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Awareness in Elementary Education Through Inclusive
Children's Literature*

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Breaking Barriers and Fostering Neurodiversity Awareness in Elementary Education Through Inclusive Children’s Literature

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Abstract

Teachers are essential in ensuring children and society are aware of neurodiversity by actively incorporating inclusive children's literature into their classroom activities to promote understanding and acceptance of neurodiverse individuals. Integrating such literature may enhance children’s awareness and acceptance of neurodiverse individuals. Many teachers encounter barriers to promoting neurodiversity awareness through this medium. This paper draws upon Vygotsky's sociocultural theory (1962) to analyze teachers' perceptions and beliefs concerning neurodiversity and their practices for using children's literature to promote neurodiversity awareness. This qualitative research study investigated the barriers teachers face in promoting neurodiversity awareness. Data collection involved semi-structured face-to-face interviews with eight K-2 grade teachers. A thematic analysis was used for interpretation. The findings indicate inadequate teacher knowledge and understanding, lack of collaborative professional development, and limited access to appropriate educational resources are significant barriers to promoting neurodiversity awareness in classroom activities through inclusive children's literature.

Keywords: neurodiversity awareness, inclusive children’s literature, inclusion, teacher preparation programs

Introduction and Background

As educators increasingly recognize the diverse ways students learn, understanding neurodiversity and implementing effective strategies to serve all students may be essential for creating effective learning environments. According to Acevedo and Nusbaum (2020), neurodiversity is a conceptualization that brain differences should be considered normal rather than deficits in the learning environment. It is vital to note that it is not a deficit because there is no “right” way of thinking, learning, and behaving (Souto-Manning, 2020).

According to several studies (Baio et al., 2018; Brugha et al., 2011; Van Naarden Braun et al., 2015), there was a significant increase in the prevalence of ASD and other neurodivergent conditions from 1996-2010. Consequently, there may be an increase in students who face sensory, social, and cognitive challenges in the school environment. Teachers have a critical role in creating optimal learning environments and promoting awareness of neurodiversity.

One avenue through which educators can generate awareness and exposure to neurodiversity is through children's literature. Research indicates that by incorporating books that feature neurodivergent characters or address neurodiverse experiences, teachers can cultivate empathy, foster acceptance, and enhance the overall classroom experience (Souto-Manning, 2020). It has been well-documented that this type of inclusive literature benefits both neurodiverse and neurotypical students. According to Overstreet (2022), children learn by seeing themselves and others reflected in books and other classroom materials, adding that books can serve as “windows, mirrors, and sliding glass doors.” When students see their own lives or others in the books they read or hear, they are

more likely to feel included in the classroom community and the world and appreciate the uniqueness of others. This may lead to more empathy, awareness, and acceptance of their peers who are neurodivergent.

Study Purpose

The increasing prevalence of neurodivergent conditions among children highlights the growing importance of addressing neurodiversity in educational settings. While the importance of promoting neurodiversity awareness and inclusive education is critical, there remains a significant gap in the literature regarding teachers' specific challenges in promoting, accepting, and awareness of neurodiverse individuals through inclusive literature and the solutions to address the barriers. Pulimeno et al. (2020) emphasize the need for teachers to create inclusive learning environments and provide children with new information about the world that would compensate for what young people may lack using tools such as storybooks since they are easier to understand for all children compared to abstract notions or theories. However, many teachers face barriers such as inadequate knowledge and understanding, limited access to appropriate educational resources, and lack of collaborative professional development, which hinder their efforts to promote neurodiversity awareness through children's literature.

Furthermore, these barriers extend beyond the immediate classroom environment as neurodivergent students interact but may not entirely be accepted and included in our societies. This lack of acceptance could translate into social barriers and make it difficult for neurodivergent people to participate and contribute fully to various aspects of life, including education, employment, and social interactions (Scott et al., 2019). Failure to promote awareness of neurodiversity in early education could affect the future workforce. Neurodivergent individuals possess unique talents and perspectives that can contribute to a diverse and innovative workforce (Nakamura & Hara, 2020).

Stories reproducing fictional situations that coincide with children's real problems allow them to feel comfortable and safe in difficult circumstances, ensuring emotional safety and providing healthier ways to cope with internal struggles, life adversities, and stressors (Pulimeno et al., 2020). Pulimeno et al. (2020) also recognized that narratives have been and continue to be narrated in all societies and diverse contexts, serving to transmit experiences, traditions, social norms, and principles. These stories offer fun and new ideas to the audience. Children's stories occupy a distinct cultural realm that helps young people transition to existence, allowing them to understand their identity as individuals and their potential role in advancing global development.

Understanding the factors that influence teachers' decisions and behaviors in this regard is crucial for developing effective interventions and strategies to support their promotion and raising awareness and acceptance of neurodiversity through inclusive literature.

Research Question

This research aims to uncover teachers' main challenges in promoting neurodiversity awareness and acceptance by incorporating diverse children's literature. The central question guiding this study was:

1. What barriers prevent elementary teachers from promoting and raising awareness about neurodiversity through children's literature?

By addressing this question and analyzing teachers' perspectives and beliefs, my study aims to contribute valuable insights that provide a deeper understanding of the challenges and opportunities in promoting neurodiversity awareness in elementary education. Ultimately, the findings from this research can inform the development of targeted interventions and policies for school districts, Universities, and teacher preparation programs to support teachers in creating inclusive learning environments that celebrate the diversity and acceptance of neurodevelopmental profiles and nurture the growth and development of all students.

Literature Review

The following literature review explores the critical role of embracing neurodiversity in fostering acceptance of an inclusive educational environment among students. The review also highlights how using picture books as educational tools can significantly reinforce understanding and appreciation of neurodiversity. Furthermore, this review addresses some challenges associated with a lack of neurodiversity awareness. It delves into some barriers educators face in integrating inclusive literature into their teaching practices. Despite these recognized benefits, there is a notable gap in the literature regarding the specific and deeper understanding of barriers teachers face in incorporating inclusive literature into their classrooms. There is also a gap in the literature on solutions for the future.

Neurodiversity Awareness

Recognizing and supporting neurodiversity means fostering inclusive environments and promoting student understanding and acceptance (Souto-Manning, 2020). Listening to these pupils and teaching about neurodiversity helps raise awareness among students.

Within the context of elementary education, promoting awareness of neurodiversity through picture books has enormous potential to foster inclusive learning environments where all students can thrive. Souto-Manning (2020) finds that children's literature is critical in child development because it helps them develop language awareness and a literacy culture. In addition, when teachers intentionally choose books that reflect their students' backgrounds, stories can act as mirrors, recreating and reflecting students' personal experiences. (Souto-Manning, 2020). When students see their own lives in the books read to them, they are more likely to feel included in the classroom community and the world.

Despite the potential benefits of neurodiversity awareness, numerous barriers prevent elementary teachers from effectively integrating neurodiversity into their teaching practices. Some of these barriers are inadequate teacher knowledge and understanding, lack of collaborative professional development, and limited access to appropriate educational resources. When elementary teachers face barriers to promoting awareness of neurodiversity through children's literature, it may limit their ability to foster inclusive learning environments. As a result, neurodivergent students may not receive the support and understanding they need to thrive, leading to negative educational experiences and lower academic achievement (Brandsen et al., 2024). Nonetheless, with proper awareness and acceptance of neurodiversity, children may grow up with more understanding and empathy towards people with different neurological profiles.

Ortiz (2020) and Izuno-Garcia et al. (2023) highlight the barriers to teaching neurodivergent learners. The findings indicate that limited understanding and knowledge of neurodiversity,

including neurodevelopmental states such as learning disabilities and autism spectrum disorder (ASD), hinder class-based neurodiversity awareness among teachers. Meanwhile, Farroni et al. (2022) add that teachers have limited neurodiversity awareness due to limited access to appropriate materials and resources, such as children's literature books, that promote neurodiversity awareness. Without proper educational resources, teachers cannot incorporate neurodiversity themes into their teachings (Acevedo & Nusbaum, 2020; Vasquez, 2022). Moreover, Gobbo et al. (2019) found that teachers cannot encourage neurodiversity awareness without the necessary support and collaboration.

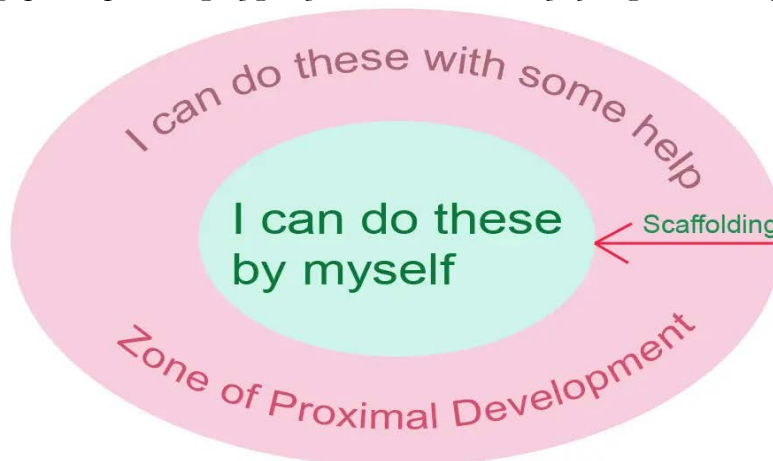
Addressing these barriers is critical to promoting equitable and inclusive education, ensuring all students reach their full potential regardless of their neurodevelopmental profiles. By understanding and overcoming the obstacles teachers face in promoting neurodiversity awareness, educational institutions may create an environment of more significant support and acceptance, fostering a sense of belonging and empowerment for all students, including those with neurodivergent characteristics.

Theoretical Framework

This research draws on Vygotsky's socio-cultural theory (1962) as a conceptual lens to understand and analyze barriers teachers face in promoting neurodiversity awareness through children's literature. This theory emphasizes the role of cultural tools, social ties, and the environment in shaping human cognition and development (Choi & Lee, 2021). A few critical concepts include social learning from others through social bonds or interactions within a child's zone of proximal development, as in Figure 1 (Choi & Lee, 2021; Crosthwaite, 2013). Vygotsky's sociocultural theory (1962) also emphasized the value of collaboration, cultural context, and social relations in educational practices.

Figure 1

Infographic Representing Vygotsky's Sociocultural Theory of Cognitive Development



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Note. Reprinted from Psychology Notes HQ (2022).

Choi & Lee (2021) noted that Vygotsky (1962) believes learning occurs through interaction and collaborative activities. Vygotsky (1962) posited that human development is a socially mediated process in which children develop beliefs, cultural values, and problem-solving approaches through collaborative conversations with more informed people. Vygotsky (1962) notes that cultural tools such as books, language, and educational resources are integral to cognitive development and help children understand their sociocultural environment (Choi & Lee 2021). Through this theoretical framework, we will examine the teacher experience.

If elementary teachers have limited access to children's literature featuring neurodiversity, they cannot expose children to diverse perspectives and acceptance of class-based neurodiversity. Limited diverse and representative literature in children's classrooms may contribute to low awareness of neurodiversity among teachers and students (Vasquez, 2022). Applying Vygotsky's (1962) point of view, the model analyzes the identified barriers to show how they hinder teachers' awareness to create a neurodiverse and more inclusive classroom (Choi & Lee, 2021). In this sense, elementary teachers may promote and expose all students to the unique gifts of neurodiverse students by incorporating diverse literature that presents neurodiverse experiences and characters.

Method

This study explored kindergarten through second-grade teachers' lives, experiences, perspectives, educational preparational backgrounds, and practices concerning integrating neurodiversity concepts through children's literature. The data was collected using a qualitative research design. Qualitative research enables an in-depth exploration and understanding of complex phenomena within their natural contexts (Adeoye-Olatunde & Olenik, 2021).

Study Participants

Participants included kindergarten, first, and second-grade teachers at two Title 1 public elementary schools in Southeast Texas. After contacting 16 teachers through district email, 12 teachers were willing to participate in the research. A purposeful sampling method was utilized to select ten teachers for the study who had the experience and knowledge to offer information that addressed the research objectives adequately. After prescreening to meet the inclusion criteria, the number of participants was reduced to eight. The inclusion criterion stipulated that the teacher must have taught for at least two years in the same school. Another factor I considered was ensuring I had an equal number of teachers from a traditional educational preparation program and an alternative certification program. Including an equal number of teachers from both programs would allow me to conduct a comparative analysis to identify any significant differences or similarities in the challenges they encounter based on educational preparation programs. Teachers from traditional education preparation programs and alternative certification programs may have different training experiences and pedagogical approaches. Understanding these differences may provide a more comprehensive view of their barriers and allow me to evaluate the effectiveness of these programs in preparing teachers to address neurodiversity and promote inclusive literature. This could allow informed recommendations for improving teacher training programs. Five teachers were from one school, and the other three were from the second elementary school. A \$20 gift card was offered to teachers who agreed to participate in the study to incentivize participation. The participant demographics are outlined in Table 1.

Table 1*Teacher Demographic Information*

Participant	Gender	Years Taught	Teacher Preparation Program	Grade Level	Classroom Type
Participant 1	Female	18	Traditional	2nd	Dual Language
Participant 2	Female	2	Alternative Certification	2nd	General Education
Participant 3	Female	7	Alternative Certification	2nd	General Education
Participant 4	Female	11	Traditional	2nd	Dual Language
Participant 5	Male	18	Alternative Certification	1st	Dual Language
Participant 6	Female	24	Traditional	1st	General Education
Participant 7	Female	14	Alternative Certification	Kinder	General Education
Participant 8	Female	9	Traditional	Kinder	General Education

Data Collection

I conducted semi-structured face-to-face interviews with the participants, which varied from 20 to 35 minutes each, and each participant was interviewed once. Semi-structured interviews allowed for an in-depth study of participants' experiences and opinions, collecting rich and thorough data (Adeoye-Olatunde & Olenik, 2021).

All interviews were audio-recorded with the participant's consent, and I asked the participants open-ended questions. The interview questions are included in Appendix A. During data collection, the participants were allowed to elaborate on their experiences and provide detailed narratives. Audio recording was chosen as the method for data collection as it may improve validity by retaining participants' precise words and capturing the nuances of their responses. It also may reduce the possibility of data loss or distortion during transcription.

Data Analysis

Vygotsky's sociocultural theory (1962) emphasizes the importance of social interaction and cultural context in the development of cognition (Choi & Lee, 2021). It provides a critical lens through which to analyze the data in this study. This theoretical framework was instrumental in understanding elementary teachers' barriers to promoting and raising awareness of neurodiversity through children's literature. The data analysis process, guided by Vygotsky's principles, focused on identifying barriers tied to teachers' perspectives, beliefs, and practices, within the school environment.

I used a thematic analysis approach to code the qualitative data. Qualitative coding is classifying and labeling data segments according to their content and finding trends and themes that emerge from the data (Linneberg, 2019). This study's qualitative coding procedure took place in 5 phases. The initial phase consisted of transcribing each interview using a transcription service. Each transcript was reviewed and cross-checked with the original audio files to correct errors. This step was crucial for capturing the authentic voices and experiences of the participants, aligning with Vygotsky's Sociocultural theory (1962), which emphasizes the importance of language and dialogue in understanding cognitive processes (Choi & Lee, 2021). The second phase involved underlining any words or phrases addressing the research question. According to Vygotsky (1962), cognitive development is deeply embedded in social contexts, so I focused on identifying phrases that reflected teachers' interactions with students, colleagues, and the broader educational environment. This helped me to pinpoint specific social and cultural factors that influence their ability to raise awareness of neurodiversity, and these became the names of my categories. I color-coded similar responses in the third phase and categorized the emerging patterns into sub-categories. I examined how cultural norms, school policies, and social dynamics within the school setting either facilitated or hindered teachers' efforts to incorporate neurodiversity into their literature curriculum. The fourth phase consisted of determining how the subcategories align with the relation of Vygotsky's Sociocultural theory (1962). The last phase was categorizing the themes into two sections addressing the research question. The barriers were divided into two sections: raising and exposing awareness.

By applying Vygotsky's socio-cultural theory (1962) throughout the data analysis process, I uncovered how social interactions and cultural contexts shape elementary teachers' barriers in promoting and raising awareness of neurodiversity through children's inclusive literature. This theoretical framework provided a deeper understanding of the socio-cultural dynamics, particularly highlighting that inadequate knowledge due to teacher preparation programs is a significant barrier.

Results

The first section focuses on teachers' barriers in introducing and raising awareness of neurodiversity concepts to their students. These include inadequate knowledge from teacher preparation programs and a lack of collaborative professional development. The second section highlights the barriers that impede the ongoing exposure and deepening of neurodiversity awareness. This includes limited access to relevant resources.

By understanding these barriers through the lens of Vygotsky's sociocultural theory (1962), we can gain insights into the sociocultural dynamics that impact teachers' efforts to foster an inclusive and neurodiverse-aware classroom. To provide a deeper understanding, the responses of two participants, Participants One and Five, were highlighted and analyzed, as seen in Table 1. Choosing these two participants may provide a contrast that might offer a deeper understanding of the barriers.

Participant One, a female with 18 years of experience, represents a traditional path in teacher training through a university education preparation program. Her experiences may show how conventional educational frameworks and theories like Vygotsky's sociocultural theory (1962) have influenced her teaching practices and knowledge of neurodiversity.

Participant Five, a male with 18 years of experience, completed his teacher training through an alternative certification program. His perspectives highlight differences in training methodologies

and how these alternative paths may affect the promotion and awareness of neurodiversity in classroom settings.

Raising Awareness

Inadequate Knowledge Due to Teacher Preparation Programs

After digging deeper into the data from the two participants' responses, adequate training and support for teachers' educational preparation was identified as a significant barrier to exposing and bringing awareness to students through diverse literature. Some of the questions asked of the participants were about their familiarity with neurodiversity and the conditions that would fall under the term, along with describing their educator preparation programs. Participant One demonstrated limited knowledge of neurodiversity and its meaning, and she even asked me to explain what that means. I briefly described the term, and she stated *"I did not receive specific training in school or professional development in this area. I went to a traditional preparation program, but umm, I don't remember learning about this or hearing that term."* She continued by explaining how she felt when she first went into teaching. She explained how "unprepared" she felt and had to learn relevant things independently. She felt like even though she attended a four-year college, and her program was the traditional educator preparation with student teaching, she believes there are a lot of topics that are not covered, such as practical ways to foster acceptance of different learners and different abilities. Her responses show a gap in her training through her educator preparation program. Her program did not introduce her to neurodiversity, which hinders her from exposing and raising awareness of neurodiversity through children's literature.

Participant Five also demonstrated limited knowledge and inadequate training regarding Neurodiversity. Participant 5 emphasized, *"My certification program was more hands-on, focusing on classroom management and direct instruction methods, but we didn't delve deeply into special education or neurodiversity issues. I actually don't think we even learned about inclusive practices."* He continued describing his training and other areas the program focused on. He showed genuine concern about how his training didn't adequately train him for "real world" experiences. His responses emphasize he has practical skills but lacks theoretical grounding, underscoring the need for balanced training that includes theory and training related to neurodiversity.

The findings indicate how educational backgrounds have influenced the participant's limited perspectives on neurodiversity, and this suggests that teacher preparation programs are not adequately integrating these essential concepts and equipping teachers with cultural tools. This aligns with Vygotsky's sociocultural theory (1962), which emphasizes the importance of cultural and educational theories in cognitive development and effective teaching practices. It is noted that learning is a socially mediated process, and theoretical knowledge serves as a cultural tool that helps teachers mediate learning effectively (Choi & Lee, 2021). Without a comprehensive training program and a solid theoretical foundation, teachers may not fully understand neurodiversity, limiting their ability to select and use inclusive literature that supports diverse learners. This stresses the need for comprehensive and robust theoretical training as part of the socio-cultural tools in teacher preparation programs that would prepare teachers to meet the needs of all their students.

Lack of Collaborative Professional Development

A second barrier that emerged from the findings that hinders teachers from raising awareness of neurodiversity through children's literature is the lack of collaborative professional development. This theme emerged from questions about the current types of training and professional development they participate in, collaboration with colleagues on teaching practices and book selection, and cooperation with the special education department. Participant One began talking about the support she receives when the inclusion teachers go into her classroom to support students with Individual Education plans. However, she expressed the need for more collaborative professional development to learn about inclusive practices and the best ways to support and promote awareness of diverse conditions. She stated, *"We have trainings, but rarely have opportunities to work together with other teachers. I would be willing to attend trainings focused on neurodiversity and collaborate with our counselor or other specialists who are more familiar with things like that."* This response shows the absence of social interaction, professional networks, and collaborative learning opportunities, which may be crucial for knowledge construction, and her willingness to learn from other knowledgeable educators. This barrier is critical because it may provide educators with opportunities for social interaction, professional networking, and collective learning, which may be essential for practical knowledge construction and the implementation of inclusive practices.

Participant Five briefly talked about the best ways he likes to learn and emphasized that he is very hands-on and likes to talk out his ideas and seek feedback from others, but he often must research different things independently. He'll talk with his teammates, but there's not much collaboration on learning new topics; it mainly deals with "small day-to-day issues." He also mentioned participating in weekly professional learning community meetings, but diverse issues such as neurodiversity never arise. His responses imply that there's a lack of collaborative professional development opportunities. He states, *"We don't have much interaction with other educators during PD. They focus on classroom techniques and it's like a refresher, but nothing new, and we don't collaborate. It's sit and get kind of trainings. Sometimes, we talk to a partner."* This statement highlights educators' significant lack of interaction during professional development (PD). This isolation may prevent teachers from benefiting from their peers' collective knowledge and experiences.

The findings reveal that educators collaborate, grow, and network minimally. The lack of collaborative professional development presents a barrier to effectively promoting neurodiversity in education through inclusive literature. This aligns with Vygotsky's sociocultural theory (1962), which emphasizes the role of social interactions in learning and development and through collaborative interactions with more knowledgeable others (Vasquez, 2022). Without ongoing collaborative professional development, teachers may experience stagnation in their professional growth. Continuous interaction with peers may foster a culture of lifelong learning, where teachers can be exposed to new ideas, research, and best practices. Teachers may be able to help each other move from their current level of understanding to a more advanced level, thus enhancing their ability to promote awareness of neurodiversity through children's literature.

Exposing Awareness

Limited Access to Relevant Resources

Limited access to relevant resources was a barrier to exposing children to neurodiversity through children's literature. The questions that helped uncover this barrier were related to how teachers

choose their book selection and other supplemental resources and the availability of books on their campus and/or district. Participant One talked about not knowing about neurodiversity to be intentional about choosing the right books. Still, she does like to use different books that will help students learn about the world and other people but emphasized, *“I’ve never seen books in my campus library that deal with issues like neurodiversity and umm; most of our books are outdated. The fictional books have just regular characters, and most of them aren’t really relatable to our kids.”* This not only suggests a need for more targeted professional development but also for districts and campuses to update their libraries with relevant and diverse literature. She continued expressing how kids are usually more engaged in her classroom when it’s a story that they like and can relate to. She said, *“my kids always point out to me whenever they can make a connection to the character.”* This reinforces the importance of having diverse and relatable books, including those that address neurodiversity, to enhance student engagement and learning. She also mentioned that her book collection is vast due to all her years in education, but she usually must go out and buy books due to the limited variety in school. Her responses highlight the systemic issue of inadequate resource provision and a gap in knowledge and understanding, hindering her ability to select books that intentionally promote diversity.

The findings from both participants illustrate a significant barrier that teachers face in promoting and raising awareness of neurodiversity, which is a lack of mediation through “cultural tools.” This aligns with Vygotsky’s sociocultural theory (1962). According to the theory, cultural tools such as books and educational materials are crucial for cognitive development and learning (Choi & Lee, 2021). The participant’s struggle to find books accurately representing diverse neurodivergent experiences highlights a critical deficiency in school resources. This scarcity of inclusive literature in school libraries impedes teachers’ ability to foster neurodiversity awareness effectively. Without access to appropriate cultural tools, teachers cannot expose students to diverse perspectives and experiences, which may be essential for building empathy and understanding.

Discussion

These findings shed light on existing challenges and areas for improvement in promoting neurodiversity awareness through children's literature in the classroom. They highlight the importance of increasing teacher knowledge and understanding through effective educator preparation, providing adequate school resources, and fostering collaborative professional development. The findings indicate that the barriers experienced by teachers compromise the role they might have in fostering an inclusive classroom by promoting and raising awareness of neurodiversity. These findings provide valuable insights into existing gaps and opportunities for improvement to promote inclusive learning environments that celebrate the diversity of neurodivergent students.

Inadequate Knowledge Due to Teacher Preparation Programs

Neurodiversity awareness is fundamental because it may increase the understanding of how the different learners’ brains function and process information. Subsequently, educators may raise awareness and promote the acceptance of neurodiverse learners through inclusive children’s literature. However, the findings in this study demonstrate a substantial lack of knowledge and understanding among teachers, which implies that they lack adequate ways to promote neurodiversity. This aligns with Ortiz (2020) and Izuno-Garcia et al. (2023), highlighting their findings that indicated that limited understanding and knowledge of neurodiversity hinder class-based neurodiversity awareness among teachers. The lack of proper training in neurodiversity limits

the teacher's professional capacity to respond to the learners' needs, especially where unique learning strategies are required. Although the two focus participants had contrasting experiences in their teacher preparation programs, it is evident that both types of programs require significant improvements to prepare teachers to understand and teach about neurodiversity adequately. To truly foster inclusive education environments and raise awareness of neurodiversity, it may be crucial for all teacher preparation programs, regardless of their format, to integrate comprehensive training on theoretical knowledge.

Lack of Collaborative Professional Development

Ortiz (2020) emphasized the importance of collaboration and communication among staff members for effective learning. This disparity highlights the need for increased collaboration and training among educators and aligns with the study findings. The findings indicated that the participants did not participate in collaborative professional development, which hinders their ability to learn from others' perspectives and knowledge. This is supported by the study by Gobbo et al. (2019) that found that teachers cannot encourage neurodiversity awareness without the necessary support and collaboration. Consequently, effective partnerships promote the development of inclusive teaching strategies and support neurodiversity awareness among educators (Acevedo & Nusbaum, 2020).

Limited Access to Relevant Resources

The lack of adequate insights and experiences in neurological differences in a diverse classroom implies that teachers face challenges in identifying, accessing, and advocating for the right resources to promote acceptance and awareness of neurodivergent pupils. Aligned with these sentiments, Izuno-Garcia et al. (2023) argue that learning differences among students complicate the teacher's role in teaching, which justifies the need to gain appropriate training and relevant instructional material.

Nakamura and Hara (2020) suggest that diverse learning strategies, such as incorporating inclusive literature, can help promote awareness of the needs of all students. However, adopting solutions that meet the neurodiversity needs of a diverse student population does not imply that some individuals should be privileged or disadvantaged by the learning process or materials. This means that the solutions adopted, including the learning materials, should be developed premised on the overall needs of all students.

The alignment of practical and relevant resources, such as diverse literature and practical training, fosters a supportive learning environment where teachers can prioritize students' self-determination through an ethical approach. However, the findings from the study highlight that a less inclusive classroom implies that although teachers seek to uphold ethical practices in the learning environment, their effectiveness in achieving neurodiversity in the classroom is influenced by underlying factors such as access to relevant resources.

Recommendations

The findings underscore the urgent need for comprehensive interventions to address the identified barriers and promote neurodiversity awareness effectively. Integrating insights from the literature review and Vygotsky's sociocultural theory (1962), the following evidence-based recommendations are proposed:

Improve Resource Allocation

Allocating sufficient resources to ensure a diverse and inclusive collection of books, materials, and learning tools is a priority (Souto-Manning, 2020). Enhancing access to relevant resources may provide educators with the necessary tools to cultivate inclusive learning environments. Teachers and school administrators can collaborate to expand library collections to include a wide range of literature and materials depicting neurodivergent characters and addressing their unique abilities. This can consist of books covering various neurodivergent conditions, such as autism, ADHD, dyslexia, and more. Premised on Vygotsky's (1962) socio-cultural theory, the developments experienced in the learning and teaching processes rely on the resources teachers and students can access (Choi & Lee, 2021). Therefore, school administrators, teachers, and other school stakeholders should be committed to supplementing the available resources to improve the student's learning experience.

Restructure Teacher Preparation Programs

As we consider the implications that neurodiversity has for the educational system, it is becoming increasingly clear that in-depth training for educators is an absolute necessity. Develop comprehensive teacher training programs to improve knowledge and understanding of neurodiversity and equip teachers with practical strategies for inclusive teaching (Choi & Lee, 2021). Teachers must have a solid understanding of their pupil's varied neurological profiles, allowing them to devise suitable instructional methods, such as works of children's literature (Overstreet, 2022).

Provide Collaborative Professional Development and Networks

Facilitate collaboration between schools and educational institutions to establish resource-sharing networks for sharing best practices and resources (Pulimeno et al., 2020). Resource-sharing networks can amplify the impact of interventions and promote collective learning within educational communities. Professional development may also be essential for empowering educators to create inclusive learning environments that cater to diverse learning needs.

Promote Inclusive Curriculum Design

Encourage developing and adopting inclusive curriculum materials that embrace neurodiversity and reflect diverse perspectives (Acevedo & Nusbaum, 2020). Inclusive curriculum design fosters a culture of acceptance and appreciation for neurodivergent individuals.

Seek Community Engagement

Encourage the involvement of parents, caregivers, and the community to address limited access to relevant resources and support awareness about neurodiversity (Nakamura & Hara, 2020). Community engagement fosters a sense of collective responsibility and enhances the effectiveness of initiatives promoting neurodiversity awareness.

Advocate For Policy Changes

Advocate for policy changes that prioritize the needs of neurodivergent students and promote inclusive education programs and educational policies (Scott et al., 2019). Policy advocacy may be essential for driving systemic changes that advance neurodiversity awareness and inclusion in education.

Limitations

The current study has several limitations that future research should address. These include a relatively small sample size, which might affect the generalization of the findings. Additionally, the research method employed might not fully capture the range of teachers' experiences. Researcher bias might also influence data interpretation. Moreover, while recommendations emphasize promoting teacher awareness of neurodiversity and the benefits of using inclusive literature, future research could explore the long-term effects of these interventions on student learning outcomes and well-being.

Conclusion

Teachers face barriers in promoting awareness and exposure to neurodiversity through children's literature. Using Vygotsky's sociocultural theory (1962) as a theoretical framework, I collected and analyzed data from teachers' perspectives, experiences, and beliefs and identified three main barriers. The barriers identified are inadequate teacher preparation programs, limited access to relevant resources, and lack of collaborative professional development. Addressing the challenges requires implementing recommended strategies so educators, policymakers, and stakeholders can work together to provide better teacher preparation and to address limited access to relevant resources to create inclusive and supportive learning environments that celebrate and accept all students' unique strengths and needs.

Comprehensive teacher training programs should be developed and implemented to enhance knowledge and understanding of neurodiversity. This training should equip teachers with practical strategies for promoting neurodiversity awareness in the classroom. This may enable teachers to effectively utilize available resources and support promoting awareness of neurodiversity in elementary education through children's literature, which may contribute to a more inclusive society that embraces the diversity of all individuals.

Sharon Amador, EdD, is a leader in education who bridges the gap between research findings and practical solutions. She currently serves as an elementary assistant principal and is dedicated to equipping new teachers for their educational journey. As a passionate advocate for all learners, she co-founded a nonprofit organization that offers support, mentoring, and professional development for new teachers. Sharon's commitment to education drives her to foster supportive and inclusive learning environments for teachers and students.

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Appendix A: Interview Questions

A. Participant background

To better understand your perspectives, I would like to know more about your background.

What is your current job title and grade level?

How long have you been teaching?

What is your educational background? Traditional Program or alternative certification program?

What experience do you have in teaching students with disabilities?

How familiar are you with neurodiversity?

B. Cultural Awareness

1. Do you believe the book selections in your classroom make a difference? Can you please elaborate?

Professional Development

2. What professional development do you participate in concerning children's literature?
3. How often do other teachers or administrators encourage you to learn about people with unique and different abilities? How do your leaders accomplish this?
4. At your school, how valuable are the equity development opportunities?

Book Talks/Tasting

5. What are the barriers to being more proactive when choosing diverse books with disabilities and neurodivergent characters?
6. What would it look like if you had conversations and book talks with colleagues surrounding neurodiverse books and lessons?
7. How often do you spend time with students with unique and different abilities at school?
8. Tell me how comfortable you would be with incorporating new material and books about neurodivergent characters.

C. Barriers

Besides the above mentioned obstacles, tell me how the following affect your book selection.

9. Can you tell me about your experience or knowledge surrounding neurodiversity and disabilities?
10. Does your district curriculum affect how you expose your students to diverse literature? Can you elaborate?
11. Do the stories included in the curriculum represent neurodiverse characters?
12. How much autonomy do you have in selecting the topics you teach and the materials you use?
13. How often do you incorporate inclusive literature?
14. Does your knowledge or background on unique abilities affect how you choose books and conversations? Can you elaborate?
15. Can you identify what conditions or unique abilities fall under neurodiversity?
16. Tell me about the availability of books in your school and other resources to expose your students to diverse literature. Is the level of resources adequate?
17. What do you do if books and other resources are not readily available in your school?

18. What other barriers affect your book selection in your student's education? Can you elaborate?

D. School personnel actions

The following questions are about your experience with the school personnel at your current institution and how they support the inclusion of neurodiversity literature in the classroom.

19. Tell me how school personnel collaborate to help you choose the books you expose your students to.
20. Tell me how the special education department communicates and collaborates with the teachers.
21. Tell me about the school counselor and how they collaborate with you or students about diverse topics and ensure all students feel included and welcomed.
22. How is the collaboration among different grade levels when choosing literature for the classrooms and creating book lists?

E. Better school support

23. Based on your experience with the school institutions in this district, what can be done to support a more inclusive classroom by bringing awareness to neurodiversity and exposing children to neurodivergent characters?