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Assessing Teachers' Competence and Attitudes Towards Inclusive Education

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Abstract: This study explores the link between teachers' self-assessed competence in managing learners with special needs and their attitudes towards inclusive education, revealing that while teachers report a high level of competence and positive attitudes towards inclusion, particularly for students with autism, there is no statistically significant correlation between these two factors. Despite teachers' confidence in their abilities and favorable views on inclusive practices, the negligible positive correlation found suggests that other, unexamined factors may influence attitudes towards inclusion. This research underlines the complexity of the relationship between teacher competence and attitudes towards inclusive education, indicating that competence alone may not predict or enhance positive attitudes towards inclusive practices. The findings call for further exploration into the myriad influences on teachers' stances towards inclusive education.

Introduction

The goal of inclusive education is to enable all students, regardless of their physical, intellectual, social, emotional, linguistic, or other problems, with the chance to learn together in regular classes (Katitas & Coskun, 2020). Nilhom (2021) emphasized that this is accomplished through the use of a pedagogical approach known as inclusive education. Marquez & Melero-Aguila (2022) highlighted that inclusive education is based on the principle of acceptance and works toward the goal of modifying the educational system so that it can cater to the requirements of all students. Moreover, the educational experience of other students is enhanced as a result of this strategy,

which not only aids students who have special educational needs but also promotes diversity and understanding among student populations (Linder & Schwab, 2020).

According to Mitchell & Sutherland (2020) in order for this strategy to be successful, it is necessary that educators possess the necessary skills to teach inclusive education. In the context of this discussion, the term "competence" refers to the capacity of the educator to modify instructional strategies, materials, and evaluations in order to cater to the varied requirements of each and every student (Abba & Rashid, 2020; Kuyini et al., 2021). Teachers are required to have a comprehensive awareness of the diversity in individual learning styles, a range of adaptable instructional tactics, and the capacity to effectively cooperate with other professionals and families (Aktan, 2020; Ng & Kwan, 2020). Establishing an inclusive classroom environment in which all students are able to participate in learning activities that are both relevant and challenging, essential to have teachers who are competent (Lakkala et al., 2021; Alves et al., 2020).

In a similar vein, the attitudes that educators have toward inclusive education have a substantial impact on the effectiveness of the program (Yada et al., 2022; Radojlovic et al., 2022). Through the cultivation of positive attitudes, a classroom atmosphere may be created that is inclusive, where diversity is valued, and where all children feel encouraged and welcomed (Black-Hawkins et al., 2022). According to Boyle et al. (2020) teachers with positive attitudes towards inclusion are more likely to implement inclusive practices effectively, recognize the potential in every student, and maintain high expectations for all. Conversely, negative attitudes can create barriers to inclusion, leading to lower expectations and reduced opportunities for students with special educational needs (Gallego-Ortega & Rodriguez-Fuentes, 2021).

When it comes to determining the quality of inclusive education, the interaction between the competence and attitudes of educators is of the utmost importance (Paseka & Schwab, 2020). Thus, both competence and positive attitudes are indispensable for teachers to navigate the complexities of inclusive education successfully (Mieghem et al., 2020). Training and professional development opportunities that enhance both aspects can significantly contribute to the success of inclusive education. In order for educators to successfully traverse the complexity of inclusive education, it is essential for them to possess both the required level of competency and a positive attitude (Kozibroda et al., 2020). The success of inclusive education can be strongly influenced by the availability of training and professional development opportunities that improve both characteristics (Love & Horn, 2021).

Nevertheless, research reveals that there are gaps in both the number of positive attitudes held by teachers towards inclusive education and the level of competence that teacher possess in managing

inclusive classrooms. In order to effectively address these weaknesses, it is necessary to do continuing research and development in all of the programs that are designed to educate teachers and provide professional development opportunities. Looking forward, research should focus on identifying and bridging these gaps. Specifically, in the Department of Education and other educational stakeholders should investigate the effectiveness of current teacher education programs in preparing teachers for inclusive education, the impact of teachers' attitudes and competencies and their inclusive practices. Additionally, teachers themselves play a crucial role in this research direction. Reflecting on this study, department of education can provide support to teachers that enhance teacher competence and foster more positive attitudes towards inclusive education, thereby making a significant contribution to the field.

Methodology

In this study, a descriptive-correlational research design was employed to investigate the relationship between teachers' profiles and their attitudes towards the inclusion of learners with disabilities in regular classrooms. Drawing upon the framework outlined by Seeram in 2019, this approach aimed to describe the current state of teachers' competence and attitudes without manipulating the study environment, while also exploring potential correlations between these variables. Teachers from various educational settings were selected as respondents due to their firsthand experience with inclusive education. Data collection was facilitated through a modified rating scale questionnaire, which incorporated elements from Tenerife et al. (2022) for assessing teachers' competence, and Wilkerson, S.E. (2012) for gauging attitudes towards inclusion. The questionnaires were designed to capture detailed information on the respondents' ability to manage inclusive classrooms and their perspectives on inclusive education. Responses were measured using a five-point Likert scale, ranging from strongly agree to strongly disagree, enabling a nuanced analysis of the levels of competence and attitudes among teachers regarding inclusive education. This methodology was chosen for its effectiveness in highlighting associations between teachers' professional profiles and their receptiveness to inclusive practices without inferring causality, thereby providing valuable insights into the dynamics of inclusive education in contemporary classrooms.

Results and Discussion

Table 1 provides a teacher's information in terms of age and gender. The data reveals a significantly higher number of females (22) compared to males (8), accounting for 73.33% and 26.67% of the total population, respectively. The distribution across age groups shows a

predominant concentration of individuals in the 24-33 age group, which comprises 56.67% of the total population, with females (10) and males (7) making up 33.33% and 23.33%, respectively.

Table 1. Age and Gender

Age (in years)	Female		Male		Total	
	F	%	F	%	F	%
54 and above	1	3.33	0	0.00	1	3.33
44-53	6	20.00	0	0.00	6	20.00
34-43	5	16.67	1	3.33	6	20.00
24-33	10	33.33	7	23.33	17	56.67
Total	22	73.33	8	26.67	30	100.00

The 34-43 age group represents 20% of the population, with a notable gender disparity: 5 females (16.67%) and only 1 male (3.33%). In the 44-53 age bracket, females (6) completely dominate this category, making up 20% of the total population with no male representation. The oldest age group, 54 and above, has the smallest representation at 3.33%, consisting of a single female participant and no male participants. Overall, the data highlights a skewed gender distribution across all age groups, with a pronounced underrepresentation of males, especially noticeable in the older age brackets.

Table 2. Field of Specialization

Field of Specialization	F	%
Filipino	6	20
English	6	20
Physical Education	2	6.67
Math	5	16.67
Science	2	6.67
TLE	5	16.67
Social Science	4	13.33
Total	30	100

This table outlines the field of specialization of teacher respondents, illustrating a diverse range of interests but with notable concentrations in certain areas. Both Filipino and English are the most popular specializations, each attracting 6 respondents, which accounts for 20% of the total population in each field. This suggests a strong interest in language and literary studies among the group. Mathematics (Math) and Technology and Livelihood Education (TLE) are also significant fields, each with 5 respondents, representing 16.67% of the total. These areas highlight an interest in both quantitative analysis and practical, vocational skills. Social Science, with 4 respondents, makes up 13.33% of the total, indicating a moderate engagement with subjects related to society and human behavior. On the other hand, Physical Education and Science each have the lowest representation, with only 2 respondents (6.67%) in each field. This relatively lower interest in these areas could reflect broader trends or specific contexts of the respondent group. The overall distribution of specializations showcases a group

with diverse academic and vocational interests, with a particular emphasis on language, mathematics, and practical skills, alongside a more modest engagement with the natural sciences, physical education, and social studies.

Table 3. Highest Educational Attainment

Educational Attainment	F	%
Master's Graduate	2	6.67
With Master's Units	21	70
Bachelor's Degree	7	23.33
Total	30	100

This table presents the highest educational attainment teacher respondents, showcasing a significant lean towards advanced studies, particularly at the master's level. The most notable finding is that a vast majority, 21 respondents or 70%, have completed some units towards a master's degree. This high percentage indicates a strong commitment to further education beyond the undergraduate level, suggesting that the majority of the respondents are in the process of enhancing their qualifications, possibly to advance their careers or deepen their expertise in their respective fields. In contrast, only 2 respondents, or 6.67%, have fully completed a master's degree. This smaller proportion could imply various factors, such as the recent commencement of graduate studies among the group or the challenges and demands of completing such programs. Furthermore, 7 respondents, or 23.33%, hold a bachelor's degree as their highest educational attainment. This indicates that a considerable minority of the group has attained the standard qualification for professional entry-level positions in many fields.

Table 4. Length of Service

Length of Service	F	%
16 and above	4	13.33
Nov-15	5	16.67
06-Oct	10	33.33
01-May	11	36.67
Total	30	100

This table delineates the length of service among 30 respondents, categorizing them into four distinct intervals based on the number of years they have served. The data reveals a progressive distribution, with the majority of respondents having relatively shorter lengths of service. Notably, 11 respondents, constituting 36.67% of the population, have served between 1 to 5 years. This segment represents the largest proportion of the group, indicating a significant influx of newer members or employees within the last five years, suggesting either growth or turnover in the organization. Following closely, 10 respondents (33.33%) have a service length ranging from 6 to 10 years.

This substantial representation underscores a stable core within the organization, likely contributing significantly to its continuity and institutional memory. The next category, covering service lengths from 11 to 15 years, includes 5 respondents or 16.67% of the total. This demonstrates a smaller yet significant cohort of experienced individuals who have dedicated over a decade to their roles, providing a layer of depth to the organization's expertise and stability. Lastly, the group with the longest tenure, those with 16 years of service and above, comprises 4 individuals, making up 13.33% of the total.

Table 5. Level of Competence

S/N	Indicators	WM	Verbal Description
1	Modifying my teaching strategies to cater children with special needs.	4.2	Agree
2	Handling behavior of learners with special needs in an inclusive classroom	3.93	Agreee
3	Implementing the process on how to handle a class catering learners with special needs.	4.43	Strongly Agree
4	Using assistive technology for learners with special needs	4.43	Strongly Agree
5	Using appropriate assessment tools for learners with special needs	4.43	Strongly Agree
6	Motivating learners with special needs to participate in class activities	4.53	Strongly Agree
7	Catering to the needs of the learners with disability	4.5	Strongly Agree
8	Providing interventions of any learner with special needs	4.43	Strongly Agree
9	Identifying the strengths and weaknesses of learners with special needs	4.37	Strongly Agree
10	Providing atmosphere that is friendly to both learners with and without special needs	4.53	Strongly Agree
11	Collaborating strategies and techniques in handling learners with special needs with my colleagues	4.13	Agree
12	Coordinating with well-trained teachers with regards to the strategies I apply inside the classroom to address the needs of the learners	4.33	Strongly Agree
13	Establishing partnership with parents to monitor the progress of the child	4.6	Strongly Agree
14	Preparing anecdotal records of the learners with special needs	4.4	Strongly Agree
15	Pursuing advanced studies to enrich my knowledge on handling learners with special needs	4.53	Strongly Agree

The results depicted in Table 5 showcase the levels of competence of teachers in various aspects of handling learners with special needs. Data showed that with the highest weighted mean of 4.6, is the indicator concerning "Establishing partnership with parents to monitor the progress of the child", suggesting a strong consensus on its importance and the effectiveness with which teachers can engage.

Following closely are aspects such as "Motivating learners with special needs to participate in class activities" and "Providing atmosphere that is friendly to both learners with and without special needs", both registering a WM of 4.53, indicating a very strong agreement on their proficiency. The domain of using assistive technology, utilizing appropriate assessment tools, catering to learners' needs, providing interventions, and identifying learners' strengths and weaknesses, each scored a 4.43 WM, reflecting a substantial competence in employing diverse methodologies and technologies to support inclusive education. Conversely, the areas with relatively lower scores, yet still within the "Agree" range, include "Handling behavior of learners with special needs in an inclusive classroom" with a WM of 3.93, and "Collaborating strategies and techniques in handling learners with special needs with my colleagues" with a WM of 4.13. These slightly lower scores may indicate areas where teachers feel they could benefit from further training or resources, despite still holding a positive outlook on their capabilities. Overall, the results illuminate a strong foundation of competence among teachers in addressing the needs of learners with special needs, with particular strengths in fostering parental partnerships, engaging learners in activities, and creating inclusive environments. However, it also highlights areas for potential growth in collaborative strategies and behavior management, emphasizing the ongoing journey towards educational inclusivity.

Table 6 outlines teachers' attitude towards inclusive education. The highest level of agreement, with a WM of 4.17, is observed in the belief that "The responsibility for educating students with autism in regular classrooms should be shared between general and special education teachers," reflecting a strong consensus on the collaborative model of education. Closely following is the support for a consultant teacher model, which received a WM of 4.13, indicating a significant inclination towards cooperation and shared expertise in addressing the educational needs of students with autism within regular classroom settings. On the other hand, more moderate views are evident in statements regarding the necessity and effectiveness of integrating students with autism into regular classrooms. The lowest WM of 3.23, indicating a "Neutral" stance, concerns the elimination of separate classrooms exclusively serving students with autism, suggesting ambivalence about fully mainstreaming autism education. Similar neutrality is seen with a WM of 3.37 regarding the effectiveness of educating students with autism in regular classrooms compared to special education settings, highlighting ongoing debates about the best environments for their learning. Statements regarding the seldom need to remove students with autism from regular classrooms (WM 3.70), modifications to regular classrooms to meet the needs of students with autism (WM 3.90), and the benefits of team teaching (WMs of 3.73 and perspective towards inclusive education.

Table 6. Level of Attitudes

S/N	Indicators	WM	Verbal Description
1	All students with autism should be educated in regular classrooms with non-handicapped peers to the fullest extent possible.	3.47	Agree
2	It is seldom necessary to remove students with autism from regular classrooms in order to meet their educational needs.	3.70	Agree
3	Most or all separate classrooms that exclusively serve students with autism should be eliminated.	3.23	Neutral
4	Most or all regular classrooms can be modified to meet the needs of students with autism.	3.90	Agree
5	Students with autism can be more effectively educated in regular classrooms as opposed to special education classrooms.	3.37	Neutral
6	Inclusion is a more efficient model for educating students with autism because it reduces transition time (i.e. the time required to move from one setting to another).	3.57	Agree
7	Students with autism should not be taught in regular classes with non-disabled students because they will require too much of the teacher's time.	3.60	Agree
8	I have doubts about the effectiveness of including students with autism in regular classrooms because they often lack the academic skills necessary for success.	3.60	Agree
9	I have doubts about the effectiveness of including students with autism in regular classrooms because they often lack the social skills necessary for success.	3.60	Agree
10	I find that general education teachers often do not succeed with students with autism, even when they try their best.	3.00	Neutral
11	I would welcome the opportunity to team-teach as a model for meeting the needs of students with autism in regular classrooms.	3.73	Agree
12	All students benefit from team teaching; that is, the pairing ofa general and a special education teacher in the same classroom.	3.77	Agree
13	The responsibility for educating students with autism in regular classrooms should be shared between general and special education teachers.	4.17	Agree
14	I would welcome the opportunity to participate in a consultant teacher model (i.e. regular collaborative meetings between special and general education teachers to share ideas, methods and materials) as a means of addressing the needs of students with autism in regular classrooms.	4.13	Agree

Interestingly, concerns about the potential drawbacks of inclusion, such as the intensive time requirement from teachers and doubts about the students' academic and social skills (each with a WM of 3.60), also reached a level of agreement, indicating recognition of the challenges alongside the benefits of such educational approaches. Moreover, the results reflect a generally positive attitude towards the inclusion of students with autism in regular classrooms, underscored by a strong belief in collaborative teaching methods. However, the presence of neutral stances and concerns highlights the complexity of implementing inclusive education effectively, pointing to a need for

balanced approaches that consider both the potential benefits and challenges.

Table 7. Test of Relationship between the Teachers' Competence and Attitudes towards Inclusive Education

Variables	r-value	Strength of Correlation	p – value	Decision	Remarks
Competence and Attitudes	0.055	Negligible Positive	0.774	Do not reject Ho	Not Significant

*Significant at p<0.05 (two-tailed)

Table 7 presents the results of a statistical test examining the relationship between teachers' competence in handling learners with special needs and their attitudes towards inclusive education. The r-value reported is 0.055, indicating a very low positive correlation between these two variables. This suggests that, within the context of this study, there is a minimal direct relationship between how competent teachers feel in their skills and strategies for teaching learners with special needs and their attitudes towards the inclusion of these learners in regular educational settings. Given that this result is marked as significant at p<0.05 (two-tailed), it suggests that while the correlation is statistically significant, the strength of the relationship is weak. This outcome might imply that factors other than personal competence in special needs education significantly influence teachers' attitudes towards inclusive education. Such factors could include institutional support, resources available for inclusive education, personal beliefs about disability and inclusion, or experiences with inclusive education. The minimal correlation suggests that enhancing teachers' competence alone may not be sufficient to significantly shift attitudes towards more positive perceptions of inclusive education. Instead, a multifaceted approach, addressing both skills and broader educational and societal attitudes towards inclusion, may be necessary to foster more supportive attitudes among teachers towards inclusive education.

Conclusion

The findings reveal that while teachers self-report high levels of competence in handling learners with special needs and generally hold positive attitudes towards inclusive education, especially for students with autism, there is a negligible positive correlation between these competences and attitudes that is not statistically significant. This suggests that a teacher's perceived competence in catering to special

needs learners does not necessarily impact their attitudes towards inclusive education. Despite individual positive perceptions on both fronts, the lack of a significant relationship indicates that factors beyond the scope of the provided data might influence teachers' attitudes towards inclusion, or that competence alone is not a strong predictor of positive attitudes towards inclusive education practices.

References

Abba, U. M., & Rashid, A. M. (2020). Teachers' competency requirement for implementation of inclusive education in Nigeria. *Universal Journal of Educational Research*, *8*(3), 60-69.

Alves, I., Campos Pinto, P., & Pinto, T. J. (2020). Developing inclusive education in Portugal: Evidence and challenges. *Prospects*, *49*(3), 281-296.

Aktan, O. (2020). Determination of Educational Needs of Teachers Regarding the Education of Inclusive Students with Learning Disability. *International Journal of Contemporary Educational Research*, *7*(1), 149-164.

Black-Hawkins, K., Maguire, L., & Kershner, R. (2022). Developing inclusive classroom communities: what matters to children?. *Education 3-13, 50*(5), 577-591.

Boyle, C., Anderson, J., & Allen, K. A. (2020). The importance of teacher attitudes to inclusive education. In *Inclusive education: Global issues and controversies* (pp. 127-146). Brill.

Gallego-Ortega, J. L., & Rodríguez-Fuentes, A. (2021). Teaching attitudes towards students with disabilities. *Mathematics*, *9*(14), 1637.

Katitas, S., & Coskun, B. (2020). What is meant by inclusive education? Perceptions of Turkish teachers towards inclusive education. *World Journal of Education*, *10*(5), 18-28.

Kozibroda, L. V., Kruhlyk, O. P., Zhuravlova, L. S., & Chupakhina, S. V. (2020). Practice and Innovations of Inclusive Education at School. *International Journal of Higher Education*, *9*(7), 176-186.

Kuyini, A. B., Major, T. E., Mangope, B., & Alhassan, M. (2021). Botswana teachers: competencies perceived as important for inclusive education. *International Journal of Inclusive Education*, 1-16.

Lakkala, S., Galkienė, A., Navaitienė, J., Cierpiałowska, T., Tomecek, S., & Uusiautti, S. (2021). Teachers supporting students in collaborative ways—An analysis of collaborative work creating supportive learning environments for every student in a school: Cases from Austria, Finland, Lithuania, and Poland. *Sustainability*, *13*(5), 2804.

Lindner, K. T., & Schwab, S. (2020). Differentiation and individualisation in inclusive education: a systematic review and narrative synthesis. *International journal of inclusive education*, 1-21.

Love, H. R., & Horn, E. (2021). Definition, context, quality: Current issues in research examining high-quality inclusive education. *Topics in Early Childhood Special Education*, *40*(4), 204-216.

Márquez, C., & Melero-Aguilar, N. (2022). What are their thoughts about inclusion? Beliefs of faculty members about inclusive education. *Higher Education*, *83*(4), 829-844.

Van Mieghem, A., Verschueren, K., Petry, K., & Struyf, E. (2020). An analysis of research on inclusive education: a systematic search and meta review. *International Journal of Inclusive Education*, 24(6), 675-689.

Mitchell, D., & Sutherland, D. (2020). *What really works in special and inclusive education: Using evidence-based teaching strategies*. Routledge.

Nilholm, C. (2021). Research about inclusive education in 2020–How can we improve our theories in order to change practice?. *European Journal of Special Needs Education*, *36*(3), 358-370.

Ng, S. W., & Kwan, Y. W. (2020). Inclusive education teachers— Strategies of working collaboratively with parents of children with special educational needs in Macau. *International Journal of Educational Reform*, *29*(2), 191-207.

Paseka, A., & Schwab, S. (2020). Parents' attitudes towards inclusive education and their perceptions of inclusive teaching practices and resources. *European journal of special needs education*, *35*(2), 254-272.

Radojlovic, J., Kilibarda, T., Radevic, S., Maricic, M., Parezanovic Ilic, K., Djordjic, M., ... & Radovanovic, S. (2022). Attitudes of primary school teachers toward inclusive education. *Frontiers in psychology*, *13*, 891930.

Seeram, E. (2019). An overview of correlational research. *Radiologic Technology*, *91*(2), 176–179.

Yada, A., Leskinen, M., Savolainen, H., & Schwab, S. (2022). Meta-analysis of the relationship between teachers' self-efficacy and attitudes toward inclusive education. *Teaching and Teacher Education*, *109*, 103521.