Parental Involvement, Socio-Economic Factors, Inclusive Education Practices, and Teacher Digital Competence as Predictors of Teacher Multidimensional Attitude

[1]Elizabeth P. Bacalso

[1]Graduate School Student
[1]Graduate School Department
[1]Holy Cross of Davao College, Davao City, Philippines

Abstract: Teachers' mental, emotional, and behavioral issues raise concerns among teachers. To address this, the model's significance in predicting teachers' multidimensional attitude, using parental involvement, inclusive education practices, socio-economic factors, and teacher digital competence as predictors, is examined. Using a predictive design and multiple regression as the statistical analysis, with 244 participants selected via cluster sampling, the model explaining 45.2% of the variance in teachers' multidimensional attitude, driven by parental involvement, inclusive education practices, socio-economic factors, and teacher digital competence, is found significant, thereby partially affirming the Ecological Systems Theory. Further research—particularly qualitative studies—is recommended to explain the remaining 55.8% of the model's variance, deepen understanding of Ecological Systems Theory in education, and guide institutions in strengthening socio-economic support and teacher digital competence to prevent mental, emotional, and behavioral problems in the implementation of inclusive education.

Index Terms **- Parental involvement, socio-economic factors, inclusive education practices, digital competence, predictors of teacher multidimensional attitude**

I. INTRODUCTION

1.1 The Problem and Its Scope

Globally, teachers' low multidimensional attitudes have emerged as a central concern in educational research, with studies noting the mental health, behavioral functioning, and emotional equilibrium are unexpectedly low (Kurrle & Warwas, 2023).

In European, Asian, and North American countries, conceptual reviews have shown that some educators report low multidimensional attitudes. These findings suggest that low mental, emotional, and behavioral attitudes among teachers are present in various countries (Kurrle & Warwas, 2023). In Chile, research found that teachers reported low levels of mental, emotional, and behavioral well-being (Paudel et al., 2024).

In the Philippine context, the issue of low mental, emotional, and behavioral aspects of the multidimensional attitudes of the teachers has also been recognized as a nuanced problematic situation in educational research. Recent systematic reviews of teacher multidimensional attitude show moderate to low levels (Nwoko et al., 2023). Thus, low levels of reported mental, emotional, and behavioral attitudes in Filipino teachers are increasingly considered a problematic phenomenon.

The problematic low levels of mental, emotional, and behavioral attitudes among teachers carry significant consequences for education systems. Empirical research indicates that typically low attitude levels, when interpreted alongside teacher multidimensional attitude indicators, can be associated with reduced occupational commitment, diminished quality of teacher–student interactions, and lower instructional engagement, which may ultimately affect student learning experiences and educational outcomes (Chan, 2024). These consequences being mentioned prompted the urgency of this research.

1.2 Significance of the Study

By investigating the teacher multidimensional attitude and promoting positive perspective in inclusivity, the study contributes to the development of the teachers' mental, emotional and behavioral aspects of attitude drawing insights from parental involvement, inclusive education practices, socio-economic factors, and teacher digital competence as they implement inclusive education, strengthening support system in the country, and fostering an excellent academic institution at Panabo City Division.

1.3 Statement of the Problem

The purpose of the study is to determine whether parental involvement, inclusive education practices, socio-economic factors, and teacher digital competence significantly predict teacher multidimensional attitude in inclusive education. The study specifically ascertains the following goals:

1.3.1 The levels of Parental Involvement in terms of parental actions, role of teachers, role of principals, and perceived challenges; Socio-Economic Factors in terms of family income, material resource, peer attitude, and religious belief; Inclusive Education Practices in terms of community development and inclusive value development; Teacher Digital Competence in terms of basic digital competence and advanced digital competence, and Teacher Multidimensional Attitude in terms of cognitive aspect of attitudes, affective aspect of attitudes, and behavioral aspect of attitudes.

1.3.2 The significant correlation between parental involvement, socio-economic factors, inclusive education practices, teacher digital competence, and teacher multidimensional attitude.

1.3.3 The significance of the model for predicting teacher multidimensional attitude using parental involvement, socio-economic factors, inclusive education practices, and teacher digital competence as predictors.

1.4 Hypotheses

To address the problem of the study, the hypotheses will be confirmed with a 0.05 degree of significance:

H01: Parental Involvement, Inclusive Education Practices, Socio-Economic Factors, and Teacher Digital Competence don't significantly correlate with Teacher Multidimensional Attitude.

H02: The model for predicting Teacher Multidimensional Attitude using Parental Involvement, Socio-Economic Factors, Inclusive Education Practices, and Teacher Digital Competence as predictors, is not significant.

1.5 Theoretical and Conceptual Framework

The study is guided by Urie Bronfenbrenner's Ecological Systems Theory (1992), this proposes that development occurs within the nested structures: the immediate environments as **microsystem**, the associations between the immediate surroundings known as **mesosystem**, the outside atmospheres that influence the child, which is referred to as the exosystem, the wider cultures, laws, and beliefs as **macrosystem**, and the transitions of time as **chronosystem**.

Central to the theory is the idea of reciprocal interaction: individuals both influence and are influenced by these environmental systems, and development results from the dynamic, interconnected relationships that emerge over time (Bronfenbrenner, 2005).

In the study the Parental Involvement as predictive variable, indicated by the indicators namely, the parental actions, the role of teachers, the role of principals, and the perceived challenges (Hyassat et al., 2024), stands for **microsystem** stated in the theory; Socio-Economic Factors indicated by the family income, the material resource, the peer attitude, and the religious belief (Mutua, 2016), are used for **mesosystem**; the Inclusive Education Practices as another predictor indicated by community development and inclusive value development (Yassin et al., 2023), are used for **exosystem**; the Teacher Digital Competence as another predictor indicated by basic digital competence and advanced digital competence (Brazal et al., 2022), are used for **chronosystem,** and finally Teacher Multidimensional Attitude indicated by cognitive, effective, and behavioral (Mahat, 2008), stands for **human development.**

This study was delimited on Parental Involvement, Inclusive Education Practices, Socio-Economic Factors, and Teacher Digital Competence as emphasized in Ecological Systems Theory. The broader cultural values, laws, and societal beliefs, or macrosystem, were excluded.

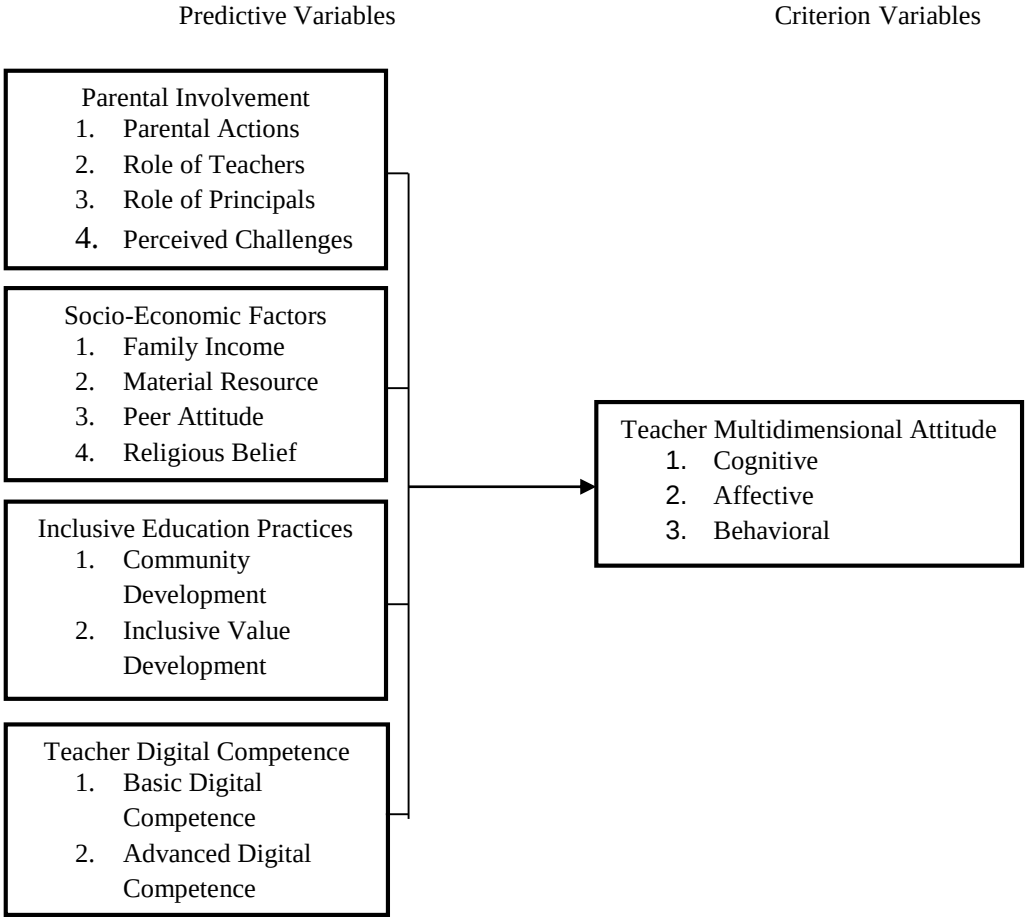

Figure 1. Conceptual Framework of the Study

II. RESEARCH METHODOLOGY

The predictive design, the study site, the samples, the sampling techniques, the data-gathering techniques, the data analysis technique, and the ethical considerations are all covered in this chapter.

2.1 Research Design

Predictive design, specifically regression analysis, was used in this investigation. This design is used to examine the association between predictive variables and the criterion variable simultaneously. It ascertains if predictors alone or in combination help to explain changes in the outcome variable. It helps researchers move beyond simple associations and obtain more realistic, comprehensive models of real-world relationships. For instance, multiple regression analysis extends simple linear regression to accommodate multiple predictors, thereby enhancing the ability to understand and predict outcomes based on several contributing factors (Ruan, 2024; McGibney, 2023).

2.2 Study Locale

The research was carried out in Panabo City, Davao del Norte, Philippines. This town has 40 barangays situated at approximately 7° 18' North, 125° 41' East, on the island of Mindanao. Elevation at these coordinates is estimated at 6.5 meters or 21.3 feet above mean sea level according to PhilAtlas (2018-2026).

2.3 Sample and Sampling Technique

Teachers involved in the study were the educators in Panabo City Division's inclusive educational programs. A total of 244 regular or receiving teachers from elementary and secondary schools were selected from the overall teacher population.

Data was collected using a cluster sampling technique. The samples are divided into naturally occurring clusters; some of these clusters are randomly selected, and data are collected from samples within the selected clusters (Creswell & Creswell, 2018).

Cluster sampling generally follows these steps: identify the target population, define the entire population to which the study intends to generalize, divide the population into clusters, group members into naturally existing clusters (e.g., South 1; South 2, North, Central), select clusters randomly, and use a random sampling or systematic sampling.

Hence, in this study, 49 teachers were selected from South 1, South 2, South, Central, and secondary schools using convenience sampling. Teachers from schools known by the researchers were invited; the first 49 to commit were immediately included as respondents.

2.4 Data Gathering Technique

This study used a survey questionnaire, designed to elicit respondents' attitudes, perceptions, experiences, behaviors, or characteristics. It is commonly used to collect standardized data from a defined population and can be administered in paper, online, or electronically (Creswell & Creswell, 2018). The process of conducting a survey typically involves the following steps: define the research objectives, develop the questionnaire items, establish validity and reliability, select the sample, implement the questionnaire, gather and analyze data, interpret the findings, and report the findings.

Five adapted and modified survey questionnaires were used in this research. First, was about the parental involvement in an inclusive education (Hyassat et al., 2024); second, the influence of socio-economic factors on implementation of inclusive education in public primary schools in Kibwezi Sub-County, Makueni County, Kenya (Mutua, 2016); third, the analysis of inclusive education practices in East Java Indonesian preschools (Yasin et al., 2023); fourth, the teacher digital competence and inclusive education at school (Brazal et al., 2022), and fifth, the development of a psychometrically sound instrument to measure teachers' multidimensional attitude toward inclusive education (Mahat, 2008).

Before full-scale administration, the instruments were modified and validated with a scale (Likert-type) with specific indicators. They underwent trial testing with 20 respondents who shared characteristics similar to those of the target population to assess reliability. Feedback from the pilot testing was employed to improve the item clarity, the language appropriateness, and the consistency within. The reliability of the questionnaires was confirmed using Cronbach's alpha, with each tool meeting an acceptable reliability threshold ($\alpha \geq 0.70$), in line with Fraenkel and Wallen's (2012) recommendations.

2.5 Data Analysis Technique

The study carefully utilized and analyzed the data; the techniques used included descriptive statistics, correlational analysis, and multiple regression.

Descriptive data analysis refers to statistical methods used to summarize, organize, and describe the data results. It includes measures such as mean, median, mode, standard deviation, frequencies, percentages, and graphical presentations (e.g., charts and tables). It does not make conclusions beyond the data analyzed (Hayes, 2021). Descriptive statistics, including the mean and standard deviation, were applied to the variable levels.

Scale	Level	Parental Involvement	Inclusive Education Practices	Socio-Economic Factors	Teacher Digital Competence	Teacher Multidimensional Attitude
3.26-4.00	Very high	Very good	Very good	Very good	Very good	Very good
2.50-3.25	High	Good	Good	Good	Good	Good
1.75-2.49	Low	Poor	Poor	Poor	Poor	Poor
1.00-1.74	Very low	Very poor	Very poor	Very poor	Very poor	Very poor

Standard Deviation Value Interpretation:

Range	Description	Interpretation
SD ≤ 0.50	Highly consistent responses	Strong and uniform perception
SD = 0.51 – 1.00	Moderately consistent responses	Acceptable consistency
SD = 1.01 – 1.50	Low consistency responses	Differing views or experiences
SD ≥ 1.50	Very low consistency responses	High variability and lack of consensus

Conversely, correlational analysis is a statistical technique for figuring out how strongly and in which direction two variables are related. It does not imply causation; it only measures association, commonly using correlation coefficients such as Pearson's r (SimplyPsychology, 2023).

For the interpretation of the r-value scale, the following matrix was used, as proposed by Guilford (1956).

Computed r	Descriptive Interpretation
0.90-1.00	Very high or very strong relationship
0.70-0.90	High or strong correlation
0.40-0.70	Moderate correlation
0.20-0.40	Low or small correlation
<0.20	Negligible or very low relationship

To determine the degree of influence and predictive strength, a multiple regression analysis was applied. It is a statistical technique used to examine the relationship between one dependent variable and two or more independent variables. It allows researchers to assess the effect of several predictors simultaneously.

In terms of Scale of Beta (β) Coefficient Strength, the following scheme, as proposed by Cohen (1988) and Hair et al. (2019), was used:

β Value Range	Strength of Relationship
±0.00 – ±0.09	Very weak
±0.10 – ±0.29	Weak
±0.30 – ±0.49	Moderate
±0.50 – ±0.69	Strong
±0.70 and above	Very strong

2.6 Ethical Consideration

This study followed to the ethical standards, informed consent through clear communication of the purpose, methods, and possible risk with voluntary participation, maintaining strict confidentiality and anonymity through secure data storage and removal or coding of identifying information, upholding honesty, and proper citation of sources, safeguarding participants from harm with the freedom to leave any time without consequence, and securing review and approval from SMILE to ensure full compliance with established ethical research norms and standards.

III. RESULTS

The researcher reviewed the summary of findings in this chapter along with the descriptive, correlation, and regression data and their conclusions.

3.1 Descriptive Results

Shown in Table 1 are the descriptive statistical results, the variables involved, namely, parental involvement, inclusive education practices, socio-economic factors, teacher digital competence, and teacher multidimensional attitude, with their respective indicators. Similarly, each variable's samples, standard deviation, mean, and descriptive level are given in the table.

Specifically, the table shows overall parental involvement, with a mean described as very high (M = 3.52; SD = 0.33), suggesting that parents' participation in school is very good. All indicators, including parental involvement actions, the roles of teachers and principals, are very high, except for the perceived challenges indicator, which has a mean rating of high.

Additionally, the table shows that the respondents' total level of inclusive education practices is very high (M = 3.68, SD = 0.41), indicating that they assessed inclusive education practices as very good. All indicators, such as community development and inclusive value development, had very high means.

Table 1: Descriptive Table (n=244

Variables	SD	MEAN	Verbal Description
Parental involvement	**0.33**	**3.52**	**Very High**
Parental actions	0.503	3.39	Very High
Role of teachers	0.37	3.77	Very High
Role of principals	0.41	3.69	Very High
Perceived challenges	0.52	3.23	High
Inclusive education practices	**0.41**	**3.68**	**Very High**
Community development	0.43	3.65	Very High
Inclusive value development	0.45	3.71	Very High
Socio-economic factors	**0.47**	**2.95**	**High**
Family income	0.54	3.10	High
Material resource	0.57	3.03	High
Peer attitude	0.72	3.83	Very High
Religious belief	0.59	2.83	High
Teacher digital competence	**0.46**	**3.39**	**Very High**
Basic digital competence	0.50	3.36	Very High
Advanced digital competence	0.50	3.43	Very High
Teacher multidimensional attitude	**0.42**	**3.04**	**High**
Cognitive aspect of attitude	0.50	3.31	Very High
Affective aspect of attitude	0.79	2.36	Low
Behavioral aspect of attitude	0.53	3.42	Very High

Moreover, the table shows that the respondents demonstrate a high overall level of socio-economic factors (M = 2.95, SD = 0.47), indicating a good socio-economic status. All other indicators are classified as high, with the exception of the peer attitude indicator, whose mean is described as very high.

Furthermore, it shows that the overall digital competence is at a very high level (M = 3.39, SD = 0.46), suggesting that the respondents assessed their digital competence as very good. Both indicators, basic digital and advanced digital competence, obtained a mean described as very high.

Lastly, the statistical results revealed that the respondents had a high level of multidimensional attitude (M = 3.04, SD = 0.42), indicating that they assessed their attitude toward inclusive education as very good. Among its indicators, only the affective aspect of attitude showed a mean indicating a low or poor attitude toward inclusive education.

3.2 Correlation Results

Shown in Table 2 are parental involvement, inclusive education practices, socio-economic factors, and teacher digital competence as predictors, and teacher multidimensional attitude as the criterion variable. Similarly, the interpretation, conclusion regarding the hypothesis, r-value, and p-value are presented. Finally, the correlational results among parent involvement, inclusive education practices, socio-economic factors, teacher digital competence as predictors, and teacher multidimensional attitude as the criterion variable are also denoted.

Table 2. Correlation Table (N=244)

Variables	Teacher Multidimensional Attitude			
	r-value	p-value	Decision on H_0	Interpretation
Parental Involvement	0.395	0.000	Reject H_0	Moderate, positive correlation.
Inclusive Education Practices	0.327	0.000	Reject H_0	Weak to moderately positive correlation
Socio-Economic Factors	0.616	0.000	Reject H_0	Strongest positive correlation
Teacher Digital Competence	0.532	0.000	Reject H_0	Moderate to strong positive correlation

As shown, the null hypothesis was rejected with a 0.05 level of confidence since the correlation between parental involvement and teacher multidimensional attitude yielded a p=value of (p=0.000). The result indicates that the relationship between parent involvement and teacher multidimensional attitude is significant. With the r-value of (r=0.395), such a correlation is moderately positive. Moreover, the correlation between the inclusive education practices and teacher multidimensional attitude obtained a p-value of (p=0.000), the null hypothesis was rejected with a 0.05 degree of confidence, denoting that the correlation is significant. A weak positive association is indicated by the corresponding r-value (r = 0.327).

Furthermore, the correlation between the socio-economic factors and teacher multidimensional attitude obtained a p-value of (p=0.000), the null hypothesis was rejected with a 0.05 degree of confidence. The finding indicates that the correlation between socio-economic factors and teacher multidimensional attitude is significant. With the r-value of (r=0.616), such a correlation is very strongly positive.

Finally, the null hypothesis was rejected with a 0.05 degree of confidence based on the association between teacher digital competence and teacher multidimensional attitude, which had a p=value of (p=0.000). It implies that the correlation between teacher digital competence and teacher multidimensional attitude is significant. With the r-value of (r=0.532), such a correlation is moderately positive.

3.3 Regression Results

The regression table, which includes the criterion variable and predictors, is shown in Table 3. It contains the constant value, parental involvement, inclusive education practices, socio-economic factors, and teacher digital competence as predictive variables. The teachers' multidimensional attitude, as a criterion variable, includes the standardized beta coefficients, the standard errors, the unstandardized beta coefficients, the t-values, the p-values, the null hypothesis's decision, and their corresponding interpretations.

Table 3. Multilinear Regression Table

Variables	Teacher Multidimensional Attitude						
	Unstandardized β Coefficient		Standardized β Coefficient				
	β	Std. Error	β	T	Sig.	Decision on H_0	Interpretation
Constant	0.889	0.221	-	4.031	.000		
Parental Involvement	0.028	0.086	0.022	0.321	.749	Failed to reject H_0	Not Significant
Inclusive Education Practice	-9.033	0.071	-0.033	-0.471	.638	Failed to reject H_0	Not Significant
Socio-Economic Factors	0.408	0.052	0.463	7.85	.000	RejectH_0	Significant
Teacher Digital Competence	0.286	0.0582	0.318	4.91	.000	RejectH_0	Significant

Model Summary:
$R = 0.672$, $R^2 = 0.452$, Adjusted $R^2 = 0.443$, $p = 0.000$
Level of Significance = 0.05
Decision rule: If $p < 0.05$, reject H0
TMA=0.028PI-9.033IEP+0.408SEF+0.286TDC+0.889

Specifically, the table shows that the model for teacher multidimensional attitude is (TMA=0.028PI-9.033IEP+0.408SEF+0.286TDC+0.889). With a p=value of (p=0.000), this prediction model of teacher multidimensional attitude is significant with a 0.05 degree of confidence. Furthermore, with $R^2 = 0.452$, the predictive model collectively accounts for 45.2% of the variance in teacher multidimensional attitude.

3.4 Summary of Findings

Based on the statistical results, it was specifically found that:

3.4.1 Parental Involvement, Inclusive Education Practices, Socio-Economic Factors, and Teacher Digital Competence significantly correlate with Teacher Multidimensional Attitude.

3.4.2 The model predicting Teacher Multidimensional Attitudes using Parental Involvement, Socio-Economic Factors, Inclusive Education Practices, and Teacher Digital Competence as predictors is significant.

IV. DISCUSSIONS

The findings of the study's multilinear regression and correlational analysis are presented in this chapter. The discussions aim to highlight how the study's results support previous findings. Furthermore, the results and discussions are also presented with a conclusion and recommendations

4.1 Correlation of Parental Involvement, Inclusive Education Practices, Socio-Economic Factors, Teacher Digital Competence with Teacher Multidimensional Attitude

The present finding affirms the core assumptions of the Ecological Systems Theory, emphasizing that high parental involvement, inclusive education practices, socio-economic factors, and teacher digital competence affect teacher multidimensional attitude toward inclusive education. In a large-scale study on teacher effectiveness, parental engagement was found to positively correlate with teachers' attitudes toward student diversity and inclusion, suggesting that active parental collaboration fosters more empathetic, multidimensionally responsive teaching. Furthermore, inclusive education practices significantly shaped teachers' beliefs, promoting positive attitudes toward acceptance and adaptive pedagogy to accommodate individual learner differences (Lopez & Serrano, 2023).

Similarly, it affirms that socio-economic and teachers' digital competence strongly influence teachers' professional outlook and multidimensional attitudes. Teachers from socioeconomically supportive environments with higher levels of digital literacy exhibited more positive perceptions of inclusion, participation, and learner engagement. The study concluded that the interplay among these variables enhances teachers' capacity to integrate inclusive teaching methods through technology-supported learning (Rahman, Karim, & Hassan, 2024).

In contrast, the present finding objects to a study investigating non-Special Education teachers' knowledge, attitudes, and practices in inclusive classrooms, which reported no significant correlation between teacher attitude and inclusive education

practices in its sample of 30 teachers, even though knowledge and practice did correlate (Paculanang et al., 2025). Additionally, this current finding contradicts evidence from parental involvement research showing that high levels of reported parental engagement do not always correlate significantly with measurable academic or teacher attitude outcomes, suggesting that the relationships between parental involvement and teacher attitudes are not universally significant across contexts (Ianniello et al., 2023).

4.2 The Model to Predict Teacher Multidimensional Attitude using Parental Involvement, Inclusive Education Practices, Socio-Economic Factors, and Digital Competence

The finding of this current study stating that the model involving parental involvement, inclusive education practices, socio-economic factors and teacher digital competence to predict teacher multidimensional attitude resonates with the research on teachers' inclusive attitudes showed that a multiple regression model including factors such as school environment, teachers' experience with students with disabilities, and continuing professional training significantly predicted teachers' multidimensional inclusive attitudes, with the overall model yielding a significant F-statistic ($p < .001$), indicating that a combination of predictors meaningfully explained teachers' attitudinal variance toward inclusion (Jurca, 2023). Although this study did not explicitly include parental involvement and socio-economic factors, it aligns conceptually with prior findings by showing that models combining multiple contextual and competence-related predictors can significantly predict teacher multidimensional attitude (Jurca, 2023).

Additionally, the model found to be significant in this current study supports the previous finding showing that attitudes and digital competence are strong predictors of educational outcomes and behaviors in the integration of technology in the classroom (Paetsch et al., 2024).

Meanwhile, a study using a relatively small sample found that attitudes toward inclusive education were moderate to favorable, without accounting for predictors such as socio-economic factors or digital competence, and did not fully explain multidimensional attitudes in inclusive contexts (Calumpang et al., 2025). This finding was categorically denied.

4.3 Conclusion

The model's strength (45.2%) for teacher multidimensional attitude, including parental involvement, inclusive education practices, socio-economic factors, and teacher digital competence as predictors, is shown to be significant based on the data. Hence, the Ecological Systems theory is partially affirmed, stating that the **microsystem** (immediate environment), the **mesosystem** (immediate settings), the **exosystem** (external environments), and the **chronosystem** (dimension of time) predict an individual's development.

4.4 Recommendation

Therefore, it is recommended to conduct more studies to identify the missing 55.8% of the variance in the model's predictive strength for teacher multidimensional attitude in inclusive education. A qualitative study is also advised to explore additional emerging themes and subthemes that may further verify and enrich the Ecological Systems Theory in educational research. Educational institutions and organizations are encouraged to initiate training and other activities that strengthen socio-economic factors and teacher digital competence to prevent mental, emotional, and behavioral problems among teachers in inclusive education.

Acknowledgements

The researcher would like to express her deepest gratitude to all the individuals who, in one way or another, contributed to the successful completion of this study.

First and foremost, she would like to acknowledge the members of the panel for their time, effort, and constructive recommendations: Dr. Hazel Jade Huliganga, panel chairperson; Dr. Giovani Montejo, panel member; and Dr. Bryan Lee Cancio, panel member. Their professional insights and suggestions significantly enhanced the rigor and depth of this study.

The researcher is profoundly thankful for Dr. Reynaldo O. Cuizon, Dean of the Graduate School of The Holy Cross of Davao College for his invaluable technical reading and insightful comments that greatly improved the quality and clarity of this manuscript.

Special thanks are extended to Dr. Ronald Decano, her research adviser, for his guidance, expertise, and continuous support throughout the entire research process.

The researcher likewise expresses her sincere gratitude to Dr. John Rodolfh C. Zaspa for his meticulous work as the manual editor, ensuring that the manuscript adheres to the required academic standards.

Moreover, she offers her thanks to her beloved family, whose love, encouragement, and unwavering belief in her abilities served as her greatest inspiration throughout the course of this research.

Also, she extends her sincere appreciation to her husband, Engr. Edralin P. Bacalso for his constant moral support, patience, and encouragement that motivated her to persevere and complete this undertaking.

Above all, the researcher gives thanks to the Almighty Father for the guidance, strength, and wisdom that made the completion of this research possible.

REFERENCES

[1] Brazal, I. K., Monje, P. M. M., & Urrutxi, L. D. (2022). Teachers' digital competence and inclusive education at school: An analysis of teacher attitudes. Cypriot Journal of Educational Sciences, *17*(9), 3314-3326.

[2] Bronfenbrenner, U. (2005). Ecological systems theory (1992)

[3] Burak, Y., Ahmetoglu, E., & Gumus, S. S. (2026). Teachers' attitudes towards inclusion and views on self-efficacy and classroom practices regarding inclusive education. Journal of Research in Special Educational Needs, *26*(1), e70047.

[4] Calumpang, Z. D. (2025). REVOLUTIONIZING INDUSTRIES: THE IMPACT OF EMERGING TECHNOLOGIES. International Journal of Applied Mathematics, 38(3s), 361-372.

[5] Chan, S. W. (2024). Teachers' occupational well-being in relation to teacher–student interactions in lower secondary schools. Educational Research Journal.

[6] Cohen, J. (1988). Set correlation and contingency tables. Applied psychological measurement, *12*(4), 425-434.

[7] Creswell, J. W., & Creswell, J. D. (2018). Research design: Qualitative, quantitative, and mixed methods approaches (5th ed.). SAGE Publications.

[8] Fraenkel, J. R., & Wallen, N. E. (2012). How to design and evaluate research in education (8th ed.). McGraw-Hill Education.

[9] Franz, S., Fackler, S., & Paetsch, J. (2024). Profiles of pre-service teachers' personality traits and cognitive abilities: relations with graduation and teacher self-efficacy. European Journal of Teacher Education, 47(4), 638-657.

[10] Gutang, C., Bacang, A. G., & Calumpang, E. (2025). The Roles of Stakeholders in Attaining Students' Reading Proficiency in English. Journal of Interdisciplinary Perspectives, 3(9), 599-611.

[11] Guildford, M. B., C. B. Bolton, U. D. Worsley, C. B. Blackpool, C. B. Manchester, M. B. Radcliffe, C. B. Liverpool, C. B. Sheffield, and C. B. Bradford. "528 MARCH 3, 1956 VITAL STATISTICS." (1956).

[12] Hair, J. F., Risher, J. J., Sarstedt, M., & Ringle, C. M. (2019). When to use and how to report the results of PLS-SEM. European business review, 31(1), 2-24.

[13] Hayes, A. (2021). Descriptive statistics definition. Overview, Types, and Examples. Investopedia. URL: https://www. investopedia. com/terms/d/descriptive_statistics. asp (дата звернення: 21.11. 2024).

[14] Hyassat, M., Al-Bakar, A., Al-Makahleh, A., & al-Zyoud, N. (2024). Special education teachers' perceptions of parental involvement in inclusive education. Education Sciences, 14(3), 294.

[15] Ianniello, A., Alodat, A. M., & Corona, F. (2023). Teachers' personal values and attitudes toward inclusive education: A correlational study. International Journal of Inclusive Education.

[16] Jurca, A. M., Baciu, D., Lustrea, A., Sava, S., & Borca, C. V. (2023). Exploring attitudinal dimensions of inclusive education: Predictive factors among Romanian teachers. Education Sciences, 13(12), 1224.

[17] Kurrle, L. M., & Warwas, J. (2023). Teacher well-being—A conceptual systematic review (2020–2023). Education Sciences, 15(6), 766.

[18] Lopez, J. M., & Serrano, P. R. (2023). Parental involvement and inclusive education practices as determinants of teachers' attitudes toward learner diversity. European Journal of Education Research, 12(4), 987–1002. https://doi.org/10.12973/eu-jer.12.4.987

[19] Mahat, M. (2008). The Development of a Psychometrically-Sound Instrument to Measure Teachers' Multidimensional Attitudes toward Inclusive Education. International journal of special education, 23(1), 82-92.

[20] McGibney, D. P. (2023). Applied Linear Regression for Business Analytics with R. International Series in Operations Research and Management Science.

[21] Mutua, C. N. (2016). Influence Of Socio-Economic Factors On Implementation Of Inclusive Education In Public Primary Schools In Kibwezi Sub County, Makueni County, Kenya (Doctoral dissertation, University of Nairobi).

[22] Nwoko, J. C., Emeto, T. I., & Malau-Aduli, B. S. (2023). A systematic review of the factors that influence teachers' occupational well-being. International Journal of Environmental Research and Public Health, 20(12), 6070.

[23] Paculanang, M. R. T., Pinili, L. C., Espina, R. C., Tenerife-Cañete, J. J. L., Capuno, R. G., & Mangubat, R. C. (2025). Inclusive education implementation: Assessing non-SpEd teachers' knowledge, attitudes, and practices (IJRISS).

[24] Paudel, N. R., KC, P., Ghimire, R., Nygård, C.-H. N., & Neupane, S. (2024). Occupational burnout and their determinants among schoolteachers in Nepal: A cross-sectional study [Study including Chilean teachers' mental health profiles]. BMC Psychiatry, 24, 472. https://doi.org/10.1186/s12888-024-05923-9

[25] PhilAtlas. (n.d.). Panabo City, Davao del Norte, Philippines – profile and location. Retrieved from https://www.philatlas.com/mindanao/r11/davao-del-norte/panabo.html (PhilAtlas)

[26] Rahman, A., Karim, S. N., & Hassan, R. (2024). Socio-economic factors and digital competence as predictors of teachers' multidimensional attitudes toward inclusion. Teaching and Teacher Education, 138, 104501. https://doi.org/10.1016/j.tate.2024.104501

[27] Ruan, Y., Maddison, C. J., & Hashimoto, T. B. (2024). Observational scaling laws and the predictability of langauge model performance. Advances in Neural Information Processing Systems, 37, 15841-15892.

[28] Science.gov. (2024). Factors influencing teaching: Regression analysis of technology competence and teachers' attitudes. (Unpublished governmental report summary).

[29] Pre-service ICT and TPACK study. (2025). Pre-service teachers' attitudes toward ICT and TPACK readiness: Predictive analysis. International Journal of Learning, Teaching and Educational Research.

[30] Simply Psychology. (n.d.). Correlation. https://www.simplypsychology.org/correlation.html

[31] Yasin, M. H. M., Susilawati, S. Y., Tahar, M. M., & Jamaludin, K. A. (2023). An analysis of teacher attitudes. Cypriot Journal of Educational Sciences, 17(9) 3314-3326