

BREAKING BARRIERS AND BORDERS: THE INTERPLAY OF ATTITUDES TOWARD INCLUSIVE EDUCATION AND SELF-EFFICACY TO IMPLEMENT INCLUSIVE PRACTICES OF PRE-SERVICE TEACHERS

Cerezo, Benjamin II B^{1,2} and Caballes, Dennis G^{3,4}

¹Centro Escolar University, Manila²Occidental Mindoro State College, Occidental Mindoro, Philippines

³Faculty, Centro Escolar University, Manila Philippines⁴Olivarez College-Paranaque, Philippines

*Correspondence Tel.: +639663594062,

Email: benjamin_cte@omsc.ph.education

dgcaballes@ceu.edu.ph

ABSTRACT: *Inclusive education is an approach to education allowing the students' participation and learning in the mainstream school system regardless of their abilities, limitations, and interests. Teachers' attitudes toward inclusive education and their perceived self-efficacy are the driving factors toward its successful implementation. In particular, the formative stage of a teacher's professional development is the ideal time to assess and influence their perspectives and capabilities to implement inclusive education. Hence, this study examines the relationship between attitudes and self-efficacy toward inclusive education among pre-service teachers. The results reveal that pre-service teachers have a moderate level of attitude toward inclusive education, while exhibiting a high level of self-efficacy to implement inclusive practices in the classroom. Despite these findings, the Pearson correlation between attitudes and self-efficacy revealed a weak negative relationship that was not statistically significant, indicating the nonexistent link between the two factors. The study concludes that changes in one variable do not directly influence the other, and the observed association may be due to other internal and external factors. With these results, it is recommended that future research investigate other influencing factors. Moreover, it is imperative that professional development programs accentuate enhancing self-efficacy and attitudes separately, specifically on behavior management and inclusive instruction.*

Keywords: inclusive education, attitudes, self-efficacy, pre-service teacher, TATIS, TEIP

INTRODUCTION

Rooted in special education, the original goal of inclusive education was to serve the needs of students who were historically kept out of the classroom or who experienced various forms of marginalization. Today, inclusive education or inclusion in education is explicated as a conceptual strategy for delivering quality education through modifications to account for all students, regardless of their physical, social, or psychological impairments. The fundamental tenet of inclusive education states that schools must foster a sense of belonging among all children regardless of their disparities and differences in ability, culture, gender, language, class, and ethnicity [1].

Currently, integration of unique learners into the regular learning environment is the goal of inclusive education (IE). Through this, these students are expected to meet the expectations of the curriculum and educational standards and experience equal possibilities identical to what the regular pupils enjoy. This allows them to experience the same world, the same chances, and the same obstacles. Despite the obvious struggles, collaborating with their classmates to address an issue, LSNs are reassured that they are not alone [2]. Consequently, they will decrease their frustration levels and improve their attitude toward finding solutions.

The Philippines is gearing toward inclusive education. It is evidenced by the establishment of Special Education (SPED) schools, which are created especially for pupils with special needs. These schools offer smaller class sizes, specialized education, and adaptive technology to make sure that these students can succeed in the classroom. Their ability to foster inclusion in early childhood classrooms is a salient factor directly influencing their performance [3]. Thus, all teachers

need to be exposed to wide arrays of relevant trainings before they can educate kids who have disabilities and foster inclusive education.

Considering the teachers' perspectives and their respective general education settings, they neither question nor oppose the practice of inclusion. However, in the study, the respondents acknowledged their uncertainty on the compliance of their IE concept to standard definitions and the effectivity of their purported methods to meet the demands of high-quality inclusive education [4].

The role of the teachers in inclusive education is undeniably significant. They are crucial in putting inclusive education into practice [1]. For instance, how teachers embrace inclusive principles affects how pupils adapt academically and behaviorally at school. The motivation and encouragement to participate in school activities, act in a pro-social manner, and achieve academic success is higher for students who like and trust their teachers and for teachers who feel the same way about their students.

In the Philippine context, inclusive education is moderately implemented because of differences in age, years in service, academic rank, and highest educational attainment among the surveyed teachers [5]. In another study, teachers have moderate efficacy in enhancing learning, managing classrooms, and establishing relationships [6]. The findings highlighted that improved training level for both in-service and pre-service teachers and creation of policy in all tertiary programs are necessitated. In consonance, policy, resources, beliefs and attitudes of implementing agencies, community support, and the implementation structure are the different factors influencing the implementation of inclusive education [7].

The interplay between personal variables and attitudes toward inclusive education has been delineated several studies. Female teachers possessed a positive attitude compared to male teachers, and this positive attitude is linked to interest to the profession and the teacher's tenacity for arduous circumstances in the field [8]. Attendance to trainings and seminars also influence the attitudes of teachers toward inclusive education. Teachers with sufficient training had more positive attitudes toward inclusive education [9]. Conversely, the lack of training in inclusion led the respondents to thinking that their existing knowledge is insufficient to meet the demands of the learners.

In a study conducted, candidate teachers were revealed to have positive attitudes [10]. However, they are concerned about students manifesting violent behavior toward others or requiring communicative devices in regular classrooms. Additionally, pre-service teachers were found to have a highly positive attitude toward inclusive education [11]. Trained and experienced pre-service teachers display a more positive and confident attitude in handling people with disabilities and inclusion and implementing inclusive practice [12].

Similarly, Filipino teachers have a generally high level of positive attitudes, efficacy, and intentions for inclusive practices [13]. Variables namely attitudes, efficacy, and intention for inclusive practices were revealed to be significantly related. As efficacy is often highlighted in various literatures, positive experiences in inclusive education can predict higher self-efficacy, specifically in organizing inclusive education [14].

In addition, elementary and female pre-service teachers have more inclusive growth mindset and able to communicate with supporting families of students with disabilities [15]. On the other hand, male pre-service teachers were found to have higher self-efficacy in managing classroom behavior. In summary, student-centered classroom that promotes student choice and differentiated instruction can increase engagement among pre-service teachers especially those who have special needs.

Helping PTs improve their understanding of inclusion and make sense of their future teaching strategies lies on the curriculum content and practicum setting [16]. This also prompts the program under review to think about making organizational changes by reevaluating the ways to make relevant pre-service teacher preparation for inclusive teaching. Ultimately, there is a need for enhancing teacher training program toward inclusion to improve their readiness and confidence in inclusive settings [17].

Despite the existence of many studies on measured attitudes toward inclusion and perceived self-efficacy, only few of them directly address the attitudes preservice teachers possess and the associations with efficacy of inclusive education. Considering that inclusive education is the core principle of equitable and accessible education for all students, this study could break down barriers—whether they are attitudinal, cultural, or systemic—by delving into the interplay between pre-service teachers' attitudes and self-efficacy, equating to more equitable educational practices. Moreover, since inclusive education is widespread approach in the Philippine educational landscape, there is a need to prepare future

teachers and their attitudes and skills to support diverse learners effectively. A wide range of studies has focused on various aspects of education, such as teaching pedagogies [18, 19, 20, 21, 22, 23], student preferences and readiness [24, 25], student motivation and attitudes [26, 27, 28, 29], teachers' skills, competencies, and challenges [30, 31, 32], as well as assessment techniques and tools [33, 34, 35, 36], and other related factors [37, 38, 39, 40, 41, 42, 43], all aimed at enhancing student learning outcomes. However, there is a dearth of opportunities for pre-service teachers to experience and practice inclusive education. Nevertheless, with this study on attitudes and self-efficacy gaps in teacher preparation programs can be revealed to help institutions amplify training programs and prepare teachers for diverse classrooms. The evidence-based insights can also be the bases for policies that foster inclusive education and collaboration among stakeholders.

Ultimately, this study can potentially bridge the gap between inclusive policy and classroom practice by highlighting pre-service teachers who possess willingness, confidence, and capability to implement inclusive education effectively.

The primary purpose of this research is to determine the attitudes and self-efficacy of pre-service teachers toward inclusive education. Specifically, it aims to answer the following questions:

1. What are the attitudes of the pre-service teachers toward inclusive education in terms of:
 - a. attitudes on students with disabilities in inclusive setting (POS)
 - b. beliefs about the efficacy of inclusion (BEI)
 - c. beliefs about professional roles and responsibilities (PRF)
2. What is the level of self-efficacy to implement inclusive practices in an inclusive classroom as perceived by the pre-service teachers in terms of:
 - a. Efficacy to use inclusive instruction (EII)
 - b. Efficacy in managing behavior (EMB)
 - c. Efficacy in collaboration (EC)
3. Is there a significant relationship between attitude towards inclusive education and self-efficacy to implement inclusive practices of the respondents.

Research Hypothesis. From the specified question, the researcher formulated the hypothesis and will be tested at 0.05 level of significance.

H_0 : There is no significant relationship between attitude towards inclusive education and self-efficacy to implement inclusive practices of the respondents

MATERIALS AND METHODS

The descriptive-correlational design was used in this study. The study's design was deemed appropriate because it involves gathering information from members of the population to assess its current state regarding the descriptive statistics of respondents' attitudes toward teaching in inclusive classrooms and self-efficacy toward implementation of inclusive practices in, as well as the relationship between and among these variables.

Participants. The survey was sent to two hundred four (204) pre-service teachers at Occidental Mindoro State College. Complete enumeration was implemented for this study. The

researchers sought permission from the administration before conducting the study and provided informed consent to the participants, which included the study's purpose, procedures, risks, and benefits of the study. In addition, the researchers informed the participants that their confidentiality and anonymity will be strictly maintained. There would be no financial ties to the conduct of the study and an objective evaluation was carried out, there was no conflict of interest involved. The students were also informed of their rights and emphasized that their participation in the research study is voluntary; hence, they can withdraw without facing consequences. Furthermore, the data gathered will be used solely for the study; hence, data manipulation was strictly restricted.

Measures. The researchers utilized two survey questionnaires as instruments for gathering the necessary data needed for this study. Both questionnaires were adapted from previously conducted research dealing with the same purpose. **Attitudes Toward Inclusive Education.** The first scale that was used in the study is the *Teacher Attitudes Toward Inclusion Scale (TATIS)*[44]. It was used to assess the pre-service teacher's attitudes on inclusive education. The TATIS is a 14-item scale designed to measure the attitude of the respondents to inclusive education. The scale contains three factors: attitudes on students with disabilities in inclusive setting (POS), beliefs about the efficacy of inclusion (BEI), and beliefs about professional roles and responsibilities (PRF). Respondents answered on a Likert-type scale ranging from “(1) agree very strongly, (2) strongly agree, (3) agree, (4) neither agree nor disagree, (5) disagree, (6) strongly disagree, and (7) disagree very strongly.”

Scoring Procedures for TATIS. Once tallied, comparison of factor and total scale scores to the normative standards listed in the tables may be done to determine t-scores and percentile ranks. T-scores have a mean of 50 and a standard deviation of 10. High Scores on TATIS mean that the respondents' attitude and beliefs imply high support for inclusion. On the contrary, low scores suggest that respondents' attitude and beliefs highly support traditional service delivery models, [44].

In interpreting the scores of obtained from the TATIS the Standard Score Conversion Chart was used.

Raw Score	T-score	% Rank	Raw Score	T-score	% Rank	Raw Score	T-score	% Rank
HIGH			MODERATE			LOW		
32 & under	80	99.9						
33	78	99.7	45	58	79	57	38	12
34	77	99.6	46	57	76	58	37	10
35	75	99.4	47	55	69	59	35	7
36	73	98.9	48	53	62	60	33	4
37	72	98.6	49	52	54	61	32	3
38	70	98	50	50	50	62	30	2
39	68	97	51	48	46	63	28	1.4
40	67	96	52	47	38	64	27	1.1
41	65	93	53	45	31	65	25	.6
42	63	90	54	43	24	66	23	.4
43	62	88	55	42	21	67	22	.3
44	60	84	56	40	16	68 & over	20	.1

In interpreting the different sub variables under Attitudes Toward Inclusion Scale the chart below was used.

Factor	Percentile Rank		
	Low	Moderate	High
POS	<21	21-84	>74
BEI	<42	42-88	>88
PRF	<38	38-84	>84

The adopted questionnaire was also subjected to reliability testing to ensure that the instrument will yield stability over time and across different populations. Based on the conducted reliability testing, the following Cronbach's Alpha were obtained:

Scale/Dimension	Cronbach's Alpha
Attitudes On Students with Disabilities in Inclusive Setting (POS)	0.707
Beliefs About the Efficacy of Inclusion (BEI)	0.794
Beliefs About Professional Roles and Responsibilities (PRF)	0.843

The TATIS is considered an instrument with high reliability and a strong level of validity [44].

The Self-Efficacy to Implement Inclusive Practices. The second scale that was used will adopt the *Teacher Efficacy for Inclusive Practices (TEIP)* scale [45]. The scale contains 18 items, in which participants were required to respond to a Likert-type scale ranging from 1 (strongly disagree) to 6 (strongly agree). TEIP scale is designed for measuring perceived teacher efficacy to teach in inclusive classrooms. The scale can be divided into three six-item sub-scales – namely: Efficacy in Inclusive Instruction (EII), Efficacy in Managing Behavior (EMB), and Efficacy in Collaboration (EC). In the whole scale and in subscales, there can be a minimum score of 1 and a maximum score of 6 (the sum of all statements in the scale or subscale divided by the number of statements in the scale or subscale). A high average-score on the scale indicates a more positive tendency and high self-efficacy and, to a lesser extent, anxiety.

The adopted questionnaire was also subjected to reliability testing to ensure that the instrument will yield stability over time and across different populations. Based on the conducted reliability testing, the following Cronbach's Alpha were obtained:

Scale/Dimension	Cronbach's Alpha
Efficacy to use inclusive instruction	0.747
Efficacy in managing behavior	0.902
Efficacy in collaboration	0.760

Data Collection Technique. The researcher administered the questionnaire to the respondents virtually through Google Forms. After the questionnaire was distributed and answered by the respondents, results were carefully consolidated and tabulated and were subjected for the treatment of data and analysis of results.

Data Analysis. After gathering the pertinent data, these were tabulated, analyzed and interpreted using several statistical tools. Descriptive statistics such as frequency distribution and mean were used to assess the attitude of the pre-service teachers toward inclusive education. The same statistical tools were used to determine the self-efficacy to implement inclusive practices in an inclusive classroom. Pearson Product

Moment Correlation was used to determine if there is a significant relationship between attitude towards inclusive education and self-efficacy to implement inclusive practices of the respondents. Lastly, Multiple Regression Analysis was utilized to determine which among the variables in self-efficacy can best predict attitudes of pre-service teachers toward inclusive education.

RESULTS AND DISCUSSIONS

Table 1. Mean, Standard Deviation and TATIS Full Scale Score

TATIS Factors	Mean	SD	T-score	% Rank	Interpretation
POS (Items 1-6)	19	5.77	48	42	Moderate
BEI (Items 7-10)	15.69	5.30	60	84	Moderate
PRF (Items 11-14)	10.41	4.61	50	50	Moderate
FULL SCALE SCORE	45.1	9.49	58	79	Moderate

Attitudes of the Pre-Service Teachers Toward Inclusive Education.

The above table 1 presents the mean, standard deviation, T-score, and percentile rank for the TATIS factors (POS, BEI, and PRF) and the overall full-scale score. A full-scale score means of 45.1 (SD=9.49) indicates that pre-service teachers surveyed have a moderate level of attitude toward inclusive education. The combined T-score of 58 and a percentile rank of 79 indicate the slightly above average participants' attitudes when compared to broader population.

These findings reveal a moderate but somewhat inconsistent attitude toward inclusive education among participants. While pre-service teachers display relatively stronger beliefs in the efficacy of inclusion, their perceptions of students and understanding of professional roles appear to be less robust. This suggests the need for targeted interventions to strengthen specific aspects of teacher attitudes. Each factor will be discussed further on the succeeding tables.

Above findings are in consonance with the result of the study which concludes that the pre-service teachers have generally positive yet moderately inclined attitude towards inclusive education [45].

In a study conducted, candidate teachers were revealed to have positive attitudes [10]. Despite the teachers' unpreparedness to handle students with disabilities in a

general classroom, many preservice general education teachers are positive towards inclusion [46]; however, they are not always armed with the appropriate instruction material to effectively teach students with disabilities [47].

Pre-service teachers found it hard to endorse the set of items on TATIS catering to the factors of Beliefs about the Efficacy of Inclusion (BEI) and some of the Teacher Perceptions of Students with Mild to Moderate Disabilities (POS) [48]. Moreover, results showed that primary pre-service teachers have more positive attitudes towards inclusion than secondary pre-service teachers [49].

A study also showed that pre-service teachers have a high perception of their readiness to execute inclusive education. Pre-service teachers were found to have a highly positive attitude toward inclusive education [50]. Also, primary trainee teachers had a moderately higher positive attitude to students with SLD than their secondary counterparts [51].

Likewise, the findings of the study highlighted pre-service teachers possessing moderately high attitudes in support of inclusive education [52]. This solidifies how attitudes towards inclusive classrooms among pre-service teachers are generally positive.

On the contrary, integrating students with disabilities in the general education classroom is a burden as evidenced by a survey he conducted among pre-service teachers [53].

Table: 2 Mean, Standard Deviation, and TATIS Score in terms of Attitudes on Students with Disabilities in Inclusive Setting (POS)

TATIS Factor	Mean	SD	T-score	% Rank	Interpretation
POS (Items 1-6)	19	5.77	48	42	Moderate

TATIS Score in terms of Attitudes on Students with Disabilities in Inclusive Setting (POS)

Table 2 shows the score obtained by the respondents on TATIS in terms of attitudes on students with disabilities inclusive setting (POS). As evidenced by the table, respondents show moderate level with a mean score of 15.69 (SD= 5.77). The relatively high standard deviation indicates attitudinal differences among the participants, with teachers who are either positive, negative, or neutral. The T-score of 48 places the attitudes slightly below the average range, while the 42% rank indicates that less than half of the participants scored higher in their attitudes toward inclusive education. These findings suggest a need for targeted, deliberate, and conscious interventions to improve teacher attitudes toward inclusive settings. Professional development programs

stressing inclusive teaching strategies and inculcating empathy may help address this variability and arouse more positive engagement with students with disabilities. For policymakers, the results emphasize the importance of capitalizing on supportive frameworks and resources that help teachers build confidence and skills in handling diverse classrooms. Implementing workshops and collaborative activities that signify awareness of disability-related challenges and strategies for effective inclusion must be initiated by schools.

[20] believe that pre-service teachers have moderate attitudes toward inclusive education in terms of attitudes on students with disabilities in inclusive setting (POS). Similarly, [29] concludes that attitudes of teachers toward students with disabilities in an inclusive setting are moderate.

Table 2.1. Mean, Standard Deviation and TATIS Score in terms of Beliefs about Efficacy of Inclusion (BEI)

TATIS Factor	Mean	SD	T-score	% Rank	Interpretation
BEI (Items 7-10)	15.69	5.30	60	84	Moderate

TATIS Score in terms of Attitudes on Students Beliefs about Efficacy of Inclusion (BEI)

Table 2.1 shows the result of TATIS factor “BEI” (items 7-10), which aims to assess the belief of the respondents toward efficacy inclusion. The respondents obtained a mean score of 15.69 (SD=5.30), which indicates that teachers have a moderate belief in effectiveness of inclusive education. With the T-score of 60 within the average range, it is indicated that teachers’ beliefs are parallel to the general expectations about the effectiveness of inclusion, with the stance being neither particularly strong nor weak. Additionally, most teachers got higher score in their beliefs about the efficacy of inclusion when compared to a broader population as indicated by the 84% rank.

These findings emphasize that improvements are still imperative despite the teachers’ moderate belief in the effectiveness of inclusive education. To reinforce these beliefs, professional development must provide teachers

with more evidence-based practices and success stories relevant to inclusive education. This could help boost their confidence in the benefits of inclusion for all students. For policymakers, the results highlight the importance of continuous support and resources to enhance teachers’ understanding of inclusive practices and build an environment that is grounded on positive beliefs about inclusion. Consequently, schools may also gain benefits from immersing in a culture emphasizing the importance and potential of inclusive education through peer collaboration and shared success.

Teachers surveyed has a moderate level of attitude toward BEI [45]. Moreover, it was revealed that primary pre-service teachers have more positive attitudes towards inclusion than secondary pre-service teachers [49]. A moderate level of attitudes among and beliefs toward inclusive education was observed among pre-service teachers based on the study conducted by [54].

Table 2.2. Mean, Standard Deviation and TATIS Score in terms of beliefs about professional roles and responsibilities (PRF)

TATIS Factor	Mean	SD	T-score	% Rank	Interpretation
PRF (Items 11-14)	10.41	4.61	50	50	Moderate

TATIS Score in terms of Attitudes on Students Beliefs about professional roles and responsibilities (PRF)

Above table 2.2 outlines the findings for TATIS factor “PRF” (items 11-14) which determines the beliefs of the respondents about professional roles and responsibilities. It is evident that respondents obtained a mean score of 10.41 (SD=4.61) which indicate moderate level of attitude toward this factor.

With the T-score of 50, these beliefs are placed precisely at the average range. On the other hand, the 50% rank shows that teachers perceive their professional roles as average when compared to a broader population. These results imply that while teachers generally recognize their roles in inclusive education, clarifying and strengthening their understanding of these responsibilities must be explored.

This yields the same result from the study that also obtained moderate level of attitude toward professional roles and

responsibilities (PRF) [45]. Another study also confirms the same findings [54]. The findings are further strengthened by the result of the study conducted which shows respondents

surveyed has a mean score of 10.28 which indicates a moderate level of attitude toward PRF [55].

Table 3. Mean, Standard Deviation and TEIP Full Scale Score

TEIP Factors	Mean	SD	Descriptive Evaluation
Efficacy to use inclusive instruction (EII)	4.47	1.18	Agree
Efficacy in managing behavior (EMB)	4.30	1.18	Somewhat Agree
Efficacy in collaboration (EC)	4.40	1.19	Agree
TEIP MEAN SCORE	4.39	1.15	Agree

Self-Efficacy to Implement Inclusive Practices in an Inclusive Classroom

Table 3 analyzes the Teacher Efficacy for Inclusive Practices (TEIP) to measure the level of self- efficacy of pre-service teachers in implementing inclusive practices in a classroom.As evidenced by the results, thepre-service teachers surveyed have high level of self-efficacyin implementing inclusive practices in the classroom (M=4.39; SD=0.60 on the TEIP scale ranging from 1 to 6).

Relative to the different TEIP factors, the mean score for Efficacy to Use Inclusive Instruction (EII) is 4.47 (SD=1.18), suggesting that teachers are in confident agreementwith their ability to design, adapt, and utilize instructional methods to handle diverse learners. For Efficacy in Collaboration (EC), with a mean score of 4.40 (SD=1.19), teachers display agreement and confidence in collaborating with colleagues, parents, and specialists to foster inclusivity. Meanwhile, the Efficacy in Managing Behavior (EMB) factor, with a slightly lower mean score of 4.30 (SD=1.18), reflects a slight agreement, indicating that this area may require further support and skill development despite teachers perceiving themselves as capable of managing behavior effectively.

These results corroborate that teachers are equipped with a strong foundational self-efficacy in inclusive practices. However, the slightly lower score in behavior management

suggests potentials and opportunities for professional development initiatives that accentuatestrategies for behavioral challenges in diverse classrooms. Overall, the high self-efficacy levels exhibit teachers’ readiness and confidence to implement inclusive practices effectively, though sustained support and measured interventions can help sustain and further improve this efficacy.

In connection with the findings,a study conducted concludes that pre-service teachers have a high self-efficacy [15]. Moreover, male pre-service teachers are found to have higher self-efficacy compared to female in terms of managing behavior inside an inclusive classroom.

Filipino teachers have a generally high level of positive attitudes, efficacy, and intentions for inclusive practices [56]. A significant relation among variables namely attitudes, efficacy, and intention for inclusive practices was revealed.

In contrary, a study examined in-service teachers in Finland [48], self-efficacy in managing problematic behavior of pupils was the lowest among the three self-efficacy sub-constructs among Finnish teachers [53, 57]. Furthermore, poor perceived self-efficacy to implements inclusive practices in terms of using inclusive instruction, collaborating effectively, and managing behavioral problems were found [59].

Table 3.1. Correlation between Attitudes and Self-Efficacy toward Inclusive Education

Variables	Pearson r	Sig. value	Interpretation	Decision to Ho
Attitude*Self-Efficacy	-.029	.677	Not Significant	Accept
α	=	0.05	Level	of Significance

Correlation between Attitudes and Self-Efficacy toward Inclusive Education

As the table 3.1 depicts, the analysis of the correlation between attitudes and self-efficacy toward inclusive education revealed a Pearson correlation coefficient (r) of -0.029 and a significance value (p) of 0.677. The negligible negative correlation indicates the nonexistence of meaningful linear relationship between the two variables. Furthermore, the p-value exceeds the alpha level of 0.05, indicating that the observed correlation is not statistically significant. As a

result, the null hypothesis, which states that there is no correlation between attitudes and self-efficacy, is accepted.

This result is supported with the study conducted which concludes that correlation between the entire scale and the attitudes was non-significant [60]. Moreover, there is a correlation between TATIS and TEIP among surveyed pre-service teachers, but the relationship is a weak one [61].

Result is in contrary with the findings which reported a positive significant relationship between teachers' attitudes and self-efficacy for inclusive practices [61].

CONCLUSIONS AND RECOMMENDATIONS

As evidenced by the data, the pre-service teachers are revealed to have a moderate level of attitude toward inclusive education and a high level of self-efficacy to implement inclusive education in an inclusive classroom.

Based on the results of TATIS and TEIP assessments, teachers have high self-efficacy in inclusive education alongside positive outlooks, beliefs in their efficacy, and perceptions of available resources. However, the Pearson correlation between attitudes and self-efficacy showed a not statistically significant relationship, asserting the nonexistence of a meaningful link between these two factors. This corroborates that changes in one variable do not directly influence the other, and the association observed may be due to other internal and external factors.

Based on these findings, it is recommended that future research explore other influencing factors of Self-Efficacy and Attitude in the context of inclusive education. Additionally, interventions intended to enhance teachers' attitudes and self-efficacy should be considered in isolation, as they may not necessarily influence each other in a direct or meaningful way. Tailored professional development programs highlighting specific areas of teaching practice, such as behavior management and inclusive instruction, could be more effective in enhancing these constructs individually.

REFERENCES:

- [1] Kozleski, E. B., Artiles, A. J., Fletcher, T., & Engelbrecht, P. (2009). Understanding the dialectics of the local and the global in education for all: A comparative case study.
- [2] Quinones, T. (2022). Exploring Inclusive Education in the Senior High School as Bridging Program to Tertiary Career Pathing. *International Journal of Advanced Multidisciplinary Studies*, 2(7), 260-274.
- [3] Darling-Hammond, L. (2006). Constructing 21st-century teacher education. *Journal of teacher education*, 57(3), 300-314.
- [4] Muega, M. A. G. (2016). Inclusive education in the Philippines: Through the eyes of teachers, administrators, and parents of children with special needs. *Social Science Diliman*, 12(1), 5-28.
- [5] Cayabyab, J. T. (2023). Implementation of Inclusive Education: A Region-wide Study in the Philippines. *Journal of Marketing Management and Consumer Behavior*, 4(3).
- [6] Sito, L. R. (2020). Teachers' Preparedness for Inclusive Education. *Mountain Journal of Science and Interdisciplinary Research (formerly Benguet State University Research Journal)*, 80(2), 7-21.
- [7] Domingo, Y. L. (2020). *Factors affecting implementation of inclusive education in the Philippines* (Doctoral dissertation, 서울대학교대학원).
- [8] Priyadarshini, S. S., & Thangarajathi, S. (2017). Effect of Selected Variables on Regular School Teachers Attitude towards Inclusive Education. *Journal on Educational Psychology*, 10(3), 28-38.
- [9] Galaterou, J., & Antoniou, A. S. (2017). Teachers' Attitudes towards Inclusive Education: The Role of Job Stressors and Demographic Parameters. *International Journal of Special Education*, 32(4), 643-658.
- [10] AlMahdi, O., & Bukamal, H. (2019). Pre-service teachers' attitudes toward inclusive education during their studies in Bahrain Teachers College. *Sage Open*, 9(3), 2158244019865772.
- [11] Lualhati, G. P. (2022). Embracing diversity: Empowerment of Filipino pre-service teachers for inclusive education. *Humanities, Arts and Social Sciences Studies (FORMER NAME SILPAKORN UNIVERSITY JOURNAL OF SOCIAL SCIENCES, HUMANITIES, AND ARTS)*, 265-272.
- [12] Sharma, U., Forlin, C., & Loreman, T. (2008). Impact of training on pre-service teachers' attitudes and concerns about inclusive education and sentiments about persons with disabilities. *Disability & Society*, 23(7), 773-785.
- [13] Raguindin, P. Z. J., Ping, L. Y., Duereh, F., & Lising, R. L. S. (2020). Inclusive Practices of In-Service Teachers: A Quantitative Exploration of a Southeast Asian Context. *European Journal of Educational Research*, 9(2), 787-797.
- [14] Weber, K. E., & Greiner, F. (2019). Development of pre-service teachers' self-efficacy beliefs and attitudes towards inclusive education through first teaching experiences. *Journal of Research in Special Educational Needs*, 19, 73-84.
- [15] Ismailos, L., Gallagher, T., Bennett, S., & Li, X. (2022). Pre-service and in-service teachers' attitudes and self-efficacy beliefs with regards to inclusive education. *International Journal of Inclusive Education*, 26(2), 175-191.
- [16] Massouti, A. (2021). Pre-Service Teachers' Perspectives on Their Preparation for Inclusive Teaching: Implications for Organizational Change in Teacher Education. *Canadian Journal for the Scholarship of Teaching and Learning*, 12(1), n1.
- [17] Miesera, S., DeVries, J. M., Jungjohann, J., & Gebhardt, M. (2019). Correlation between attitudes, concerns, self-efficacy and teaching intentions in inclusive education evidence from German pre-service teachers using international scales. *Journal of Research in Special Educational Needs*, 19(2), 103-114.
- [18] Gayeta, N. E. & Caballes, D. G. (2017). Measuring conceptual change on stoichiometry using mental models and ill-structured problems in a flipped classroom environment. *Asia Pacific Journal of Multidisciplinary Research*, 5(2), 104-113.
- [19] Guiao, C. D., & Caballes, D. G. (2023). Teachers' perception on integrating historical vignettes in teaching science concepts. *International Journal of Innovative Science and Research Technology*, 8(1), 1985-1990.
- [20] Narca, M. L., & Caballes, D. G. (2021). Exploring students' mental constructs on evolution towards proposed pedagogical interventions. *International Journal of Science and Research*, 10(8), 857-862.
- [21] Caballes, D. G., Panol, R. F., Vasquez, A. G., & Valdez, M. R. (2022). Offline modular learning in a public school system: its perceived effects on school operations. *International Journal of Research in Engineering and Science*, 10(3), 21-26.

- [22]Ucang, J. & Tan, D.A. (2013). Students' Beliefs and Mathematics Performance in a Process-Oriented Guided-Inquiry Learning (POGIL) Environment. *CMU Journal of Science*. 17 (2013), 141-157.
- [23]Florungco, J. K. E. &Caballes, D. G. (2021). A narrative study of science teaching methods and techniques in the new normal. *International Journal of Asian Education*, 2(3), 296-303.
- [24]Ong, A. K. S., Prasetyo, Y. T., Chuenyindeedobla, T., Young, M. N., Doma, B. T., Caballes, D. G., Centeno, R. S., Morfe, A. S., & Bautista, C. S. (2022). Preference analysis on the online learning attributes among senior high school students during the COVID-19 pandemic: a conjoint analysis approach. *Evaluation and Program Planning*, 102100.
- [25]Caballes, D. G., & Tabang, M. P. (2022). Grade 10 students' online learning readiness and e-learning engagement in a science high school during a pandemic. *Journal of Humanities and Education Development*, 4(3), 237-241.
- [26]Narca, M. L., & Caballes, D. G. (2021). Learning motivation: strategies to increase students' engagement in online learning at San Sebastian College-Recoletos, Manila. *International Journal of Asian Education*, 2(4), 573-580.
- [27]Aguanta, E. & Tan, D.A. (2018). Effects of Dyad Cooperative Learning Strategy on Mathematics Performance and Attitude of Students Towards Mathematics, *International Journal of English and Education*, 7(3), 303-313.
- [28]Ciubal-Fulgencio, N., & Tan, D. (2018). Effects of mathematics communication strategies on attitude and performance of grade 8 students, *Asian Academic Research Journal of Multi-disciplinary*, Volume 5, Issue 2, 44-53, February 2018.
- [29]Cordova, C., & Tan, DA. (2018). Mathematics Proficiency, Attitude and Performance of Grade 9 Students in Private High School in Bukidnon, Philippines. *Asian Academic Research Journal of Social Sciences and Humanities*, vol. 5, issue 2, pp. 103-116, February 2018.
- [30]Doblada, J. C. L. &Caballes, D. G., (2021). Relationship of teachers' technology skills and selected profile: basis for redesigning training for online distance learning modality. *Instabright International Journal of Multidisciplinary Research*, 3(1), 17-22.
- [31]Caballes, D. G., Panol, R. F., Vasquez, A. G., & Valdez, M. R. (2021). Competency level of science teachers in teaching evolution: basis for training design. *Global Journal of Advanced Research*, 8(8), 235-243.
- [32]Herrera, M. B., &Caballes, D. G. (2022). Challenges of teachers amidst sustained global health crisis. *Journal of Humanities and Education Development* 4 (3), 142-149, 4(3), 142-149.
- [33]Cordova, C., Pagtulon-an, EA., & Tan, DA. (2018). No Assignment Policy: A Boon or A Bane?!. *International Journal of English and Education*, 8(1), 144-160, January 2019.
- [34]Cordova C., Tan D. and Ucang J. (2018). Take Home Assignment and Performance of Grade 11 Students. *International Journal of Scientific and Technology Researches*, 7(12), 57-61, December 2018.
- [35]Pagtulon-an, E. & Tan D. (2018). Students' Mathematics Performance and Self-efficacy Beliefs in a Rich Assessment Tasks Environment. *Asian Academic Research Journal of Multidisciplinary*. 5(2), 54-64.
- [36]Tan, D.A., Cordova, C.C., Saligumba, I.P.B., Segumpan, L.L.B. (2019). Development of Valid and Reliable Teacher-made Tests for Grade 10 Mathematics. *International Journal of English and Education*, 8(1), January 2019, 62-83.
- [37]Jackaria, P. M., &Caballes, D. G. (2022). Equipping teachers to adapt: a look into teachers' professional development experiences in times of COVID-19 pandemic. *Journal of Humanities and Education Development*, 4(4), 18-22.
- [38]Panol, R. F., Vasquez, A. G., Valdez, M. R., &Caballes, D. G., (2021). Parental involvement on students' completion of learning tasks in science. *International Journal of Scientific Research in Multidisciplinary Studies*, 7(5), 1-7.
- [39]Tan, D. A., & Balasico, C. L. (2018). Students' Academic Performance, Aptitude and Occupational Interest in the National Career Assessment Examination. *PUPIL: International Journal of Teaching, Education and Learning*, 2(3), 01-21.
- [40]Tan, D.A. (2018). Mathematical Problem Solving Heuristics and Solution Strategies of Senior High School Students, *International Journal of English and Education*, 7(3), July 2018, 1-17.
- [41]Duque, C. & Tan, D. (2018). Students' Mathematics Attitudes and Metacognitive Processes in Mathematical Problem Solving. *European Journal of Education Studies*, 4(11), 1-25.
- [42]Balasico, C.L., & Tan, D.A., (2020). Predictors of Performance of Central Mindanao University Laboratory High School Students, *PEOPLE: International Journal of Social Sciences*, 6(2), 1-21.
- [43]Caballes, D. G., & Sapad, R. P. (2022). Initiation of professional development program for science instructional leaders within the technological pedagogical content knowledge (TPACK) framework. *The Palawan Scientist*, 14(1), 75-83.
- [44]Sharma, U., Loreman, T., & Forlin, C. (2012). Measuring teacher efficacy to implement inclusive practices. *Journal of research in special educational needs*, 12(1), 12-21.
- [45]Na, L. L., & Low, H. M. (2023). Pre-Service Teachers' Perceptions Towards the Inclusion Of Children With Special Educational Needs In Chinese Pre-Schools. *Journal of Special Needs Education*, 13, 1-12.
- [46]Cook, B. G. (2002). Inclusive attitudes, strengths, and weaknesses of pre-service general educators enrolled in a curriculum infusion teacher preparation program. *Teacher Education and Special Education*, 25(3), 262-277.
- [47]Shippen, M. E., Crites, S. A., Houchins, D. E., Ramsey, M. L., & Simon, M. (2005). Preservice Teachers' Perceptions of Including Students with Disabilities. *Teacher Education and Special Education*, 28(2), 92-99.

- [48] Baker, E. C. (2022). Preservice Teachers' Attitudes Toward Inclusion and Self-efficacy in the classroom (Doctoral dissertation, Miami University).
- [49] Boyle, C., Barrell, C., Allen, K. A., & She, L. (2023). Primary and secondary pre-service teachers' attitudes towards inclusive education. *Heliyon*, 9(11).
- [50] Lualhati, G. P. (2022). Embracing diversity: Empowerment of Filipino pre-service teachers for inclusive education. *Humanities, Arts and Social Sciences Studies (FORMER NAME SILPAKORN UNIVERSITY JOURNAL OF SOCIAL SCIENCES, HUMANITIES, AND ARTS)*, 265-272.
- [51] Woodcock, S. (2013). Trainee teachers' attitudes towards students with specific learning disabilities. *Australian Journal of Teacher Education (Online)*, 38(8), 16-29.
- [52] Yusoff, S. M., & Marzaini, A. F. M. (2021). Attitudes toward inclusive education among pre-service teachers. *International Journal of Advanced Research in Education and Society*, 3(3), 152-162.
- [53] McNamee, K. K. (2016). A survey of preservice teachers' attitudes on integrating students with disabilities in inclusive education classrooms.
- [54] Ediyanto, E., Kawai, N., Hayashida, M., Matsumiya, N., Siddik, M. A. B., & Almutairi, A. T. (2021). Indonesian teachers' attitudes toward inclusive education. *Discourse and Communication for Sustainable Education*, 12(2), 31-44.
- [55] Ćwirynkało, K., Kisovar-Ivanda, T., Gregory, J. L., Żyta, A., Arciszewska, A., & Zrilić, S. (2017). Attitudes of Croatian and Polish elementary school teachers towards inclusive education of children with disabilities. *Hrvatska revija za rehabilitacijska istraživanja*, 53(Supplement), 252-264.
- [56] Raguindin, P. Z. J., Ping, L. Y., Duereh, F., & Lising, R. L. S. (2020). Inclusive Practices of In-Service Teachers: A Quantitative Exploration of a Southeast Asian Context. *European Journal of Educational Research*, 9(2), 787-797.
- [57] Yada, A., Tolvanen, A., Malinen, O. P., Imai-Matsumura, K., Shimada, H., Koike, R., & Savolainen, H. (2019). Teachers' self-efficacy and the sources of efficacy: A cross-cultural investigation in Japan and Finland. *Teaching and Teacher Education*, 81, 13-24.
- [58] Savolainen, H., Engelbrecht, P., Nel, M., & Malinen, O. P. (2012). Understanding teachers' attitudes and self-efficacy in inclusive education: Implications for pre-service and in-service teacher education. *European journal of special needs education*, 27(1), 51-68.
- [59] Vogiatzi, C., Charitaki, G., Kourkoutas, E., & Forlin, C. (2022). The Teacher Efficacy for Inclusive Practices (TEIP) Scale: Further evidence for construct validity in Greek-speaking teachers. *PROSPECTS*, 52, 387 - 403.
- [60] Narkun, Z., & Smogorzewska, J. (2019). Studying self-efficacy among teachers in Poland is important: Polish adaptation of the teacher efficacy for inclusive practice (TEIP) scale. *Exceptionality Education International*, 29(2), 110-126.
- [61] Özokcu, O. (2018). The relationship between teacher attitude and self-efficacy for inclusive practices in Turkey. *Journal of Education and Training Studi*