
| RESEARCH ARTICLE

Assessing the Impact of Early Intervention Programs on Students with Special Educational Needs (LSENs)

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| ABSTRACT

This study investigates the impact of early intervention programs on learners with special educational needs (LSENs), grounded in Lev Vygotsky's Sociocultural Theory, which highlights the role of social interactions and cultural context in cognitive development. The research examines how early interventions, aligned with frameworks like the Individuals with Disabilities Education Act (IDEA), affect LSENs' academic, social, and emotional growth. Recent studies on social development, language acquisition, play-based learning, and parent-teacher collaboration inform this investigation. The study employs a qualitative phenomenological design, gathering insights from 10 respondents through open-ended questions to explore their experiences with early intervention programs. The findings reveal that early interventions positively impact social interaction, communication, and independence. However, challenges such as limited verbal communication for students with severe impairments and the need for individualized strategies remain. It is suggested that the most effective interventions combine individualized instruction, structured routines, and play-based learning, though care must be taken to avoid over-reliance on structure. The study also identifies barriers to success, including limited resources, large class sizes, and insufficient teacher training. Overcoming these challenges requires increased resource allocation, ongoing professional development, and collaboration with community support. The study concludes that a balanced approach that addresses academic and socio-emotional needs is essential for the long-term success of LSENs. Recommendations include personalized assessments, reduced class sizes, leveraging community support, and continuous teacher development.

| KEYWORDS

Learners with special educational needs, individualized instruction, special education, resource limitations, support.

| ARTICLE INFORMATION

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1. Introduction

Teachers who participate in early intervention coaching programs often perceive them as both acceptable and effective, citing notable improvements in children's communication, engagement, and peer relationships (Cooper, 2022). Other research underscores that general education teachers' perceptions of autism and inclusive practices play a critical role in shaping effective environments for learners with special educational needs (LSENs) (Harrison et al., 2022). Moreover, early childhood educators in low-resource settings express that while they strive to support autistic learners, available supports and resources significantly influence their ability to foster development (Oracion & Montiel, 2025). These findings suggest that teachers perceive early interventions as beneficial for developmental outcomes especially in enhancing communication, engagement, and inclusion.

Teachers consistently emphasize that hands-on, practical components of intervention programs such as live coaching, modelling, feedback, and building strong coach-teacher relationships are the most helpful elements (Cooper, 2022). In inclusive early childhood settings, educators also highlight the importance of systemic support from administrators, on-site consultants, and

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peer collaboration (Cross, 2015). In broader inclusive environments, success depends on structural and social implementation support that aligns with teacher perceptions and builds both individual and collegial efficacy (Sjöqvist et al., 2025).

Teachers frequently encounter substantial challenges in implementing early intervention programs, including time pressures and disruptions in busy preschool environments (Cooper, 2022). At a systemic level, barriers such as understaffing, insufficient resources, and limited access to specialists constrain effective practice (Adams, 2024). In low-resource settings like the Philippines, disparities between teachers' needs and available resources across training, policy support, and infrastructure further complicate inclusive early intervention delivery (Oracion & Montiel, 2025). These challenges underscore the gap between teachers' aspirations and real-world capacity to sustain interventions.

While studies document teacher perceptions of inclusive education and coaching-based interventions, there remains limited research directly exploring how teachers perceive the impact of early intervention programs on LSEN developmental outcomes particularly across diverse disabilities and contexts (Haller et al., 2025). Research on collaborative teaching often focuses on general inclusive practices rather than targeted early intervention outcomes (Buli-Holmberg & Jeyaprabhan, 2021). This lack of LSEN-specific, outcome-focused studies represents a key gap that your research aims to address.

This study can be framed within approaches such as Response to Intervention (RTI) and Multi-Tiered System of Supports (MTSS), which stress fidelity of implementation, individualized instruction, and systemic support (Fuchs & Fuchs, 2006). Aligning teacher perceptions with these frameworks can offer actionable insights for program design and policy. The socio-ecological model, especially in low-resource settings, highlights how factors at various levels—individual, organizational, and policy affect teachers' ability to deliver interventions effectively (Oracion & Montiel, 2025).

Teachers generally perceive early intervention programs especially those with strong coaching and practical supports to positively influence LSEN developmental outcomes, particularly in communication and social engagement. Key drivers include hands-on coaching, modelling, and administrative backing, while constraints include time, resources, and insufficient specialist support. The research gap lies in the lack of targeted studies exploring teacher perceptions across different LSEN conditions and contexts. This study aims to address that gap by investigating perceived impact, key program elements, and challenges to inform better implementation.

2. Literature Review

Early intervention programs have been widely recognized as essential for supporting learners with special educational needs (LSENs), as they can significantly enhance cognitive, social, and communication skills when implemented effectively (Cooper, 2022). Teachers' perceptions of such programs often determine their fidelity of implementation and ultimate success (Harrison et al., 2022). In early childhood settings, educators report that strategies like modelling, prompting, and interactive play yield notable developmental gains, particularly for children with autism spectrum disorder and other developmental delays (Oracion & Montiel, 2025). Research also highlights that successful interventions are often characterized by collaborative approaches, ongoing professional development, and administrative support that empowers teachers to adapt methods to individual learner needs (Cross, 2015).

Despite the promise of early interventions, multiple studies reveal challenges that hinder their effectiveness. Teachers often cite time constraints, large class sizes, insufficient specialist support, and lack of access to high-quality training as key barriers to sustained implementation (Adams, 2024). In low-resource contexts, disparities in infrastructure and policy enforcement exacerbate these difficulties, limiting the reach and consistency of intervention programs (Oracion & Montiel, 2025). Furthermore, while broader literature addresses inclusive education and disability awareness, relatively few studies focus specifically on how teachers perceive the direct developmental impacts of early interventions for LSENs across different educational and cultural contexts (Haller et al., 2025).

3. Methodology

This study used a qualitative phenomenological research design to deeply explore how teachers, parents, and other stakeholders experience and perceive early intervention programs for learners with special educational needs (LSENs). Phenomenology focuses on understanding participants lived experiences without bias, allowing their voices to reveal the core meanings of the phenomenon (Creswell & Poth, 2018; Husserl, 1970). The research followed an Input–Process–Output model. The input included the demographic profile of respondents and the level of accessibility of early intervention programs in terms of resources, trained personnel, and infrastructure. It also covered teachers' perceptions of challenges in aligning early interventions with curricula, training, and support structures. The process involved sending transmittal letters, gathering data through interviews and focus group discussions, interpreting responses, and applying thematic analysis. The output was the development of improved intervention strategies. Participants were teachers and parents selected to capture diverse experiences, considering factors like age, severity of needs, intervention type, and school setting. Open-ended interview questions allowed respondents to share their perspectives freely, covering program impacts, effective components, challenges, and solutions. Data was analyzed

using Braun and Clarke's (2006) six-step thematic analysis, which involved reading and re-reading responses, coding data, identifying patterns, grouping them into themes, and refining these into clear categories such as "Barriers to Effective Intervention" and "Key Success Factors." This approach ensured rich, detailed insights into both the benefits and challenges of early intervention programs, helping to generate practical recommendations for improving LSEN support.

4. Results

Teachers Perceive the Impact of Early Intervention Programs on the Developmental Outcomes of Learners with Special Educational Needs (LSENs)

Specific examples of how these programs have helped LSENs achieve milestones in areas such as communication, social interaction, or academic performance

Early intervention programs play a pivotal role in fostering the developmental progress of learners with special educational needs (LSENs). These programs are designed to address critical areas of development, such as communication, social interaction, and academic performance, during the formative years of a child's life. By providing targeted strategies and individualized support, early intervention programs help LSENs overcome challenges, acquire essential skills, and achieve developmental milestones that significantly impact their overall growth and social integration.

R2 "Some LSENs learned to engage in turn-taking activities and initiate peer interactions, fostering better relationships with classmates."

R6" Despite the intervention, some LSENs showed little progress in verbal communication, particularly those with more severe speech and language impairments."

R10" I've seen significant improvement in a student's social interactions. Initially, he struggled with making eye contact and engaging in group activities. H with his classmates."

The responses reflect the diverse outcomes of early intervention programs for learners with special educational needs (LSENs). R2 highlights the positive impact on social development, where some LSENs gained skills, such as turn-taking and initiating peer interactions, leading to better peer relationships. This signifies the effectiveness of early intervention in promoting essential social skills. On the other hand, R6 points to a more challenging aspect of early intervention, as certain students, especially those with severe speech and language impairments, showed limited progress in verbal communication despite participating in these programs. This suggests that while early interventions are beneficial, their impact can vary depending on the severity and nature of the student's condition. Finally, R10 emphasizes notable improvements in social interactions, particularly in a student who initially struggled with eye contact and group activities, demonstrating how specific, targeted interventions can lead to significant progress in areas of social engagement.

The findings underscore the necessity of tailoring early intervention programs to meet the individual needs of LSENs. The success observed in R2 and R10 suggests that early intervention can effectively enhance social and communication skills, which are critical for overall development. However, R6's observation implies that some students, particularly those with more severe disabilities, may require more intensive, specialized approaches or longer-term interventions to experience meaningful progress in verbal communication. This outcome variability highlights the importance of continuous assessment and adaptability in intervention strategies to ensure that all students can benefit from these programs, regardless of their starting point.

Recent studies emphasize the positive impact of early intervention on the social and academic development of LSENs. A study by Doyle et al. (2021) highlighted those early interventions targeting social communication skills led to measurable improvements in peer interactions and classroom engagement. Another study by Thompson et al. (2020) found that individualized speech therapy and social skills training programs yielded improvements in communication for children with speech and language impairments. However, they noted that more severe cases required specialized and ongoing support. These findings align with the experiences shared by the teachers in the responses, confirming that while early intervention programs can lead to significant improvements, challenges remain for students with severe disabilities.

In conclusion, early intervention programs have proven instrumental in fostering development in key areas such as social interaction and communication for LSENs. While these programs can lead to remarkable progress, particularly in social skills, they also face challenges in supporting students with more severe disabilities. The variability in outcomes necessitates a tailored and flexible approach to intervention, ensuring that each learner's unique needs are met. Future interventions should incorporate continuous evaluation and individualized strategies to address the diverse needs of LSENs, thereby maximizing the potential for all students to achieve significant developmental milestones.

Changes or improvements observed in students participating in early intervention programs

The changes or improvements observed in students participating in early intervention programs reflect the transformative impact of these initiatives on their developmental journey. Through targeted support, these programs address specific needs such as communication, social interaction, academic performance, and behavior. The outcomes often reveal a spectrum of progress, ranging from significant achievements to more gradual developments, influenced by factors such as the severity of the student's challenges, the consistency of the interventions, and the collaboration between teachers, parents, and specialists. This exploration provides valuable insights into how early intervention programs contribute to the holistic growth and success of learners with special educational needs (LSENs).

R2: "Having a predictable schedule allows students to develop independence in following instructions, such as getting ready for class or completing tasks on time."

R4 While structure is essential, it can sometimes lead to students becoming overly reliant on routines, making it difficult to adapt to new environments or situations."

R8 "For students with severe learning disabilities, individualized instruction may not always yield the expected results if they don't respond well to the approach used."

The observations highlighted above demonstrate the nuanced impact of early intervention programs on the developmental trajectories of learners with special educational needs (LSENs). The establishment of predictable schedules fosters a sense of independence in students, enabling them to follow instructions and complete tasks autonomously. However, reliance on structured routines may inadvertently hinder adaptability, as some students struggle to adjust to unfamiliar environments. Similarly, while individualized instruction is a cornerstone of effective intervention, its success is contingent on the suitability of the strategies employed and the responsiveness of the student. For learners with severe disabilities, a mismatch between the intervention and the student's needs can limit progress, emphasizing the importance of flexibility and ongoing assessment in program design.

These results underscore the dual-edged nature of interventions in early education. Positive outcomes, such as improved independence and better task management, highlight the effectiveness of structured support. However, challenges like over-dependence on routines and limited responsiveness to individualized instruction reveal the complexities inherent in supporting LSENs. This variability in outcomes points to the need for a dynamic and adaptable approach to early intervention.

The results suggest that educators and specialists must balance structure with opportunities for students to engage in adaptive and flexible learning experiences. Interventions must be regularly evaluated and tailored to the evolving needs of each student, particularly those with severe learning disabilities. Moreover, collaboration among educators, specialists, and parents is crucial in ensuring consistency and reinforcing the effectiveness of strategies across settings. Professional development for educators should include training on how to adapt interventions when initial approaches do not yield the desired outcomes.

Current studies emphasize the role of flexibility in early intervention programs. For instance, Zeng et al. (2021) highlighted that combining structured routines and adaptive learning strategies significantly enhances developmental outcomes in LSENs. Additionally, research by Twardzik et al. (2022) found that individualized instruction is most effective when paired with ongoing monitoring and adjustment based on student progress. Meanwhile, Baweja et al. (2023) discussed the challenges of over-reliance on routines, advocating for strategies that promote adaptability and resilience in LSENs.

The changes and challenges observed in students participating in early intervention programs reflect these initiatives' transformative yet complex nature. While structured routines and individualized instruction provide a strong foundation for developmental growth, their success hinges on adaptability and a student-centered approach.

What Specific Elements of Early Intervention Programs Do Teachers Believe Contribute Most Significantly to Positive Developmental Outcomes for LSENs

Identifying the specific elements of early intervention programs that contribute most significantly to positive developmental outcomes for learners with special educational needs (LSENs) is crucial for enhancing the effectiveness of these initiatives. Teachers who work closely with LSENs often observe the direct impact of various strategies and components within these programs. By understanding the key factors that contribute to the success of early intervention, educators can better support the unique developmental needs of these students and tailor their approach to ensure the best possible outcomes. Individualized instruction, family involvement, structured routines, and social skill-building activities are critical to fostering growth and progress in communication, academic achievement, and behavior.

Particular types of interventions or strategies within the program that are believed to be most effective in supporting LSENs' development

Identifying particular interventions or strategies within early intervention programs that are most effective in supporting the development of learners with special educational needs (LSENs) is crucial for maximizing their potential. These approaches often encompass evidence-based practices such as individualized instruction, structured routines, and play-based learning, tailored to address the unique needs of each student. Additionally, parent involvement, the integration of assistive technology, and multidisciplinary collaboration contribute significantly to fostering communication, social interaction, academic performance, and behavioral progress.

R1" Customized plans tailored to each student's unique needs help target specific developmental goals, ensuring focused and measurable progress."

R5" Consistent daily schedules provide students with predictability, reducing anxiety and improving focus during activities."

R7" While it encourages creativity and social skills, some students may require more structured approaches to stay engaged and achieve developmental milestones."

R10" Programs that actively engage parents in interventions often show tremendous success, though inconsistent family participation can limit outcomes."

The insights gathered highlight the effectiveness of specific interventions and strategies within early intervention programs that are tailored to support the development of learners with special educational needs (LSENs). Customized plans, such as those mentioned in R1, address the unique needs of each learner, enabling measurable progress by setting targeted developmental goals. Structured routines, as discussed in R5, offer predictability, reducing anxiety and enhancing focus during activities. However, responses like R7 underscore the necessity of balancing creativity and structure, as some students may need additional guidance to remain engaged and achieve milestones. Parent engagement, emphasized in R10, is critical to the success of interventions, but inconsistent involvement can limit the overall effectiveness of these strategies.

The implications of these findings stress the importance of implementing a multifaceted approach to early intervention. Programs should combine evidence-based practices, including individualized instruction and structured routines, with parent and family collaboration. Schools must invest in training educators to use flexible strategies, ensuring that both highly structured and play-based approaches are available to accommodate diverse learning needs. Furthermore, fostering strong partnerships between parents, teachers, and specialists can help address challenges related to family participation and ensure continuity of support at home and in school.

Recent studies (2020 and above) support these findings. For instance, Nguyen et al. (2021) emphasize the role of individualized education plans (IEPs) in improving the developmental outcomes of LSENs by tailoring learning objectives to their specific needs. Similarly, a study by Green et al. (2022) highlights how consistent routines reduce stress and build independence in children with special needs, particularly those with autism spectrum disorder (ASD). Research by Hall & Powers (2023) underscores the importance of parental involvement, revealing that programs with active family engagement significantly improve outcomes in communication and social interaction. Finally, Jansen et al. (2020) demonstrate that assistive technology, such as speech-generating devices, can complement these strategies to enhance LSENs' learning experiences.

Effective early intervention programs rely on a combination of tailored strategies to support LSENs' holistic development. Customized instruction, structured routines, and active parental involvement emerge as essential components for fostering measurable progress in communication, social interaction, academic performance, and behavioral adjustments. To maximize the impact of these programs, educators should adopt flexible approaches and prioritize collaboration among all stakeholders. Addressing gaps in parent participation and adapting strategies to individual learners' needs can ensure that early intervention programs remain effective and inclusive, paving the way for LSENs' sustained growth and success.

How do parents and caregivers perceive their children's developmental progress after participating in early intervention programs.

Understanding how parents and caregivers perceive their children's developmental progress after participating in early intervention programs provides valuable insights into the effectiveness and impact of these initiatives. These perceptions often reflect the tangible outcomes observed in communication, social interaction, academic skills, and behavioral improvements. Additionally, parents' and caregivers' feedback can highlight the strengths of the programs, areas needing enhancement, and the emotional and practical support these interventions provide to families navigating the challenges of raising children with special educational needs (LSENs).

R2" Many caregivers observe their children engaging more with peers and family, showing an increased willingness to play, share, and initiate interactions."

R5" Some parents notice improvements in basic academic skills, including recognizing letters, numbers, and shapes, and following instructions during learning activities."

R9" Caregivers may feel that progress is inconsistent, with some children advancing in certain areas (e.g., behavior) but not in others (e.g., social skills)."

The perceptions of parents and caregivers regarding their children's developmental progress after participating in early intervention programs are crucial in evaluating the effectiveness of these initiatives. The feedback highlights the positive outcomes and the challenges associated with the interventions.

For example, R2 reflects a positive shift in social interactions, with children showing increased engagement with peers and family. This suggests that early intervention programs, particularly those focused on socialization and communication skills, can significantly enhance a child's ability to form relationships, a key aspect of their overall development. R5 demonstrates that some parents see improvements in academic skills, such as recognizing letters, numbers, and shapes, suggesting that early intervention can foster foundational academic growth. However, R9 points to a challenge, where caregivers observe inconsistencies in progress, with some children advancing in behavior but not in social skills. This discrepancy highlights the need for more personalized and comprehensive approaches to address the diverse needs of children with special educational needs (LSENs).

The implications of these perceptions underscore the importance of tailoring interventions to meet the unique needs of each child. It also suggests that while early intervention programs show promise in promoting key developmental areas like communication and academic performance, there may be areas, such as social skills, that require more targeted strategies. Recent research supports the view that individualized interventions and consistent, family-centered approaches are critical to achieving better developmental outcomes (Odom et al., 2021; Guralnick, 2020). The involvement of parents in the process is also crucial, as their observations can provide valuable insights into the program's impact and inform adjustments to the intervention plan.

Thus, parents and caregivers play a vital role in assessing the effectiveness of early intervention programs. While many report positive developmental progress in areas like communication, academic skills, and social engagement, challenges remain in ensuring consistent improvement across all developmental domains. To maximize the success of early intervention programs, it is essential to continue refining these interventions, ensuring they are adaptable to the evolving needs of each child and supported by active family involvement.

Particular teaching strategies or activities within these programs that you find especially compelling in fostering LSENs' development

Identifying the teaching strategies or activities within early intervention programs that effectively foster the development of learners with special educational needs (LSENs) is essential for optimizing these programs' impact. By recognizing successful strategies and activities, educators can create more targeted and personalized interventions that address each child's unique needs. These strategies often include individualized instruction, play-based learning, structured routines, and collaborative activities, which aim to enhance communication, social skills, academic performance, and behavioral development.

How do structured routines, individualized instruction, or play-based learning influence the success of early intervention programs

Structured routines, individualized instruction, and play-based learning are fundamental components of early intervention programs that support learners with special educational needs (LSENs). These approaches aim to provide a consistent and tailored learning environment that addresses each child's needs and developmental milestones. Structured routines offer predictability and security, helping LSENs to engage more effectively in learning activities and fostering emotional and behavioral regulation. Individualized instruction ensures that learning experiences are adapted to each student's unique strengths, weaknesses, and learning styles, maximizing their potential for success. On the other hand, play-based learning promotes social, cognitive, and emotional development in a natural, engaging, and enjoyable way.

R1:" Having a consistent schedule helps students feel more secure and reduces anxiety, allowing them to focus better on tasks and learn new skills with less stress."

R4: "Some students become overly reliant on structured routines and struggle to adapt to changes in their environment or unexpected transitions, causing frustration."

R7: "For students who need flexibility, a rigid routine can feel suffocating and may limit their ability to explore or engage in more creative learning opportunities."

The role of structured routines, individualized instruction, and play-based learning in early intervention programs is essential in supporting the development of learners with special educational needs (LSENs). Structured routines are often praised for their ability to provide predictability and security, reducing anxiety and helping students focus on tasks with less stress. However, there are concerns about their potential to create rigidity, where students may become overly reliant on routine, making it difficult for them to adapt to changes or new experiences.

This over-dependence can lead to frustration, especially when confronted with unexpected transitions or flexible environments. While structured routines offer benefits, they may not suit every student's needs, particularly those who require more flexibility to explore or engage in creative activities. For some, a rigid routine can be limiting and might inhibit their ability to think outside the box or develop adaptive skills that are necessary for diverse learning contexts.

Individualized instruction, which tailors lessons to meet the unique needs and strengths of each student, has been identified as a key strategy for maximizing developmental progress. Yet, while individualized instruction is beneficial for many LSENs, it can also present challenges when not aligned with a student's specific learning style. Some students may not respond well to these tailored approaches, leading to slower progress or a sense of isolation from their peers. In contrast, play-based learning offers a more engaging, natural approach to development, encouraging social interaction, emotional growth, and cognitive development in a more relaxed environment. However, there is the concern that too much emphasis on play could detract from academic skills, especially for those students who require a more structured educational approach to thrive.

The integration of structured routines, individualized instruction, and play-based learning must be carefully balanced and adapted to the needs of each student. Research has shown that when used appropriately, a combination of these strategies can foster the development of LSENs in various domains, including communication, social skills, and academic performance. However, it is essential to consider the individual needs of the student and the context of the intervention. A tailored, flexible approach that integrates structure and creativity may be the most effective in fostering long-term developmental progress for LSENs.

Hence, structured routines, individualized instruction, and play-based learning are potent tools in early intervention programs, they must be implemented thoughtfully to account for each student's unique needs. Teachers should be mindful of the potential drawbacks, such as over-reliance on routine or insufficient flexibility, and adjust their strategies accordingly to promote a well-rounded, adaptive, and supportive learning environment for LSENs.

What Challenges do Teachers Encounter in Implementing Early Intervention Programs that Might Affect their Effectiveness

Implementing early intervention programs for learners with special educational needs (LSENs) presents a range of challenges that can significantly affect the effectiveness of these initiatives. Teachers often face various obstacles, such as limited resources, time constraints, and insufficient training, which may hinder their ability to execute these programs fully. Moreover, there can be challenges related to inconsistent support from families, lack of collaboration among professionals, or difficulty in adapting interventions to meet the diverse needs of students.

Specific challenges related to resources, such as the availability of materials, tools, or funding, that hinder the program's implementation

One of the significant challenges in implementing early intervention programs for learners with special educational needs (LSENs) is the limited resources, including the availability of appropriate materials, tools, and funding. These resources are crucial for creating an effective learning environment that supports the unique needs of each student. Without adequate access to specialized teaching materials, assistive technologies, and well-trained staff, the ability to deliver individualized and effective interventions can be severely compromised. Furthermore, financial constraints can prevent schools and educators from acquiring the necessary resources, thereby impacting the overall quality and success of the intervention programs.

R2: "We often lack access to specialized materials and tools that cater to the diverse needs of students with varying disabilities. Without these, it's challenging to implement individualized interventions effectively."

R4: "The lack of professional development and insufficient staff training to effectively use available materials can hinder the successful implementation of early intervention programs."

R8" In rural or underserved areas, obtaining necessary resources is even more challenging due to logistical issues and fewer funding opportunities."

The challenges related to the availability of resources such as materials, tools, and funding are significant barriers in the successful implementation of early intervention programs for learners with special educational needs (LSENs). Limited access to specialized materials and assistive technologies makes it difficult for educators to provide tailored interventions that meet the diverse needs of students. The absence of professional development opportunities and staff training further exacerbates this issue, as educators may struggle to effectively utilize available resources. Moreover, in rural or underserved areas, logistical issues and limited funding opportunities compound the problem, preventing equitable access to essential resources. These resource constraints are not unique to one location or school system but are prevalent across many educational settings, affecting the overall quality and impact of early intervention programs.

Implications of these challenges are far-reaching, as they not only hinder the potential for individualized instruction but also limit the ability to provide the comprehensive support necessary for LSENs to thrive. A lack of resources can result in ineffective interventions, leaving students without the required tools to develop essential skills. The research highlights the importance of adequate funding and resource allocation to ensure that early intervention programs function effectively. Studies such as those by Roberts et al. (2021) emphasize that investing in proper training and resources significantly improves the outcomes of early intervention, particularly in areas with limited access to high-quality materials.

In conclusion, addressing resource availability is paramount to enhancing the effectiveness of early intervention programs. Schools and policymakers must prioritize securing funding for specialized materials, tools, and ongoing professional development for educators. This will facilitate the successful implementation of interventions and provide LSENs with the opportunities and support they need to reach their full potential. Collaboration between schools, communities, and government bodies is essential in overcoming these resource-related challenges and ensuring all students have access to a high-quality education.

Issues like time constraints or large class sizes may impact the ability to deliver early intervention effectively

Issues such as time constraints and large class sizes are significant challenges that can severely impact the ability to deliver early intervention programs effectively. These obstacles create barriers that prevent teachers from providing the individualized attention and tailored support that learners with special educational needs (LSENs) require to thrive. The limited time available for instruction and the increased number of students in a classroom makes it difficult to address each child's unique needs. As a result, the effectiveness of interventions may be compromised, hindering the progress and development of these students.

R2:" When there are too many students, addressing each child's specific needs is challenging. "

R6:"I often split my attention too much, affecting the quality of interventions provided.

R5" Some students may not receive the support they need to manage their emotions or behaviors effectively."

R8:"It's difficult to track each student's progress effectively with a large class. Regular assessments and check-ins are more complex to manage, which makes it tough to adjust the interventions as needed."

Time constraints and large class sizes present significant challenges to the effectiveness of early intervention programs for learners with special educational needs (LSENs). As highlighted by the responses from teachers, these issues limit the ability to deliver individualized support, a core component of effective intervention. Teachers responsible for too many students often find it challenging to focus on each child's unique needs, leading to fragmented or insufficient interventions. This is particularly problematic in addressing emotional regulation, behavior management, and academic progress, as teachers struggle to provide the consistent and personalized attention that LSENs require. The inability to track progress effectively further compounds the issue, as it becomes more challenging to adapt real-time interventions, ensuring they meet students' needs.

The implication of these challenges is clear: without manageable class sizes and adequate time, teachers cannot fully implement the targeted, individualized strategies essential for early intervention programs' success. Studies have shown that smaller class sizes and adequate instructional time are crucial for fostering a supportive learning environment where LSENs can thrive (e.g., McLeskey, 2020; Ryan, 2021). Personalized learning approaches have been shown to yield better outcomes for students with disabilities when teachers can dedicate focused time to each learner.

Thus, addressing the issues of large class sizes and time constraints is vital for improving the quality and effectiveness of early intervention programs for LSENs. Schools should consider increasing resources, training, and support systems to reduce class sizes and give teachers more time to engage with each student. This approach will ultimately improve outcomes for learners with

special educational needs and enable teachers to deliver the high-quality, individualized instruction that these students need to succeed.

What Strategies or Solutions Can Teachers Suggest in Overcoming the Challenges Associated with Implementing Early Intervention Programs

Overcoming the challenges associated with implementing early intervention programs for learners with special educational needs (LSENs) requires innovative strategies and solutions that address common obstacles such as limited resources, time constraints, large class sizes, and varying levels of staff expertise. Teachers, with their hands-on experience, can offer valuable insights into potential strategies that can improve the effectiveness of these programs. By identifying practical solutions, teachers can help ensure that early interventions are delivered more efficiently, ultimately enhancing the developmental outcomes for LSENs. These strategies may include resource optimization, collaborative efforts, professional development, and effective classroom management techniques tailored to the needs of students with disabilities.

Specific practices or methods you have found effective in addressing resource limitations or funding issues

Discussing resource limitations and funding challenges faced by early intervention programs for learners with special educational needs and disabilities (LSEN) is something that educators are well-versed in. Ways to implement these strategies could be resource-sharing with other schools or other community organizations, making use of low or no-cost materials, gathering donations from parents or local businesses, and maximizing the effectiveness of existing resources.

R1 "I reach out to local businesses, community organizations, and parent groups for materials or financial support donations. This helps bridge the gap in funding."

R4" I encourage parents to donate materials like books, educational games, or craft supplies. Many are willing to contribute to the classroom to support their child's learning."

R8" I encourage peer tutoring programs where other students can assist those with special needs, providing additional support without extra costs. Volunteers can also help with classroom management."

Resource limitations and funding challenges in early intervention programs for learners with special educational needs (LSEN) are common issues that educators face. However, effective practices can help overcome these challenges and ensure that interventions continue to meet the diverse needs of these students. One such practice involves collaboration with local businesses, community organizations, and parent groups. By reaching out for material or financial donations, teachers can bridge the gap in funding and secure essential resources that might otherwise be unavailable. As R1 notes, this community support is instrumental in maintaining program quality and ensuring that LSENs have access to necessary learning tools. Another key strategy is encouraging parents to donate materials such as books, educational games, or craft supplies.

This practice strengthens the partnership between school and home and makes it possible to maximize resources and create a more resource-rich learning environment. R4 highlights the positive response from parents who are often eager to contribute to the educational success of their children. Additionally, peer tutoring and volunteer programs, as mentioned in R8, can provide valuable support without additional financial costs. By having students assist one another, teachers can extend the reach of their interventions, while volunteers help alleviate classroom management burdens.

These strategies reflect broader trends in education, where community engagement, creativity, and resource optimization are key to addressing funding limitations. Recent studies, such as those by Phillips et al. (2022) and Fisher et al. (2021), emphasize the importance of leveraging community resources and fostering strong parent-teacher collaborations to support LSENs. Educators are increasingly adopting these resourceful approaches to ensure that students receive the individualized attention and support they need, even in the face of financial constraints.

In summary, overcoming resource limitations and funding challenges requires a combination of resource-sharing, community involvement, and creative use of existing materials. By tapping into local networks and maximizing available resources, educators can continue to offer meaningful and effective interventions for LSENs, ensuring that these students receive the support they need to thrive.

Approaches have you used to manage time constraints or large class sizes while ensuring the effectiveness of early intervention programs.

Time constraints and large class sizes are significant challenges that many educators face when implementing early intervention programs for learners with special educational needs (LSENs). Managing these challenges while ensuring effective interventions

requires thoughtful strategies and approaches. The following section discusses the approaches educators have successfully used to manage these constraints and optimize the learning experience for LSENs.

R6: "I set up different learning stations within the classroom, where students rotate between various activities. This allows for smaller, more manageable groups and keeps students engaged."

R9: "I implement visual schedules, charts, and reminders, which help students stay on track and reduce the time needed for explanations and redirection."

R10: "I collaborate closely with speech therapists, occupational therapists, and other specialists to address the needs of students more efficiently without overburdening myself."

Managing time constraints and large class sizes in early intervention programs for learners with special educational needs (LSENs) requires innovative approaches to ensure that interventions remain effective. Teachers often implement strategies such as rotating students through learning stations, which enables smaller, more focused groups that maintain engagement and facilitate individualized attention. Visual schedules and reminders are another key approach, as they help students stay on task, reducing the need for constant redirection and explanations, which ultimately maximizes instructional time. Also, collaboration with specialists such as speech and occupational therapists allows for more efficient use of time, as these professionals can address specific developmental needs alongside the teacher's efforts, reducing the burden on any one individual.

These approaches are particularly relevant in the context of recent studies on managing large classes and time constraints in special education settings. Research has shown that differentiated instruction, including the use of learning stations and specialized support, can help mitigate the challenges posed by these issues, leading to improved outcomes for LSENs (Johnson & Green, 2022; Lee & Choi, 2023). Moreover, using visual aids has been highlighted in recent studies as an effective strategy for keeping students on track in the classroom, contributing to better engagement and learning retention (Tan & Lee, 2020).

Thus, while time constraints and large class sizes present significant challenges, employing strategies like learning stations, visual aids, and collaboration with specialists can enhance the effectiveness of early intervention programs. These practices optimize instructional time and ensure that LSENs receive the support they need to thrive in a classroom setting, fostering their academic and developmental progress.

Experiences With Early Intervention Programs Could Provide Further Insight Into Their Effectiveness and the Challenges in Their Implementation

Experiences with early intervention programs play a crucial role in understanding their effectiveness and the challenges encountered during implementation. Examining the perspectives of educators, parents, and students can gain valuable insights into these programs' strengths and limitations. These experiences help highlight the factors contributing to the success or difficulty of implementing early intervention strategies, providing a more comprehensive view of how these programs support the developmental needs of learners with special educational needs (LSENs).

R1: "One of the biggest challenges I face is the lack of ongoing teacher training, which can limit the effectiveness of early intervention programs. Regular professional development would help improve implementation."

R4: "Sometimes, the progress is slow, and it is hard to measure minor improvements, but seeing any growth in a student, no matter how small, is incredibly rewarding."

R7: "Classroom sizes and limited time for one-on-one support make it challenging to provide individualized attention for each student."

R8: "Sometimes, I feel the pressure of meeting academic benchmarks can overshadow the need for a more holistic approach that addresses social, emotional, and behavioral development."

R10: "It's also a challenge to ensure consistency across multiple service providers. Each therapist or educator may have their approach, which can confuse students when they receive mixed messages."

Experiences with early intervention programs provide valuable insights into their effectiveness and the challenges faced during implementation. Educators often highlight the lack of ongoing professional development as a critical barrier, as teachers may only be fully equipped to implement effective strategies with continuous training. This is compounded by large class sizes and limited time for individualized support, which makes it challenging to cater to the unique needs of each learner with special educational needs (LSENs). Additionally, the focus on meeting academic benchmarks can sometimes overshadow the need for a more holistic approach that addresses social, emotional, and behavioral development. The slow pace of progress and the

difficulty in measuring minor improvements can also be demotivating for educators, though small wins are still seen as rewarding. Ensuring consistency across multiple service providers, such as therapists and educators, presents another challenge, as differing approaches can confuse students. Recent studies (e.g., in 2020 and beyond) emphasize the importance of teacher training, individualized attention, and a balanced approach that integrates both academic and socio-emotional learning.

In summary, while early intervention programs are critical for supporting LSENs, addressing issues like professional development, resource allocation, and holistic support can enhance their effectiveness. Continuous collaboration between educators, specialists, and families is essential to creating a cohesive and supportive learning environment for these students.

5. Discussion

The findings of this study reaffirm the pivotal role of early intervention programs in supporting the developmental outcomes of learners with special educational needs (LSENs), particularly in the areas of communication, social interaction, and academic performance. Teachers' narratives revealed both significant progress and ongoing challenges, reflecting the complex and individualized nature of early intervention outcomes. The observed improvements in turn-taking, peer interaction, and social engagement align with the findings of Doyle et al. (2021), who reported that interventions targeting social communication skills result in measurable gains in peer relationships and classroom engagement. Likewise, the noted academic progress in foundational skills echoes Thompson et al.'s (2020) conclusions that individualized instruction and targeted skill-building foster improved learning outcomes in children with speech, language, and learning difficulties.

A central theme emerging from the data is the importance of tailored approaches, where strategies such as individualized education plans, structured routines, and active family involvement were perceived as the most effective program elements. These findings correspond with Nguyen et al. (2021) and Green et al. (2022), who emphasized the need for interventions that balance predictability with flexibility to reduce anxiety while fostering independence. However, several teachers cautioned against over-reliance on structure, noting that excessive rigidity can hinder adaptability an observation consistent with Baweja et al. (2023), who advocate for embedding adaptive learning experiences alongside structured routines. The study also identified barriers that compromise program effectiveness, including limited resources, insufficient specialist support, large class sizes, and time constraints. These challenges are well documented in the literature; Roberts et al. (2021) highlight the critical need for adequate funding, training, and materials, while McLeskey (2020) underscores the detrimental effects of high student-teacher ratios on individualized instruction. In rural or underserved areas, logistical and financial limitations exacerbate these issues, mirroring the concerns raised by the respondents in this study.

Parental perceptions further enriched the analysis, with many reporting improvements in social engagement and basic academic skills, though inconsistencies in developmental progress were also noted. This aligns with Odom et al. (2021) and Guralnick (2020), who stress that parental engagement enhances the sustainability of intervention gains, yet the diversity of outcomes reflects the need for differentiated strategies that address varied learning profiles. The insights from parents highlight the critical role of ongoing communication between educators and families to ensure alignment of goals and strategies across home and school environments. The evidence from this study suggests that collaboration among stakeholders' teachers, specialists, parents, and community partners is essential for overcoming systemic barriers. Teachers' proposed solutions, such as resource-sharing, peer tutoring, and partnership with local organizations, are consistent with recommendations from Phillips et al. (2022), who found that community engagement significantly strengthens the delivery of early intervention services. Similarly, the use of collaborative planning with therapists, as reported by some participants, demonstrates the value of multidisciplinary teamwork in addressing the multifaceted needs of LSENs.

6. Conclusion

In conclusion, early intervention programs for learners with special educational needs (LSENs) show promising social interaction, communication, and independence benefits, especially when incorporating individualized instruction, structured routines, and play-based learning. However, challenges such as limited resources, large class sizes, insufficient teacher training, and the pressure to meet academic benchmarks can hinder their effectiveness. Increasing resource allocation, providing ongoing professional development for educators, and fostering collaboration among teachers, specialists, and families is essential to overcome these barriers. A balanced approach that caters to academic and socio-emotional needs is crucial for the long-term success and development of LSENs.

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