, *21*(2), 339–356. https://www.redalyc.org/pdf/175/17546156008.pdf

Dörnyei, Z., & Ushioda, E. (2011). *Teaching and researching motivation* (2nd). Longman.

for Research in Child Development, S. (2017). Students' self-concepts of ability in math, reading predict later math, reading attainment. www.sciencedaily.com/releases/2017/09/170919091005.htm

Freire, C., M., F., & Valle, A. (2016). Profiles of psychological well-being and coping strategies among university students. *Frontiers in Psychology*, *7*. https://www-lib-uwo-ca.proxy1.lib.uwo.ca/cgibin/ezpauthn.cgi?url=http://search.proquest.com.proxy1.lib.uwo.ca/docview/1857840004?accountid=15115

Fullmer, M. O. (2016). *Physical activity rates and motivational profiles of adolescents while keeping a daily leisure-time physical activity record*. https://scholarsarchive.byu.edu/cgi/viewcontent.cgi?article=6692&context=etd

García-Grau, P., Pérez, D. A., Moreno, F. C., & Prado-Gascó, V. J. (2014). Self-concept in preadolescence: A brief version of af5 scale. *Motriz, Rio Claro*, *20*(2), 151–157. https://www.scielo.br/pdf/motriz/v20n2/1980-6574-motriz-20-02-00151.pdf

Gerardi, S. (2012). Academic self-concept as a predictor of academic success among minority and low-socioeconomic status students. *Journal of College Student Development*, *31*, 402–407. https://eric.ed.gov/?id=EJ419675

Ghazvini, S. D. (2012). Relationships between academic self-concept and academic performance in high school students. *Procedia Social and Behavioral Sciences*, *15*, 1034–1039. https://core.ac.uk/download/pdf/82473831.pdf

Gilakjani, A. P., & Leong, L. M. (2012). Efl teachers' attitudes toward using computer technology in english language teaching. *Theory and Practice in Language Studies*, *2*(3), 630–636. http://www.academypublication.com/issues/past/tpls/vol02/03/28.pdf

Gul, E. (2014). Efficacy of skill development techniques: Empirical evidence. *Journal of Education and Educational Development*, *1*(2), 134–144.

Halder, S., & Datta, P. (2013). An exploration into self-concept: A comparative analysis between the adolescents who are sighted and blind in india. *British Journal of Visual Impairment*, *30*, 31–41. https://journals.sagepub.com/doi/10.1177/0264619611428202

Han, H., Nelson, E., & Wetter, N. (2014). Medical students' online learning technology needs. *Clinical Teaching*, *11*(1), 15–19. http://www.ncbi.nlm.nih.gov/pubmed/24405913

Harris, M., & Orth, U. (2019). The link between self-esteem and social relationships: A meta-analysis of longitudinal studies. *Journal of Personality and Social Psychology*, *1*, 1–19. https://www.apa.org/pubs/journals/releases/psp-pspp0000265.pdf

ISSN 3028-1261
10.5281/zenodo.11644911/NIJSE.2024

Hickson, R. S. (2016). *The relationship between self-efficacy and teacher's ability to integrate technology*. https://core.ac.uk/download/pdf/75897999.pdf

Igbo, J. N., Onu, V. C., & Obiyo, N. O. (2015). Impact of gender stereotype on secondary school students' self-concept and academic achievement. *SAGE Open*, *5*, 1–10. https://journals.sagepub.com/doi/full/10.1177/2158244015573934

Jennings, L. (2017). *Physical health and physical self-description: A comparison of physical activity electives at middle school level*. https://digitalcommons.humboldt.edu/cgi/viewcontent.cgi?article=1039&context=etd

Kalaivani, M., & Rajeswar, V. (2016). The role of academic motivation and academic self-concept in student's academic achievement. *Internal Journal Research Granthaalayah*, *4*(9), 37–49. http://granthaalayah.com/Articles/Vol4Iss9/05_IJRG16_SE09_05.pdf

Kim, C., Kim, M. K., Lee, C., Spector, J. M., & DeMeester, K. (2013). Teacher beliefs and technology integration. *Teaching and Teacher Education*, *29*, 76–85.

Koné, K. (n.d.). *The impact of performance-based assessment on university esl learners' motivation*. https://core.ac.uk/download/pdf/214121176.pdf

Kurniawan, I. N. (2013). Social self-concept and life satisfaction: A preliminary study on indonesian college students. https://www.researchgate.net/publication/303763162

Lannem, A. M. (2012). *The role of physical exercise as a stress-coping resource for persons with functionally incomplete spinal cord injury* [Doctoral dissertation, Norwegian School of Sport Sciences]. https://nih.brage.unit.no/nih-xmlui/handle/11250/171328

Laryea, J. E., Saan, A. J., & Dawson-Brew, E. (2014). Influence of students self-concept on their academic performance in elmina township. *European Journal of Research and Reflection in Educational Sciences*, *2*(4), 1–10. https://www.idpublications.org/wp-content/uploads/2014/09/INFLUENCE-OF-STUDENTS-SELF-CONCEPT-ON-THEIR-ACADEMIC-PERFORMANCE-IN-THE-ELMINA-TOWNSHIP.pdf

Lawrence, A., & Vimala, A. (2013). Self-concept and achievement motivation of high school students. *Conflux Journal of Education*, *1*(1), 141–146. https://files.eric.ed.gov/fulltext/ED543974.pdf

Lawton, R., Conner, M., & McEachan, R. (2012). Desire or reason: Predicting health behaviors from affective and cognitive attitudes. *Health Psychology*, *28*, 56–65. http://doi:%2010.1037/a0013424

Lee, C., Dickson, D. A., Conley, C. S., & Holmbeck, G. N. (2014). A closer look at self-esteem, perceived social support, and coping strategy: A prospective study of depressive symptomatology across the transition to college. *Journal of Social and Clinical Psychology*, *33*, 560–585. http://dx.doi.org/10.1521/jscp.2014.33.6.560

Lee, T. (2016). *Competition and motivation*. http://merl.nie.edu.sg/documents/Competition%20and%20Motivation.pdf

Leng, K. B. (2012). The relationship between self-concept, intrinsic motivation, self-determination and academic achievement among chinese primary school students. *International Journal of Psychological Studies*, *3*(1), 90–98. http://doi:10.5539/ijps.v3n1p90

Lloyd, H. (2013). The impact of racial identity, masculinity, and academic self-concept of african male high school students. https://uknowledge.uky.edu/cgi/viewcontent.cgi?referer=https://www.google.com/&httpsredir=1&article=1016&context=edp_etds

ISSN 3028-1261
10.5281/zenodo.11644911/NIJSE.2024

Lu, H., Lin, P., & Chen, A. N. (2017). An empirical study of behavioral intention model: Using learning and teaching styles as individual differences. *J. Discrete Math. Sci. Cryptogr.*, *20*, 19–41. https://www.tandfonline.com/doi/abs/10.1080/09720529.2016.1177968

Mahajan, G. (2016). Attitude of teachers towards the use of technology in teaching. https://ndpublisher.in/admin/issues/EQV7N2m.pdf

Mahumoud, A., & Usama, G. (2014). Family predictors of self-concept and self-esteem in children at risk for learning disabilities. *Oman International Education Studies*, *7*, 89–92. https://doi.org/10.5539/ies.v7n10p89

Marri, A. R., Ahn, M., Fletcher, J., Heng, T. T., & Hatch, T. (2012). Self-efficacy of us high school teachers teaching the federal budget, national debt and budget deficit: A mixed-methods case study. *Citizenship, Social and Economics Education*, *11*(2), 105–120.

Marsh, H. W., & Martin, A. J. (2012). Academic self-concept and academic achievement: Relations and causal ordering. *British Journal of Educational Psychology*, *81*, 59–77. https://onlinelibrary.wiley.com/doi/abs/10.1348/000709910X503501

Maulding, J. M. (2013). *Associations between family relationships and self-concept* [Master's thesis]. http://csus-dspace.calstate.edu/bitstream/handle/10211.9/2001/Jennifer%20Maulding%20Thesis_Final.pdf?sequence=1

Nazeri, R. (2016). Relationships between self-concept, self-efficacy, classroom atmosphere and mathematics achievement of iranian high school students. https://core.ac.uk/download/pdf/199242693.pdf

Nier, V. C., Silvio, F. D., & Malone, M. E. (2014). Beliefs about assessment and language learning: Findings from arabic instructors and students. *The NECTFL Review*, *73*, 56–76. https://files.eric.ed.gov/fulltext/EJ1256553.pdf

Olatomide, O. O., & Oluwatosin, S. A. (2014). Class teachers' continuous assessment input in the primary six leaving certificate (pslc) in akoko south-west local government area in ondo state nigeria. *Journal of Psychology and Behavioural Science*, *2*(1), 107–118. http://jpbsnet.com/journals/jpbs/Vol_2_No_1_March_2014/10.pdf

Omeh, G. (2012). Self-concept, academic performance and behavioral evaluation of the children of alcoholic parents. *Revista Brasileria de Psiquiatria*, *27*, 233–226. https://doi.org/10.1590/S1516-44462005000300014

Oscarson, M. (2014). Self-assessment in the classroom. *The Companion to Language Assessment*, *1*, 712–729.

Oye, N., & Iahad, A. (2013). The impact of e-learning on students performance in tertiary institutions. *International Journal of Computer Networks and Wireless Communications*, *2*(2), 121–130. http://eprints.utm.my/id/eprint/33593/

Palomino, M. (2017). An analysis of self-concept in students with compensatory education needs for developing a mindfulness-based psycho-educational program. *SAGE Open*. https://journals.sagepub.com/doi/full/10.1177/2158244017708818

Rady, H., Kabeer, S., & El-Nady, M. T. (2016). Relationship between academic self-concept and students' performance among school age children. *American Journal of Nursing Science*, *5*(6), 295–302. http://article.sciencepublishinggroup.com/html/10.11648.j.ajns.20160506.19.html

ISSN 3028-1261
10.5281/zenodo.11644911/NIJSE.2024

Rashid, K., Iqbal, M. Z., & Khalid, N. (2015). Development of self as a concept in the university students. *Bulletin of Education and Research*, *37*(2), 43–58. https://files.eric.ed.gov/fulltext/EJ1210431.pdf

Rath, S., & Nanda, S. (2013). Adolescent's self-concept: Understanding the role of gender and academic competence. *International Journal of Research Studies in Psychology*, *1*(2), 63–71. http://consortiacademia.org/wp-content/uploads/IJRSP/IJRSP_v1i2/82-283-1-PB.pdf

Spaights, E., Kenner, D., & Dixon, H. (2013). Academic success of black students in white institutions of higher education. *Journal of Instructional Psychology*, *21*(2), 101–111.

Stearns, K. (2017). Relationships between self-concept, teacher expectation, and academic achievement: An analysis of social-emotional well-being and its relation to classroom performance. https://digitalcommons.sacredheart.edu/cgi/viewcontent.cgi?article=1018&context=edl

Taconis, R., & Jochems, W. (2012). Reviewing the relations between teachers' knowledge and pupils' attitude in the field of primary technology education. *International Journal of Technology and Design Education*. https://link.springer.com/article/10.1007/s10798-008-9055-7

Tang, S. (2013). The relationships between self-concept, academic achievement and future pathway of first year business studies diploma students. *International Journal Psychological Studies*, *3*(2), 123–130. http://doi:10.5539/ijps.v3n2p123

Tasir, Z., Mohammad El Amin Abour, K., Abd Halim, N., & Harun, J. (2012). Relationship between teachers' ict competency, confidence level, and satisfaction toward ict: A case study among postgraduate students. *The Turkish Online Journal of Educational Technology*, *11*(1), 138–143. https://files.eric.ed.gov/fulltext/EJ976576.pdf

Thorne, B. (2013). The relationship of family structure to indicators of self-esteem regulation. https://uh-ir.tdl.org/bitstream/handle/10657/421/THORNE-THESIS-2013.pdf?sequence=1

Ugras, M., Ay, K., Altunbas, S., & Cil, E. (2012). Examining of teacher candidates' attitudes to science teaching and self-efficacy related to alternative measurement assessment. *Procedia - Social and Behavioral Sciences*, *47*, 1457–1461.

Ugwanyi, B. E. (2013). Family structure states and transitions: Associations with children's well-being during middle childhood. *Journal of Marriage and Family*, *71*, 575–591. https://doi.org/10.1111/j.1741-3737.2009.00620.x

Walter, O. (2015). Self-efficacy as an accurate predictor of teaching skills. *Journal of Education Research*, *9*(3), 309–322. https://scholarworks.waldenu.edu/cgi/viewcontent.cgi?article=8958&context=dissertations

ISSN 3028-1261
10.5281/zenodo.11644911/NIJSE.2024