



PREDICTORS OF NON-SPECIAL EDUCATION TEACHERS' PROFESSIONAL DEVELOPMENT AND READINESS IN HANDLING LEARNERS WITH AUTISM SPECTRUM DISORDER (ASD)

Marijo M. Lopez¹,

Andrian A. Dela Cruz²ⁱ

¹Special Education Teacher,
Bangued West Central School,
Abra Special Education Center,
Bangued, Abra, 2800,
Philippines

²Faculty,
Mariano Marcos State University,
College of Teacher Education,
Laoag Campus, 2900,
Philippines

Abstract:

This descriptive-correlational study described the relationship between the non-special education (non-SpEd) teachers' profile, level of professional development, and level of readiness in handling learners with autism spectrum disorder (ASD) in inclusive education (IE). The study participants were 20 non-Sped teachers in the Schools Division of Abra. This study used a survey questionnaire adapted from dela Cruz (2020), Gepila (2020) and Aldabas (2020) to gather the data. Frequency, percentage distribution, mean, Pearson's r correlation, and regression analysis were used to treat the data. Findings reveal that most of the non-SpEd teachers have master's units, are Teacher III, have 5 to 9 years of teaching experience, and have six to eight SpEd-related seminars/trainings. Likewise, the non-SpEd teachers are highly proficient (2.55) in terms of their professional development. Additionally, the study reveals that the non-SpEd teachers are slightly ready (2.00) in handling learners with ASD. Moreover, the analysis reveals a significant correlation between the teachers' profile and professional development. Further, the study reveals that there exists a significant correlation between the teachers' readiness to handle learners with ASD in IE and their teaching position. Lastly, the analysis revealed that years in service significantly predict the teachers' professional development, while teaching position significantly predicts their readiness in IE.

Keywords: Autism Spectrum Disorder (ASD), development, non-special education teachers, readiness

ⁱ Correspondence: email mariju.lopez@deped.gov.ph

1. Introduction

Continuous professional development for teachers is crucial for creating a dynamic educational environment. It involves refining their craft, adapting to pedagogical approaches, and staying updated. It empowers teachers to meet diverse student needs, including those with special needs. Investing in teacher professional growth ensures high-quality instruction for all learners, aligning with Sustainable Development Goals 3 and 4, which promote healthy lives, mental well-being, and inclusive education for diverse students, including those with special needs.

AbdulRab (2023) asserted that teachers' professional development is an ongoing process that begins with their first training and continues until their retirement. However, teachers, irrespective of their age, experience, or academic qualifications, are not exempted from facing challenges.

To reduce the potential effects of the challenges that teachers may face in the workplace, Suryanti *et al.* (2021) suggested that they need to foster readiness, highlighting the critical role that preparation plays in providing high-quality instruction and shaping overall student outcomes. In relation to this, Aldabas (2020) claimed that teachers' readiness is a critical factor in the achievement of inclusive education for children with severe disabilities. This backs up the global research that outlines and measures the professionalism and accountability difficulties that educators confront globally at all educational levels and settings (Stromquist, 2018).

Nevertheless, Elton-Chalcraft *et al.* (2016) mentioned that teaching in special education (SpEd) classrooms has never been easy, and learning can be equally challenging for learners with special educational needs (LSENs). Scholars, both local and abroad, identified issues and challenges that intricate teaching in SpEd setting, such as teachers' lack of qualifications and strategies in dealing with LSENs (Allam & Martin, 2021), low ability in lesson preparation, teaching materials, and assessment (Kartini & Aprilia, 2022), and lack of knowledge of IE policy (Neupane & Niure, 2023).

With the recent enactment of Republic Act 11650, public school teachers are mandated to provide LSENs access to formal education through mainstream programs. As defined in Department of Education (DepEd) Order No. 53, s. 2008, mainstreaming refers to the enrolment of LSENs in regular classes with support services, whether partial or full integration. With this mandate, several trainings and workshops were provided to prepare teachers for the mainstreaming program (United Nations Educational, Scientific and Cultural Organization [UNESCO], 2020).

Considerably, amidst these initiatives, regular teachers who are non-SpEd graduates face a heightened challenge in handling LSENs, particularly those with autism spectrum disorder (ASD) (Kahn, 2023). The World Health Organization (WHO) defined ASD as a range of confined, repetitive, and rigid patterns of behavior, interests, or activities that are abnormal or excessive for the person's age and sociocultural context, making it more difficult for non-SpEd teachers to work with them.

Numerous studies outline the common deficits that people with ASD may encounter and which may have an impact on the teaching and learning process. According to Hustyi *et al.* (2023), people with ASD struggle with behavioral, social, and communication problems. They are unable to express their own mental and emotional experiences because of their disease (Montaque *et al.*, 2018), which impacts their capacity for social interaction and communication (Zhao & Chen, 2018). As emphasized during the 11th revision of the International Classification of Diseases (ICD), ASD typically manifests in infancy, but those symptoms may not be fully obvious until later when social expectations exceed a person's capacity (World Health Organization, 2021).

As reported by the Centers for Disease Control and Prevention (CDC) (2018), the prevalence of ASD has increased exponentially over the past 10 years, with an estimated 1 in 59 children suffering from the condition. Globally, these startling prevalence rates are thought to be increasing. As Swift (2018) contends, the inclusion strategy has led to a rise in the enrollment of learners with ASD in regular classes through mainstream programs.

Owing to the challenges faced by learners with ASD in educational settings, it is imperative to adopt a comprehensive and inclusive support approach (Schalkwyk & Volkmar, 2017). Consequently, non-SpEd teachers must be well-versed in handling learners with ASD enrolled in mainstream programs. Addressing this, Allam and Martin (2021) acknowledge the urgent necessity to equip them with the requisite knowledge and skills to handle learners with ASD and carry out their duties effectively as regular teachers in a mainstream program.

Several studies have identified factors that predict the readiness and effectiveness of non-SpEd teachers. Relatedly, Arpilleda and Jondy (2018) found that educational attainment, teaching experience, specialization, and participation in seminars influence pedagogical styles and readiness. Likewise, Utami and Vioreza (2021) observed that seminars and training impact career productivity, while Werang (2014) highlighted a substantial correlation between teachers' socioeconomic status and their work productivity.

These findings underscore the potential value of understanding teachers' profiles as an indicator of their instructional preparation and readiness in the classroom.

In line with the needed competencies for Filipino teachers to be ready and prepared, the government crafted guidelines pursuant to DepEd Order No. 001, s. 2020 in connection to the professional development priorities. These priorities shall support the realization of the department's goal of continuous upskilling and reskilling of basic education teachers in content knowledge, pedagogical skills, assessment strategies, and professional ethics that result in effective and efficient teaching performance for better learning outcomes.

Nevertheless, despite DepEd's initiatives to support them, many primary teachers still struggle due to a lack of professional development and instructional preparedness (Dagdag, 2023). According to Al Jaffal (2022), schools should enhance these components, particularly non-SpEd students in IE. Nonetheless, there is a dearth of research that

directly links non-SpEd teachers' professional development and preparedness in handling learners with ASD, which emphasizes the importance of this present undertaking.

Hence, this study provided a comprehensive description of the predictors influencing non-SpEd teachers' readiness and professional development in handling learners with ASD.

2. Purpose of the Study

This study described the predictors of non-Special Education teachers' professional development and readiness in Inclusive Education (IE) in handling learners with Autism Spectrum Disorder (ASD).

3. Research Methodology

3.1 Research Design

The study used descriptive-correlational predictive research design. It described the profile, professional development, and readiness of non-SpEd teachers in handling learners with ASD in IE. Likewise, the relationship between the following variables was correlated:

- 1) teachers' profile and level of professional development, and
- 2) teachers' profile and level of readiness.

Moreover, predictive analysis was employed to determine which among the variables can predict the non-SpEd teachers' professional development and readiness in IE to handle learners with ASD.

3.2. Research Participants

This research was conducted in the Schools Division of Abra, involving six schools. These schools were chosen as the study's locale due to their practice of integrating learners with ASD into regular classrooms. Moreover, These schools have non-SpEd teachers who undertake the responsibility of instructing learners with ASD alongside their peers in mainstream classes. This setting offers a valuable opportunity to understand the professional development and readiness of these non-SpEd teachers in handling learners with ASD in IE.

3.3 Research Instrument

This study used three self-survey questionnaires to assess teachers' professional development in content knowledge, pedagogy, learning environment, diversity, curriculum planning, assessment, community engagement, and personal growth. The first part, adapted from dela Cruz (2020), determined the profile of respondents along with educational attainment, teaching position, years in service, and the number of seminars/trainings attended in the past three years related to SpEd. The second part,

adopted from Gepila (2020), assessed teachers' perceptions of their professional development in content knowledge, pedagogy, learning environment, diversity, curriculum planning, assessment, community engagement, and personal growth. The third part, adopted from Aldabas' (2020) study, assessed non-SpEd teachers' readiness for managing learners with ASD in IE, focusing on collaborating and teaming skills, effective instructional methods, inclusion, planning, accessing the general education curriculum, and transition programs.

3.4 Data Collection

The researcher obtained approval from the MMSU-University Research Ethics Review Board (URERB), which assessed the ethical aspects of this study before conducting it. A letter of request was secured from the school's division superintendent of the Schools Division of Abra.

Upon approval, the researcher asked permission from the six school heads for the administration of the questionnaire to the respondents. After which, the data gathering began in the third week of January 2024 and ended in the third week of March 2024. Each respondent was given utmost one week to complete the questionnaire. The researcher herself retrieved the questionnaire after receiving confirmation from the respondents.

The collected data were imported and organized using Microsoft Excel. After this, the organized data were imported into the SPSS software prior to statistical analysis. Several statistical formulae were used to address the objectives of the study. Consequently, the predictors of teachers' professional development and readiness in IE in handling learners with ASD were determined.

3.5 Data Analysis

All data gathered were categorized, tallied and tabulated. Frequency and percentage were used to analyze the data on the non-SpEd teachers' profiles. Meanwhile, the mean was used to analyze the non-SpEd teachers' professional development and readiness in IE in handling learners with ASD. The following mean range intervals with their corresponding descriptive interpretations were used:

Range of Means	Descriptive Interpretation (DI)
3.50-4.00	Distinguished (D)
2.50-3.49	Highly Proficient (HP)
1.50-2.49	Proficient (P)
1.00-1.49	Beginning (B)

On the other hand, to determine the relationship between the non-SpEd teachers' profile and their level of professional development and level of readiness in IE in handling learners with ASD, the Pearson correlation coefficient was used.

Moreover, regression analysis was used to determine which among the variables of the study is the predictor of non-SpEd teachers' professional development and readiness in IE in handling learners with ASD.

The following range of means with the corresponding descriptive interpretation was used to treat the data.

Range of Means	Descriptive Interpretation (DI)
3.50-4.00	Very Much Ready (VMR)
2.50-3.49	Ready (R)
1.50-2.49	Slightly Ready (SR)
1.00-1.49	Not Ready (NR)

4. Results and Discussions

4.1 Profile of the Non-Special Education (non-SpEd) Teachers

This section discusses the distribution of non-SpEd teachers regarding their profile as to highest educational attainment, teaching position, number of years in the service, and number of seminars/training attended for the past three years related to SpEd. The data are presented in Table 1.

Table 1: Distribution of the non-SpEd teachers in terms of their profile (n=20)

Profiles		
Highest Educational Attainment	<i>f</i>	%
Bachelor's degree holder	2	10.00
With master's units	11	55.00
Master's degree holder	5	25.00
With doctoral units	2	10.00
Total	20	100
Teaching Position	<i>f</i>	%
Teacher III	17	85.00
Master Teacher I	2	10.00
Master Teacher II	1	5.00
Total	20	100
Number of years in the service	<i>f</i>	%
5-9	6	30
10-14	4	20
15-19	5	25
20-24	1	5
25-29	2	10
30-34	1	5
35 and above	1	5
Total	20	100
Number of seminars/training	<i>f</i>	%
3 -5	1	5
6-8	9	45
9-11	5	25
12 and above	5	25
Total	20	100

A. Highest Educational Attainment

In terms of the highest educational attainment, it is evident on the table that the majority of non-SpEd teachers pursue further education beyond a bachelor's degree, with 11 (55.00%) having completed master's units, and five (25.00%) holding a master's degree.

This indicates a strong commitment to professional development and potentially enhances their teaching abilities and knowledge base. However, it is notable that there is a smaller distribution of teachers with doctorate-level qualifications, with only two (10.00%) having completed doctoral units and none holding a doctorate or post-doctorate degree.

The findings imply that while many non-SpEd teachers have advanced education, there is still room for growth and professional development. Encouraging more teachers to pursue higher studies could improve teaching expertise and student outcomes, especially those with special educational needs.

The need for continuous learning in teaching stems from its demanding nature, which requires advanced knowledge and skills (Ingersoll & Perda, 2008), as well as a solid academic background (Symeonidis, 2015). According to Liu (2021), higher educational attainment among teachers can signify advanced human capital development, innate ability, academic motivation, and cognitive skills, potentially leading to more effective instructional practices, improved classroom management, and increased creativity

B. Teaching Position

In terms of teaching position, the table illustrates that out of 20 non-SpEd teachers, the majority, 17 (85.00%), are Teacher III. This suggests that Teacher III is the most common teaching position among non-SpEd teachers. Additionally, two (10.00%) of the teachers hold the position of Master Teacher I, while only one (5.00%) is Master Teacher II. Conversely, none of the teachers are Teacher I, Teacher II, or Master Teacher III, respectively.

This finding aligns with the local research conducted by Dagdag (2023), which similarly found that most respondents occupy the Teacher III academic rank position.

C. Number of Years in the Service

In terms of the number of years in service, the majority (six or 30.00%) of the teachers have five to nine years of teaching experience. Likewise, five (25.00%) have 15 to 19 years of experience. On the other hand, four (20.00%) have 10 to 14 years of service, while the remaining five (20.00%) belong to the bracket of 25 to 35 years or more of teaching experience.

Kini and Podolsky's (2016) study suggested that as teachers accumulate experience, students exhibit enhanced learning outcomes. The accrued experience among the teachers serves as a compelling indicator of their effectiveness in the teaching profession.

D. Number of SpEd-related Seminars/Trainings Attended for the Past Three Years

Based on the number of seminars/trainings attended for the past years, the majority (nine or 45.00%) of the teachers have six to eight trainings, five (25.00%) have nine to 11, and 12 or more, respectively, while only one (5.00%) has three to five SpEd-related trainings. This indicates the teachers' commitment to professional development and willingness to enhance their skills in catering to students with special educational needs. The availability of specialized training initiatives could improve their capacity to support students with learning needs in inclusive classroom settings.

Nonetheless, Allam and Martin (2021) pinpointed that the majority of the teachers handling LSEs do not get specialized training in SpEd from their schools, resulting to feelings of inadequacy while teaching these children.

4.2 Level of Non-Special Education (non-SpEd) Teachers' Professional Development Based on the Different Philippine Professional Standards for Teachers (PPPST) Domains

This section provides a discussion on the level of non-SpEd teachers' professional development based on the different domains of the PPST along with content knowledge and pedagogy, learning environment, diversity of learners, curriculum and planning, assessment and reporting, community linkages and professional engagement, and personal growth and professional development.

Table 2 shows the mean rating on the level of non-SpEd teachers' professional development. It can be deduced from the table that the overall mean of 2.55 explains a consistently high proficiency across all domains. The data suggest that teachers have demonstrated strong competencies in various aspects of teaching and professional practice as outlined in the PPST Domains.

Table 2: Mean rating on the level of non-SpEd teachers' professional development

Professional Development Domain		
Domain 1. Content Knowledge and Pedagogy	Mean	DI
1. Content knowledge and its application within and across curriculum areas	2.50	HP
2. Research-based knowledge and principles of teaching and learning	2.30	HP
3. Positive use of ICT	2.40	HP
4. Strategies for promoting literacy and numeracy	2.70	HP
5. Strategies for developing critical and creative thinking, as well as other higher-order thinking skills	2.60	HP
6. Mother Tongue, Filipino and English in teaching and learning	2.65	HP
7. Classroom communication strategies	2.60	HP
Composite Mean	2.54	HP
Domain 2. Learning Environment	Mean	DI
1. Learner safety and security	2.55	HP
2. Fair learning environment	2.60	HP
3. Management of classroom structure and activities	2.60	HP
4. Support for learner participation	2.60	HP
5. Promotion of purposive learning	2.60	HP
6. Management of learner behavior	2.55	HP

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Composite Mean	2.58	HP
Domain 3. Diversity of Learners	Mean	DI
1. Learners' gender, needs, strengths, interests and experiences	2.55	HP
2. Learners' linguistic, cultural, socio-economic and religious backgrounds	2.35	P
3. Learners with disabilities, giftedness and talents	2.30	P
4. Learners in difficult circumstances	2.30	P
5. Learners from the indigenous group	2.35	P
Composite Mean	2.37	P
Domain 4. Curriculum and Planning	Mean	DI
1. Planning and management of teaching and learning process	2.50	HP
2. Learning outcomes aligned with learning competencies	2.65	HP
3. Relevance and responsiveness of learning programs	2.50	HP
4. Professional collaboration to enrich teaching practice	2.60	HP
5. Teaching and learning resources, including ICT	2.40	P
Composite Mean	2.53	HP
Domain 5. Assessment and Reporting	Mean	DI
1. Design, selection, organization and utilization of assessment strategies	2.45	P
2. Monitoring and evaluation of learner progress and achievement	2.75	HP
3. Feedback to improve learning	2.60	HP
4. Communication of learner needs, progress and achievement to key stakeholders	2.50	HP
5. Use of assessment data to enhance teaching and learning practices and programs	2.60	HP
Composite Mean	2.58	HP
Domain 6. Community Linkages and Professional Engagement	Mean	DI
1. Establishment of learning environments that are responsive to community context	2.55	HP
2. Engagement of parents and the wider school community in the educative process	2.60	HP
3. Professional ethics	2.70	HP
4. School policies and procedures	2.55	HP
Composite Mean	2.60	HP
Domain 7. Personal Growth and Professional Development	Mean	DI
1. Philosophy of teaching	2.55	HP
2. Dignity of teaching as a profession	2.75	HP
3. Professional links with colleagues	2.60	HP
4. Professional reflection and learning to improve practice	2.65	HP
5. Professional development goals	2.65	HP
Composite Mean	2.64	HP
Overall Mean	2.55	HP

Legend:

Range of Means	Descriptive Interpretation (DI)
3.50-4.00	Distinguished (D)
2.50-3.49	Highly Proficient (HP)
1.50-2.49	Proficient (P)
1.00-1.49	Beginning (B)

A. Content Knowledge and Pedagogy

In terms of content knowledge and pedagogy, the data reveal that the teachers are highly proficient in all the indicators, as evidenced by the composite mean of 2.54. This implies that teachers demonstrate high proficiency in implementing meaningful, developmentally appropriate instruction using Medium of Teaching Learning (MOTL), technology, instructional methodologies, and communication strategies.

However, the lowest mean of 2.30 indicates a need for additional research engagement and the use of findings to enhance their instruction. This suggests a need for further research engagement among the teachers to improve their teaching methods.

Ulla's 2018 study underscored the significant benefits of research for Filipino teachers, revealing that engaging in research activities profoundly improves their content mastery, refines their pedagogical skills, and fosters substantial professional growth.

B. Learning Environment

When it comes to the learning environment, the composite mean of 2.58 suggests that teachers are highly proficient and deemed to succeed at creating a fair, secure, and safe learning environment, as shown in the students' high level of participation in class and the skillfully managed structure, activities, and conduct of the classroom. Moreover, the data explain that teachers are adept at controlling their learners' behavior in both real-world and virtual environments as they have firsthand knowledge of teaching their clientele using different learning modes of teaching.

This can be linked to what Anagün (2018) explained that when teachers have strong perceptions about problem-solving, critical thinking, cooperation, communication, and creativity, they may appear to offer their students learning environments that are more open to students' inquiry and investigation and that are therefore more favorable to positive student attitudes.

C. Diversity of Learners

Along with the diversity of learners, the composite mean of 2.37 indicates a proficient level among non-SpEd teachers. Though they are found proficient in this domain, the finding explains that there are still areas for improvement in addressing the needs of specific learner groups, such as those with linguistic, cultural, socio-economic and religious backgrounds issues, with disabilities, giftedness and talent concerns, under difficult circumstances, and those from Indigenous backgrounds.

The result can be associated with what Gepila (2020) discovered on poor management of an indigenous group of students by the teaching staff from selected basic and higher education institutions in Southern Luzon utilizing PPST. This reminds teachers to keep on updating their skills and abilities to be competent in coping with the challenges of a diversified community of learners (Valdez, 2023).

D. Curriculum and Planning

Along with curriculum and planning, the finding reveals that the respondents are highly proficient in relation to effective management of curriculum and other learning resources, as reflected in well-organized conduct of the teaching-learning process, either individually or in collaboration with colleagues.

This is evident as revealed by the composite mean of 2.53 obtained in this domain. This only implies that the teachers can turn curriculum material into engaging activities that adhere to the fundamentals of successful teaching and learning.

E. Assessment and Reporting

As to assessment and reporting, the teachers are highly proficient, as revealed by the composite mean of 2.58. However, the teachers were only proficient in the first indicator, which obtained a mean of 2.45. This only means that the non-SpEd teachers still need support to be capacitated in the indicator along with designing, selecting, organizing, and utilizing assessment strategies. As affirmed, teachers' experience and knowledge in assessment and reporting are crucial for student learning to improve (Hattie, 2008).

F. Community Linkages and Professional Engagement

Along with community linkages and professional engagement, the data explain that all the teachers excel at following school regulations, standards, and procedures, building relationships with the local community, and encouraging professional ethics, which is supported by the composite mean of 2.60, described as highly proficient.

This implies that they recognize the importance of the connection of classroom instruction to experiences, passions, and goals of the larger school community and other significant stakeholders. It addresses how crucial it is for teachers to carry out their responsibilities to sustain professional ethics, accountability, and openness in order to foster professional and cordial relationships with students, parents, schools, and the larger society.

As mentioned in the study of Gepila (2020), this domain encourages community and school collaboration, which is demonstrated through initiatives and activities that uphold the growth of solid and cordial relationships between and among school stakeholders.

G. Personal Growth and Professional Development

In terms of personal growth and professional development, the teachers consider their overall performance in upholding the indicators established in this domain to be highly proficient, with a composite mean of 2.64.

Indicators of this domain explain teacher professionalism. Although there is no universally accepted definition, education experts refer to this as raising the standards and quality of teachers and their practices, as well as improving the teaching profession, which is reflected in this domain (Demirkasmolu, 2010).

4.3 Readiness of non-Special Education (non-SpEd) Teachers in Handling Learners with Autism Spectrum Disorder (ASD)

This section presents the level of readiness of non-SpEd teachers in handling learners with ASD in an IE setting along with collaborating and teaming skills, using effective instructional methods, implementing inclusion, planning and implementing of behavioral interventions, accessing the general education curriculum, and planning transition programs. The data are presented in Table 3.

It could be gleaned from the table that the non-SpEd teachers' readiness in IE, as indicated by the obtained overall mean of 1.98, which is described as slightly ready, underscores the importance of ongoing support and professional development initiatives to enhance non-SpEd teachers' readiness in meeting the diverse needs of learners across various skill areas. Continued efforts in training and collaboration are essential to ensure positive outcomes for learners with ASD in inclusive educational settings.

However, it can be deduced from the table that among the indicators of readiness in IE, planning transition programs received the lowest composite mean of 1.98, which is slightly ready, followed by accessing the general education curriculum and planning and implementing behavioral interventions, with composite means of 2.00 and 2.03 respectively, which are both interpreted as slightly ready. Thus, teachers need additional support for transition programs, while improvements in the general education curriculum access and behavioral interventions could enhance IE effectiveness.

According to Aldabas (2020), teachers' readiness is a critical factor in achieving IE for children with severe disabilities. Chia and Kee (2023) asserted that the only way to ensure that LSENs receive the education that they deserve is through teachers' readiness.

Table 3: Mean rating on the level of non-SpEd teachers' readiness in IE along with collaboration and teaming skills in handling learners with ASD

Readiness of non-Special Education Teachers		
Collaborating and Teaming Skills	Mean	DI
1. Teamwork and partnership.	2.40	SR
2. Facilitate the participation of families in the preparation and implementation of the IEP	2.35	SR
3. Work cooperatively with professionals within the school to support and handle learners with ASD.	2.45	SR
4. Train and provide colleagues with best practices in handling learners with ASD.	2.20	SR
Composite Mean	2.35	SR
Using Effective Instructional Methods	Mean	DI
1. Monitor the progress of the learners with ASD to achieve their IEP goals.	2.25	SR
2. Explain and analyze the progress of the learners with ASD on their Individualized Educational Plans (IEPs).	2.10	SR
3. Use methods of motivation and stimulation in teaching skills and behaviors.	2.40	SR
4. Teach and train learners with ASD in communication skills using augmentative and alternative communication methods in diverse environments.	2.00	SR
5. Teach learners with ASD social skills and daily life skills.	2.10	SR
6. Teach learners with ASD strategies and techniques to help them generalise the skills in different situations.	2.05	SR

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7. Train students to build friendships using appropriate methods and situations.	2.15	SR
Composite Mean	2.15	SR
Implementing of Inclusion	Mean	DI
1. Collaborate with school professionals to support inclusion.	2.40	SR
2. Plan behavioral intervention programs to train and motivate learners with ASD to stay in inclusive classrooms.	2.20	SR
3. Facilitate interaction between learners with ASD and their typically developing peers.	2.15	SR
5. Support the independence of learners with ASD in Inclusive Education (IE) classrooms based on their abilities.	2.20	SR
6. Apply the principles of universal design for learning to support the education of learners with ASD in IE classrooms.	2.25	SR
7. Modify the classroom environment to meet the physical and educational needs of learners with ASD.	2.10	SR
8. Identify the appropriate assistive technology to enable the learners with ASD to participate in all school activities.	2.20	SR
Composite Mean	2.21	SR
Planning and Implementing of Behavioral Interventions	Mean	DI
1. Monitor the progress of learners with ASD toward the achievement of behavioral goals	2.10	SR
2. Build behavioral intervention plans to control the challenging behaviors of learners with ASD.	1.95	SR
3. Collect and use data before and after the occurrence of challenging behaviors of learners with ASD to develop hypotheses.	2.05	SR
Composite Mean	2.03	SR
Accessing to the general education curriculum (GEC)	Mean	DI
1. Identify the possible use of the contents of GEC using adaptation or modification techniques	1.95	SR
2. Adapt GEC objectives with the objectives of the IEP for learners with ASD.	2.05	SR
3. Use strategies of adaptation in teaching and evaluation to facilitate the learning of learners with ASD.	2.05	SR
4. Describe and analyze the performance of learners with ASD toward achieving their IEP goals by applying GEC.	1.95	SR
5. Teach learners with ASD the necessary skills to help them in ongoing participation in none educational activities.	2.00	SR
Composite Mean	2.00	SR
Planning Transition Programs	Mean	DI
1. Discuss planning transitional goals with the learners with ASD themselves (if possible) in addition to the IEP team.	2.00	SR
2. Teach the learners with ASD skills that help them participate in recreational activities in the community.	1.90	SR
3. Use appropriate assessment and measurement tools for long-term planning and to establish long-term goals.	1.95	SR
4. Teach learners with ASD independence skills to help them to integrate into the community.	2.00	SR
5. Teach the students self-determination skills	2.05	SR
Composite Mean	1.98	SR
Overall Mean	1.98	SR

Legend:

Range of Means	Descriptive Interpretation (DI)
3.50-4.00	Very Much Ready (VMR)
2.50-3.49	Ready (R)
1.50-2.49	Slightly Ready (SR)
1.00-1.49	Not Ready (NR)

A. Collaborating and Teaming Skills

In terms of their collaborative and teamwork skills in IE, the table shows that the teachers exhibit a modest level of readiness in demonstrating collaboration and teamwork, as indicated by the composite mean of 2.35 across the four specified skills. This indicates that the non-SpEd teachers possess a reasonable level of readiness in cooperation and teamwork skills but would benefit from additional training and support. Similarly, they demonstrate a moderate level of readiness in engaging with families and collaborating with specialists. However, to address the diverse needs of learners with ASD in inclusive educational environments, they require ongoing assistance and training despite having foundational skills. This continuous support is crucial to ensure positive outcomes for all students.

As outlined in Goldstein *et al.*'s study (2013), the capacity to collaborate with parents and professionals is a crucial skill for general education teachers in inclusive settings.

B. Using Effective Instructional Methods

In terms of using effective instructional methods for learners with ASD. It can be deduced from the same table that the teachers are generally slightly ready in using instructional methods as demonstrated by the obtained composite mean of 2.15. This implies that the teachers may require further support and training to effectively monitor and elucidate the progress of learners with ASD in achieving their IEP objectives.

According to Lindsay *et al.* (2013), when non-SpEd teachers lack guidelines and proper training, they may resort to using non-evidence-based practices to teach students with special needs in their classrooms, potentially resulting in detrimental outcomes.

C. Implementing of Inclusion

Along with implementing inclusion, the teachers are slightly ready, as evidenced by the obtained composite mean of 2.21. This suggests that the non-SpEd teachers are somewhat ready to work with school professionals for inclusion, but there is room for growth in creating behavioral intervention programs, fostering independence, and enabling contact between ASD learners and classmates

Studies pinpointed that well-prepared and ready teachers are better equipped to teach and handle students with ASD needs, as they are knowledgeable about their unique characteristics, such as communication difficulties, delayed social development, and repetitive movements and behaviors, leading to improved outcomes (Edward, 2021).

D. Planning and Implementing of Behavioral Interventions

In terms of developing and implementing behavioral interventions, the composite mean of 2.03 suggests that the teachers are slightly ready to develop and administer behavioral treatments for ASD learners. This implies that teachers are slightly ready to monitor the progress of ASD learners toward behavioral goals but are not as prepared to develop intervention strategies for problematic behaviors.

According to Edward (2021), a prepared teacher possesses essential social skills training, including the ability to offer classroom accommodations and devise contingency plans for immediate behavior intervention.

E. Accessing to the General Education Curriculum

In terms of accessing the general education curriculum, the table shows that the non-SpEd teachers are slightly ready to handle learners with ASD, as proven by the composite mean of 2.00. This indicates the need for ongoing support and training to improve their effectiveness in inclusive settings.

This finding corroborates the claim of Cameron and Cook (2013), which emphasized that many mainstream classroom teachers encounter significant challenges when teaching students with ASD in today's classrooms.

F. Planning Transition Programs

In terms of planning transition programs, the obtained composite mean of 1.98 suggests that the non-SpEd teachers are generally slightly ready in demonstrating some level of readiness in planning transition programs.

Ashburner *et al.* (2010) found that teachers who feel unprepared may lack self-confidence and skills to positively teach students with ASD, leading to apprehension about their behavioral and emotional difficulties, such as attention, compared to their typically developing peers. This negative attitude towards inclusion can lead to a lack of confidence in teaching these students.

4.4 Non-Special Education (non-SpEd) Teachers' Profile, Professional Development, and Readiness in Handling Learners with Autism Spectrum Disorder (ASD)

This section presents the Pearson correlation analysis between the profiles of nonSpEd teachers and their professional development. The data are presented in Table 4.1. and Table 4.2.

Overall, Table 4.1 shows that the number of years in service exhibits a significant correlation with their professional development ($[r(0.562) = 0.036, p < 0.05]$). This significant correlation indicates that the duration of teaching service contributes to their professional development. This suggests that as the years of teaching service increase, non-SpEd teachers are better equipped to address the needs of learners with ASD.

This is evident in their effective planning and management of curriculum and other learning resources ($[r(0.643) = 0.037, p < 0.05]$), ability to understand diverse learner needs ($[r(0.543) = 0.039, p < 0.05]$), and their capacity to uphold teaching integrity, defining

a teaching philosophy, fostering learning, cultivating relationships, and pursuing professional development shape their careers ($[r(0.391) = 0.049, p < 0.05]$).

Conversely, seminars and trainings attended demonstrate significant correlation with professional development but along the domain “diversity of learners” only ($[r(0.492) = 0.028, p < 0.05]$). This indicates that participating in seminars and training sessions is associated with a better understanding of diverse learner needs and contributes to overall personal and professional growth among non-SpEd teachers.

This corroborates the conclusion drawn by Padillo *et al.* (2023), indicating that teachers' competence in teaching is closely linked to factors such as their length of service and participation in training and seminars.

Table 4.1: Correlation analysis between the non-SpEd teachers' profile and professional development

Variables	Highest Education Attainment		Teaching Position		No. of Years in Service		Seminars/ Trainings Attended	
	<i>r</i>	p-value	<i>r</i>	p-value	<i>r</i>	p-value	<i>r</i>	p-value
Content Knowledge and Pedagogy	-0.257	0.273	0.046	0.846	0.311	0.182	-0.296	0.206
Learning Environment	-0.189	0.424	0.087	0.715	0.267	0.256	-0.173	0.466
Diversity of Learners	-0.203	0.391	-0.095	0.690	0.643*	0.037	0.492*	0.028
Curriculum and Planning	-0.158	0.505	0.090	0.706	0.543*	0.039	-0.215	0.363
Assessment and Reporting	-0.214	0.364	0.122	0.609	0.309	0.185	-0.256	0.276
Community Linkages and Professional Engagement	-0.270	0.249	0.103	0.666	0.370	0.109	-0.257	0.274
Personal Growth and Professional Development	-0.209	0.377	0.076	0.750	0.391*	0.049	-0.329	0.157
Overall	-0.233	0.322	0.070	0.769	0.562*	0.036	-0.305	0.191

*correlation (*r*) is significant at a 0.05 level.

Table 4.2 shows the Pearson correlation analysis between the non-SpEd teachers' profile and their preparedness for working with learners with ASD.

It can be deduced from the table that only the teaching position demonstrates a significant correlation with readiness in IE ($[r(0.511) = 0.038, p < 0.05]$). Thus, the teaching position plays a significant role in influencing their preparedness to support and manage learners with ASD in an IE setting. The significant correlation indicates that as non-SpEd teachers advance in their academic ranks, they demonstrate strengths in collaboration,

teamwork, family involvement, IEP creation, ASD support, and training for ASD learners ([$r(0.451) = 0.044, p < 0.05$]).

This also suggests their proficiency in designing, implementing, and adapting educational techniques to meet the diverse needs of ASD students ([$r(0.505) = 0.029, p < 0.05$]), as well as effectively aligning GEC content with ASD learners' IEP goals using impactful teaching strategies to enhance their learning and participation ([$r(0.473) = 0.029, p < 0.042$]).

Table 4.2: Correlation analysis between the non-SpEd teachers' profile and readiness in inclusive education (IE)

Variables	Highest Education Attainment		Teaching Position		No. of Years in Service		Seminars/ Trainings Attended	
	<i>r</i>	p-value	<i>r</i>	p-value	<i>r</i>	p-value	<i>r</i>	p-value
Collaborating and teaming skills	0.028	0.907	0.451*	0.044	0.112	0.639	0.070	0.770
Using effective instructional methods	-0.004	0.986	-0.288	0.219	-0.054	0.821	0.057	0.812
Implementing of inclusion	0.200	0.397	0.505*	0.029	-0.088	0.713	-0.011	0.962
Planning and implementing of behavioral intervention	0.036	0.880	-0.232	0.324	0.181	0.446	0.283	0.227
Accessing to the general education curriculum (GEC)	0.051	0.832	0.473*	0.042	0.061	0.798	0.074	0.756
Planning transition programs	0.013	0.957	-0.301	0.197	0.146	0.539	0.151	0.524
As a whole	0.061	0.800	0.511*	0.038	0.068	0.776	0.120	0.614

*correlation (*r*) is significant at 0.05 level.

The findings of this study corroborate with that of Salivio (2019), who claimed that a teacher's current rank reflects the culmination of their efforts to enhance their professional status, achieved through active participation in seminars, enrollment in post-graduate programs, engagement in research activities, and receiving high evaluation ratings from both students and principals. As a result, higher ranks denote increased qualifications among teachers, thereby better equipping and preparing them to tackle various instructional challenges, including effectively supporting learners with ASD.

However, it was found that factors such as highest education attainment, years of service, and participation in seminars/trainings do not significantly correlate with the readiness of non-SpEd teachers in IE.

The correlation analysis conducted by Arpilleda and Jondy (2018) challenges the findings of this study. Their research highlights that factors such as educational attainment, teaching experience, specialization, and participation in seminars significantly influence pedagogical styles and readiness to handle learners. Other scholars revealed the same findings, negating the results of this study and highlighting the influence of these variables on teachers' career readiness and productivity (Anyanwu *et al.*, 2016; Kini & Podolsky, 2016).

The study of Alido *et al.* (2023) can be linked to the results of this study. They found that teachers with shorter working experience have lower confidence in their preparedness. Similarly, their findings indicated that teachers holding advanced degrees exhibited diminished confidence in their preparedness. Their findings highlight an important reality that even with extended service tenure and advanced education, non-SpEd teachers cannot depend only on these factors to assure readiness for the challenges of handling and educating students with ASD. As stated by Pershina *et al.* (2018), there are two key factors that may be utilized to evaluate a teacher's readiness for an IE setting which include professional readiness and psychological readiness.

4.5 Predictors of non-Special Education (non-SpEd) Teachers' Professional Development and Readiness in Handling Learners with Autism Spectrum Disorder (ASD) in Inclusive Education

This section presents the potential predictors influencing non-SpEd teachers' professional development and readiness in handling and managing learners with ASD in an IE setting. The data are presented in Table 5.

Among the variables examined, only the number of years in service emerges as a prominent predictor of non-SpEd teachers' professional advancement, demonstrating a noteworthy coefficient of determination ($r = 0.804$). This coefficient implies that approximately 80.40% of the variability in professional development among non-SpEd teachers can be explained by their tenure in teaching.

Furthermore, the statistical significance of this predictor ($p = 0.023$) reaffirms its substantive impact, highlighting its strong association with professional growth. Therefore, the findings suggest that the longer teachers remain in the service, the greater their tendency to improve their professional development. Thus, as teachers accumulate more years of experience in the field, they tend to become more adept and prepared to support ASD learners effectively.

Conversely, it is reflected in the table that teaching position serves as a predictor of the non-SpEd teachers' readiness in IE, demonstrating a noteworthy coefficient of determination ($r = 0.796$). This coefficient suggests that approximately 79.60% of the variability in their readiness to handle learners with ASD can be explained by their teaching position or academic rank.

Moreover, the statistical significance of this predictor ($p = 0.044$) reinforces its substantive impact, underscoring its strong association with the instructional preparation readiness of non-SpEd teachers in handling learners with ASD in mainstream classes.

Table 5: Predictors of the non-SpEd teachers' professional development and readiness in handling learners with autism spectrum disorder (ASD) in inclusive education (IE)

Predictors	Professional Development		Teachers' Readiness in IE	
	r-square	Significance	r-square	Significance
Highest Educational Attainment	0.054	0.322	0.004	0.8
Teaching Position	0.005	0.769	0.796	0.044*
No. of Years in Service	0.804	0.023*	0.005	0.776
Seminars/ Trainings Attended	0.093	0.191	0.014	0.614

* The variable is a significant predictor.

This indicates that the teaching position or academic rank of non-SpEd teachers significantly influences and contributes to their readiness in IE to handle learners with ASD. According to Sharma *et al.*, (2021), teachers play an important role in successfully implementing IE principles and practices in classrooms. Because of this, their readiness is pivotal in its successful implementation (Zainalabidin & Ma'rof, 2021).

Results of research with regard to IE provide empirical evidence that highlights the potential significance of profile as an indicator of non-SpEd teachers' professional development and readiness in an IE setting (Wray *et al.*, 2022).

5. Conclusions

Based on the findings, it can be concluded that the non-SpEd teachers have demonstrated commitment through advanced qualifications, extended tenure, and active professional development, supporting learners with ASD and contributing positively to the IE setting. Likewise, they excel in meaningful instruction, creating supportive environments, addressing diverse needs, engaging curriculum, monitoring progress, fostering relationships, and pursuing research-driven professional development for career advancement and teaching improvement. Moreover, they have some foundational skills for inclusive teaching but may need further development and support to meet the diverse needs of ASD learners fully. Further, they have some capacity to engage in inclusive practices but need additional training, resources, and guidance to effectively implement inclusive strategies and support ASD learners in their mainstream classes.

The tenure of service and active involvement in seminars/trainings play vital roles in enhancing the professional development of non-SpEd teachers. Additionally, their teaching position equips them with readiness in IE settings.

Both tenure and teaching positions shape the professional development and readiness of the non-SpEd teachers, supporting mainstreamed ASD learners within IE settings.

6. Implications

The research study on the predictors of non-special education teachers' professional development and readiness in handling learners with ASD has significant implications for the education sector. Understanding the key predictors can help improve the support and training provided to teachers, ultimately enhancing the educational experience for students with ASD. Policymakers can use this research to advocate for resources and initiatives that enhance the professional development of non-special education teachers in handling learners with ASD.

7. Recommendations

Based on the conclusions and implications, the non-SpEd teachers are encouraged to participate in specialized training programs focused on understanding and supporting students with ASD, particularly programs that cover topics such as behavior management, sensory integration, and differentiated instruction techniques specifically designed for learners with ASD.

The Curriculum and Implementation Division Office of the Schools Division of Abra may tap experts along the seven domains of the PPST to capacitate teachers in maintaining their professional growth toward career path development.

The members of the School Planning Team may closely examine each of the Key Results Areas (KRAs) highlighted in teachers' Individual Performance Commitment and Review Form (IPCRF) ratings to help design training programs and include topics during the conduct of In-service training (INSET) that can prepare them in IE setting, particularly in handling and managing learners with ASD.

Policymakers and curriculum planners in higher education may consider reviewing existing programs for teacher education institutions (TEIs) to better prepare teacher education graduates, regardless of their specialization, in handling and managing learners with special needs in an IE setting.

Future studies may be conducted to thoroughly investigate the roles of the number of years in the service, attendance to seminars/trainings, and teaching position to the professional development and readiness of general education teachers in handling and managing other exceptionalities in IE settings.

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Conflict of Interest Statement

The authors of the correspondence declare that none of their known personal or financial conflicts could have influenced the article presented in this publication.

About the Authors

Marijo M. Lopez is a special education teacher at Bangued West Central School—Abra Special Education Center, where she handles children enrolled in self-contained classes. She holds a master's degree in special education from Mariano Marcos State University and is currently pursuing her doctorate degree in educational management at Ilocos Sur Polytechnic State College.

Dr. Andrian A. Dela Cruz holds the academic rank of Assistant Professor at the Mariano Marcos State University where he teaches major and allied subjects in the Early Childhood and Special Needs Education Department. Likewise, he is an Associate Member of the National Research Council of the Philippines (NRCP) Division 1: Governmental, Educational, and International Policies. He published his research articles focusing on children's behavior, teachers's personality traits, professional development and self-efficacy, pre-service teachers' career readiness, and inclusive education in international peer-reviewed, Scopus Index and ASEAN Citation Index journals.

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