



INTEGRATING STUDENTS WITH HEARING IMPAIRMENTS INTO REGULAR CLASSROOMS: AN APPLIED ANALYTICAL STUDY IN REGULAR SCHOOLS IN EAST JERUSALEM

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Abstract:

This study aimed to explore the reality of educational inclusion for students with hearing disabilities in mainstream classrooms and to examine the impact of inclusive education on their academic and social development. It also sought to identify the main challenges experienced by these students within inclusive educational settings from their own perspectives. The study adopted a qualitative research approach, as it was considered appropriate for understanding students' personal experiences. Data were collected through semi-structured interviews and direct observations. The study sample consisted of 30 students with hearing disabilities enrolled in mainstream schools in East Jerusalem, who were purposively selected based on their direct experience with inclusive education. In addition, interviews were conducted with teachers and parents to obtain a comprehensive understanding of the inclusion process. The findings revealed that educational inclusion had positive effects on many participants, including improving academic achievement, developing social skills, enhancing self-confidence, and increasing opportunities for interaction with peers. However, the results also indicated that students continued to face several challenges, such as communication difficulties in the classroom, insufficient educational support services, limited adaptation of teaching strategies to their individual needs, and differences in the level of acceptance among teachers and classmates. These challenges affected their academic participation and social integration. The study recommended strengthening inclusive education practices, enhancing teacher preparation and professional development, providing appropriate assistive technologies and educational resources, and promoting cooperation among schools, families, and relevant institutions to improve the quality of educational services and support the successful academic and social inclusion of students with hearing disabilities in mainstream schools.

Keywords: inclusive education, hearing disability, students with hearing disabilities, mainstream schools, social interaction, academic achievement, qualitative research

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1. Introduction

In the late twentieth century, the concept of inclusion emerged as a modern philosophy and approach in special education, emphasizing the rights, dignity, and social participation of individuals with disabilities. Inclusive education aims to provide children with disabilities equal opportunities to access education, develop a sense of belonging, and participate actively within their communities rather than being isolated from society. The movement toward inclusion was strengthened by international efforts, including the United Nations' emphasis on the right of persons with disabilities to education and employment. Consequently, many countries have adopted inclusive education policies that place students with disabilities in mainstream schools alongside their peers, with appropriate support services to promote academic, social, and personal development (Khader, 2005; Nematian *et al.*, 2025).

Supporters of full inclusion argue that students with disabilities should be educated in regular classrooms while receiving the necessary therapeutic, educational, and social support services. Inclusion requires mainstream schools to respond effectively to the diverse needs of all learners and to create learning environments that accommodate individual differences (Dickinson *et al.*, 2020). In the Israeli educational system, policies emphasize placing students with disabilities in the least restrictive environments and providing support within their local communities. Successful inclusion requires that students with special educational needs attend mainstream schools in their neighborhoods while receiving appropriate educational adaptations and resources (Caron & Karth, 2021). Furthermore, effective inclusion depends on collaboration between general and special education teachers to ensure that students receive adequate support that enables them to reach their full potential (Anderson & Boyle, 2019).

The Israeli education system, particularly within Arab-sector schools, faces several challenges regarding the implementation of inclusive education for students with disabilities. According to the World Bank (2021), approximately 15% of the world's population experiences some form of disability-related challenge, and individuals with disabilities often face social and economic disadvantages compared with non-disabled individuals. These challenges may lead to exclusion from education, limited participation in society, and unequal access to educational resources and opportunities (Ahmed, 2015). Studies indicate that Arab-sector schools in Israel continue to experience difficulties in effectively integrating students with hearing disabilities into mainstream education. These schools often face limitations related to resources, funding, and inclusive practices compared with some Jewish-sector schools that have developed more comprehensive support systems for students with special educational needs. In addition, family awareness and support play an essential role in strengthening students' confidence and helping them overcome classroom challenges (Cohen, 2015).

Despite the increasing emphasis on inclusive education, there remains a gap in the literature regarding the inclusion of students with hearing disabilities in Arab-sector schools in East Jerusalem. There is limited official data concerning the prevalence of

hearing disabilities, the number of students with hearing impairments enrolled in mainstream elementary schools, and their proportion compared with other students (Feniger *et al.*, 2021). Therefore, further research is needed to understand the experiences, challenges, and support needs of students with hearing disabilities within inclusive educational settings. The findings of such studies can contribute to developing evidence-based recommendations for effective school policies, improving educational practices, enhancing the use of assistive technologies, and supporting the development of comprehensive inclusive programs that promote the academic and social participation of students with hearing disabilities (Alas, 2017; Feniger *et al.*, 2021).

2. Literature Review

Educational inclusion has become one of the fundamental principles in contemporary education systems, reflecting a shift from segregation and separation toward providing equal educational opportunities for all learners regardless of their abilities or disabilities. This approach is based on the belief that students with disabilities have the right to participate in mainstream educational environments, receive appropriate support, and develop academically, socially, and emotionally alongside their peers. The implementation of inclusive education requires not only placing students with disabilities in regular classrooms but also adapting teaching methods, learning environments, and support services according to their individual needs. Within this context, the inclusion of students with hearing disabilities represents an important area of research due to the specific challenges they may encounter related to communication, academic participation, and social interaction. Therefore, understanding the principles of inclusion, the role of educational support systems, and the barriers affecting successful inclusion is essential for developing effective practices that promote meaningful participation and achievement for students with hearing disabilities in mainstream schools.

2.1 The Concept of Educational Inclusion and Its Importance for Students with Disabilities

Educational inclusion emerged as a modern philosophy in special education during the late twentieth century, emphasizing the right of students with disabilities to receive education within mainstream schools alongside their peers. Inclusion aims to enhance students' sense of belonging, self-worth, equality, and participation in society. It has shifted the perspective of disability from isolation and segregation toward providing equal opportunities and supportive environments that enable students with disabilities to learn, work, and participate actively in their communities. The United Nations' emphasis on the rights of persons with disabilities to education and employment contributed to the global movement toward inclusive education systems (Khader, 2005). Inclusive education is based on the principle that mainstream schools should respond to

diverse learners' needs by providing appropriate educational support, accommodations, and individualized services (Dickinson *et al.*, 2020).

2.2 Educational Inclusion of Students with Disabilities in Mainstream Schools

Successful inclusion requires adapting educational environments, teaching strategies, and support services according to students' individual needs. Inclusive education does not mean simply placing students with disabilities in regular classrooms; rather, it requires cooperation between general and special education teachers to provide effective support and meaningful participation. Students should receive differentiated instruction, appropriate learning objectives, and necessary assistance to achieve their full potential (Anderson & Boyle, 2019). In Israel, educational policies emphasize placing students with disabilities in the least restrictive environments and supporting their integration within local mainstream schools to promote social participation and educational equality (Karn & Kart, 2021).

2.3 Inclusion of Students with Hearing Disabilities in Mainstream Education

Students with hearing disabilities face unique challenges within inclusive educational settings, particularly related to communication, classroom participation, and access to learning content. Although inclusion provides opportunities for academic development and social interaction, its success depends on the availability of assistive technologies, appropriate teaching methods, and trained teachers who understand the needs of students with hearing disabilities. Research indicates that many students with disabilities continue to experience barriers related to insufficient educational resources, limited teacher preparation, and inadequate adaptation of learning environments. Therefore, effective inclusion requires systematic support that addresses both academic and social aspects of students' development (Ahmed, 2015).

2.4 Challenges of Inclusive Education in the Arab Education Sector in Israel

The implementation of inclusive education in Arab schools in Israel faces several structural and educational challenges. Studies indicate that Arab schools experience difficulties related to limited resources, lower financial support, and fewer inclusive practices compared with some other educational sectors. These challenges may negatively affect the quality of services provided to students with disabilities, including students with hearing disabilities. In addition, the lack of accurate statistical data regarding the number of students with hearing disabilities integrated into mainstream schools creates difficulties in planning effective educational policies and intervention programs (Cohen, 2015; Feniger *et al.*, 2021). Despite these challenges, the role of school principals, teachers, and families remains essential in developing supportive environments and promoting equal participation for all students.

2.5 The Role of Teachers, Families, and Support Systems in Successful Inclusion

Teachers play a central role in the success of educational inclusion through developing positive attitudes, implementing appropriate teaching strategies, and creating supportive classroom environments. Collaboration between special education teachers, mainstream teachers, families, and educational professionals is necessary to ensure that students with disabilities receive continuous support. Family involvement also contributes significantly to students' confidence, adaptation, and academic success, as cooperation between home and school helps generalize learned skills across different environments (Cohen, 2015). Therefore, successful inclusion requires a comprehensive approach based on cooperation, accessibility, and commitment to the educational rights of students with disabilities.

These findings agree with Masturihi (2021) and Al Amide (2022), who showed that successful inclusion depends on the support available in the school. *"Unlike Noor & Shyanto (2026), my study found bullying and social isolation because of limited school support"*. It found that inclusion improved social acceptance and students' relationships.

The findings are consistent with Vygotsky's Sociocultural Theory and Bronfenbrenner's Ecological Systems Theory, which emphasize the importance of school support, social interaction, and the learning environment for successful inclusion.

3. Material and Methods

3.1 Research Methodology

This study adopted a qualitative research methodology within a qualitative research design, as it was considered the most appropriate approach for exploring the lived experiences of students with hearing disabilities who are included in mainstream classrooms. Qualitative research is particularly suitable for studies that aim to understand individuals' perceptions, experiences, challenges, and the meanings they assign to social and educational phenomena. Unlike quantitative approaches that focus mainly on measuring variables, qualitative methodology allows researchers to gain an in-depth understanding of participants' personal experiences within their natural contexts (Bloomfield & Fisher, 2019). Furthermore, qualitative research is associated with interpretivist and constructivist perspectives, which emphasize that individuals construct different meanings based on their experiences and social environments (Erciyes, 2020).

The qualitative approach was selected because the purpose of this study was not only to identify whether educational inclusion positively or negatively affects students with hearing disabilities, but also to explore how these students experience inclusion academically and socially, and what challenges they encounter in their daily school lives. Through direct observation and semi-structured interviews, the study aimed to reveal aspects of inclusion that may not appear through quantitative measurements, such as feelings of acceptance, communication difficulties, classroom participation, and relationships with teachers and peers. Therefore, the qualitative methodology provided

a deeper and more realistic understanding of the educational inclusion experience and contributed to identifying the factors that influence the success or failure of inclusive practices.

The study was conducted through face-to-face interviews with students enrolled in the school where the researcher works, in addition to non-face-to-face interviews with students outside the researcher's workplace through communication platforms, with the cooperation of teachers and families who contributed to facilitating access to participants. The researcher also relied on direct observation to gain a broader understanding of students' interactions within inclusive classroom environments. The analysis of participants' responses revealed differences in their experiences, with some students describing positive outcomes of inclusion, while others highlighted ongoing challenges related to support services, communication barriers, and classroom adaptations. This variation reflects differences in the level of support, acceptance, and preparedness within inclusive educational environments.

3.2 Study Sample

The study sample consisted of 30 students with hearing disabilities who were integrated into mainstream classrooms in regular schools in East Jerusalem. The sample was selected purposively rather than randomly, as is common in qualitative research, because participants needed to have direct experience with educational inclusion and the ability to provide meaningful information related to the research objectives. Purposive sampling enables researchers to select individuals who possess specific characteristics and experiences relevant to the phenomenon under investigation (Etikan *et al.*, 2016; Cebeci & Ghorbani, 2020).

Participants were selected based on several criteria. First, all participants were students with hearing disabilities enrolled in inclusive classrooms within mainstream schools. Second, the sample included students with different degrees of hearing loss, ranging from mild to moderate and severe hearing disabilities, in order to capture diverse experiences and challenges. The sample also considered differences in gender, age, and educational stage to provide a broader understanding of the educational and social experiences of students with hearing disabilities.

The selection of this sample was based on the researcher's professional experience and direct involvement in inclusive educational settings. The researcher has more than twelve years of experience working in inclusive schools affiliated with the Israeli Ministry of Education in East Jerusalem, which provided practical knowledge of the challenges faced by students with special educational needs. Through this professional experience, the researcher identified a gap between theoretical policies of inclusion and their actual implementation within classrooms. Although there are positive educational attitudes toward inclusion among special education professionals, practical challenges remain, particularly regarding teacher preparation, classroom support, educational resources, and adaptation of teaching strategies to meet the needs of students with hearing disabilities.

Therefore, the purposive selection of participants aimed to provide a realistic representation of students who experience inclusion on a daily basis. The sample was chosen to generate rich and detailed descriptions of students' academic and social experiences and to contribute to developing recommendations based on real educational practices. The purpose of the sample was not statistical generalization but rather achieving a deeper understanding of the phenomenon of educational inclusion and identifying factors that may improve inclusive practices in mainstream schools.

3.3 Data Collection Instrument

The main instrument used in this study was the semi-structured interview. Semi-structured interviews are widely used in qualitative research because they provide a balance between guidance and flexibility, allowing researchers to ask prepared questions while giving participants sufficient space to express their experiences freely and introduce new themes related to the research topic (Kallio *et al.*, 2016). This method was selected because it was appropriate for exploring the personal experiences of students with hearing disabilities and understanding the academic, social, and emotional dimensions of their inclusion experience.

The interview questions were developed based on the objectives of the study and previous literature related to educational inclusion and hearing disabilities. The questions covered several main areas, including students' experiences in mainstream classrooms, academic challenges, communication difficulties, relationships with teachers and peers, available support services, and the impact of inclusion on their social development and self-confidence. The questions were formulated using clear and accessible language appropriate to the participants' educational and cultural backgrounds.

Several criteria were considered when selecting participants for the interviews, including: being a student with a hearing disability integrated into a mainstream classroom, having sufficient experience within an inclusive educational setting, possessing the ability to communicate and express experiences verbally, in writing, or through supportive communication methods, and representing diversity in terms of gender and degree of hearing loss. These criteria aimed to ensure that the collected data would be rich, diverse, and directly relevant to the research questions.

Before conducting the actual interviews, a pilot study was carried out with a small group of students outside the original sample. The purpose of the pilot phase was to evaluate the clarity of the questions, estimate the time required for interviews, examine the effectiveness of communication methods, and identify any difficulties participants might experience. Based on the pilot results, some questions were simplified, reorganized, and adjusted to make them clearer and more suitable for students with hearing disabilities.

3.4 Data Collection Procedures

The researcher conducted individual interviews with 30 students with hearing disabilities, considering differences in gender, age, educational stage, and severity of hearing loss. Fifteen participants were students from the school where the researcher works, while the remaining participants were reached through cooperation with teachers, schools, and families. The interviews were conducted in suitable and quiet environments to ensure participants' comfort and encourage open expression.

Some interviews were conducted face-to-face, while others were conducted remotely through communication platforms or voice calls depending on participants' circumstances and accessibility needs. The duration of each interview ranged approximately between 30 and 45 minutes. Five interviews were audio-recorded after obtaining participants' consent to ensure accurate documentation of responses, while additional field notes were written regarding participants' body language, tone of voice, and level of interaction, as these elements contributed to a deeper interpretation of qualitative data.

3.5 Data Analysis

The collected data were analyzed using thematic analysis. This method was selected because it allows researchers to identify, organize, and interpret recurring patterns and themes within qualitative data. The researcher reviewed the interview transcripts, coded meaningful statements, grouped related codes into broader categories, and developed major themes representing students' experiences of educational inclusion. The analysis focused on identifying positive and negative aspects of inclusion, including academic development, social participation, communication barriers, classroom support, and environmental challenges.

The analysis process was conducted manually without relying on specialized qualitative analysis software. The researcher extracted the main themes and sub-themes emerging from participants' responses and organized them into analytical tables to facilitate interpretation and comparison between participants' experiences.

3.6 Ethical Considerations

Several ethical principles were considered throughout the research process. First, informed consent was obtained from participants after explaining the purpose of the study, procedures, and their rights. Participation was voluntary, and participants had the right to withdraw at any stage without any consequences. Second, confidentiality and privacy were maintained by protecting participants' identities and ensuring that collected information was used only for scientific research purposes. Finally, all collected data were stored securely and handled responsibly to protect participants' personal information and ensure adherence to research ethics standards.

4. Results

The analysis of the semi-structured interviews with students with hearing disabilities integrated into mainstream classrooms revealed several central themes related to their educational experiences, academic and social development, and the challenges they encounter within inclusive educational settings. The findings reflected that inclusion is a complex experience influenced by multiple factors, including the availability of support services, teachers' preparedness, classroom environment, peer acceptance, and the individual characteristics of each student. The following themes present the main results emerging from the participants' narratives and discuss them in relation to the objectives of the study and previous literature.

Theme 1: The impact of educational inclusion on students' academic and social experiences

The findings indicated that educational inclusion provided students with hearing disabilities with opportunities to participate in mainstream learning environments and interact with their hearing peers, which positively influenced their academic and social development. Many participants described inclusion as a valuable experience that increased their sense of belonging, improved their confidence, and allowed them to develop social relationships. However, some participants reported that the benefits of inclusion depended greatly on the level of support provided within the classroom. When teachers adapted their teaching methods and offered appropriate assistance, students felt more capable of participating and achieving academically. These findings support the view of Dickinson *et al.* (2020), who emphasized that successful inclusion requires schools to respond to diverse learners' needs through flexible educational practices. Similarly, Anderson and Boyle (2019) highlighted that inclusive education is effective when students receive appropriate instructional strategies and support services that enable them to reach their potential.

Theme 2: Communication barriers as a major challenge affecting classroom participation

The findings showed that communication difficulties represented one of the most significant challenges experienced by students with hearing disabilities in mainstream classrooms. Participants explained that difficulties in hearing teachers' explanations, following classroom discussions, and participating in group activities sometimes limited their academic engagement and created feelings of frustration. The results suggest that inclusion alone is insufficient unless communication accessibility is ensured through appropriate strategies, assistive technologies, and teacher awareness. This finding is consistent with previous research indicating that students with hearing disabilities may experience reduced participation when classrooms do not provide suitable communication support. The importance of adapting learning environments and providing equal access to educational content was also emphasized by Cohen (2015), who

noted that effective inclusion requires awareness and support from both educational institutions and families to help students overcome classroom challenges.

Theme 3: The importance of teacher preparedness and professional support in successful inclusion

The results revealed that teachers play a central role in determining the quality of the inclusion experience for students with hearing disabilities. Participants indicated that supportive teachers who understood their needs and modified teaching approaches contributed significantly to their academic success and emotional well-being. In contrast, limited teacher knowledge about hearing disabilities and insufficient preparation created barriers to effective participation. The findings demonstrate that inclusive education is not only a matter of placing students with disabilities in mainstream classrooms but also requires qualified teachers who possess the knowledge and skills needed to address individual differences. This result agrees with Anderson and Boyle (2019), who stressed the importance of collaboration between general and special education teachers to provide meaningful support for students with disabilities. Furthermore, it aligns with the findings of Al-Rifai (2018), who identified a lack of teacher preparation as one of the major obstacles affecting the success of inclusive education programs.

Theme 4: The role of social acceptance and peer relationships in the inclusion experience

The findings demonstrated that peer acceptance and social interaction were important factors influencing students' sense of belonging within mainstream classrooms. Participants explained that positive relationships with classmates increased their confidence and reduced feelings of isolation, while negative attitudes or lack of understanding from peers created social barriers. This indicates that successful inclusion requires not only academic adaptation but also the development of an inclusive social environment where diversity is respected. The results support the argument presented by Khader (2005), who emphasized that inclusion contributes to strengthening individuals' sense of belonging and active participation in society. Moreover, the findings correspond with those of Bader and Sweisi (2023), who found that positive attitudes among school staff and peers are essential for improving the inclusion experiences of students with autism and other disabilities.

Theme 5: The need for cooperation between schools, families, and support professionals

The findings highlighted that cooperation between families, teachers, and specialized professionals is a key factor in improving the effectiveness of educational inclusion. Participants emphasized that communication between school and family helped teachers better understand students' needs and supported the development of appropriate educational plans. In addition, collaboration with special education professionals and the use of assistive resources contributed to reducing learning barriers. These findings confirm the importance of a comprehensive support system surrounding students with disabilities. Previous studies have similarly emphasized that successful

inclusion requires coordinated efforts among educational institutions, families, and policymakers. According to Finiger *et al.* (2021), strengthening inclusive educational policies and improving available resources are necessary steps toward creating effective inclusion systems, particularly in contexts where official data and support structures remain limited.

Theme 6: The gap between inclusive education policies and practical implementation

The findings revealed a noticeable gap between the theoretical principles of inclusion and their actual implementation in mainstream schools. Although participants recognized the value of inclusive education and its potential benefits, they also described ongoing difficulties related to limited resources, insufficient classroom adaptations, and inconsistent support services. This suggests that the success of inclusion depends not only on adopting inclusive policies but also on transforming these policies into daily educational practices. The findings are consistent with previous research conducted by Abu Obeid (2025) and Hussein and Abdel Khalek (2024), who identified institutional barriers, limited resources, and challenges faced by teachers as major factors influencing the effectiveness of inclusion programs. Therefore, improving inclusive education requires continuous evaluation, teacher training, and investment in support systems to ensure that students with hearing disabilities receive equitable educational opportunities.

5. Discussion

The present study aimed to explore the experiences of students with hearing disabilities who are integrated into mainstream classrooms and to examine the academic and social impact of inclusive education, as well as the challenges they encounter within inclusive educational settings. The findings revealed that educational inclusion is a complex process influenced by multiple factors, including the availability of educational support, teachers' preparedness, classroom environment, peer acceptance, and the adaptation of teaching strategies to meet students' individual needs. The results indicate that inclusion can provide important opportunities for academic progress and social participation; however, its success depends on the quality of implementation rather than merely placing students with hearing disabilities in regular classrooms.

The findings showed that many students perceived educational inclusion as a positive experience that contributed to improving their social relationships, increasing their confidence, and providing opportunities for interaction with hearing peers. Participants indicated that being part of mainstream classrooms helped them feel a sense of belonging and reduced feelings of isolation. These findings are consistent with the principles of inclusive education, which emphasize that inclusion is not only physical placement in the classroom but also meaningful participation and equal opportunities for learning. Similar findings were reported by Anderson and Boyle (2019), who emphasized that successful inclusion requires appropriate educational support, differentiated

teaching methods, and collaboration between general and special education teachers to enable students with disabilities to reach their full potential. The results also align with Dickinson *et al.* (2020), who highlighted that inclusive education requires schools to respond effectively to diverse student needs and provide an environment that supports participation and equality.

Despite the positive aspects of inclusion, the study revealed several challenges experienced by students with hearing disabilities, particularly communication barriers within the classroom environment. Participants reported difficulties in following classroom discussions, understanding teachers' explanations, and participating fully in learning activities when appropriate communication supports were unavailable. These challenges indicate that physical inclusion alone does not guarantee educational equality. Students require accessible communication methods, assistive technologies, visual supports, and teachers who understand the specific needs of students with hearing disabilities. This finding supports the results of Finiger *et al.* (2021), who indicated that there is still a gap between inclusive education policies and their practical implementation, particularly regarding the availability of resources and effective support systems for students with disabilities in Arab-sector schools in Jerusalem.

The study also found that teachers' preparedness and professional knowledge play a central role in determining the success of inclusion. Participants emphasized that differences in teachers' awareness, teaching approaches, and ability to adapt classroom activities significantly affect their educational experiences. When teachers provide flexible instruction, encourage participation, and create supportive classroom environments, students experience greater academic and social success. However, insufficient training and limited awareness among some teachers may create barriers to effective inclusion. These findings correspond with the study of Al-Rifai (2018), which identified lack of teacher preparation and insufficient educational resources as among the main obstacles facing inclusive education. Similarly, Abu Obeid (2025) found that teachers reported several barriers to integrating students with autism in mainstream schools, including limited resources, difficulties adapting teaching practices, and challenges in meeting individual needs, which reflects the broader challenges faced by inclusive education systems.

Another important finding was the significant role of social acceptance and peer relationships in students' inclusion experiences. Participants described that positive attitudes from classmates enhanced their confidence and encouraged their participation, while negative attitudes or misunderstanding of their disability could lead to feelings of exclusion. This finding emphasizes that inclusion is not only an educational process but also a social process requiring awareness among all members of the school community. The results are consistent with Bader and Sweisi (2023), who examined attitudes of general school staff toward integrating students with autism and found that positive attitudes and awareness among school personnel contribute significantly to improving inclusion outcomes. Therefore, developing inclusive school cultures that promote respect for diversity is essential for supporting students with disabilities.

The findings further indicated the importance of cooperation between schools, families, and professionals in supporting students with hearing disabilities. Participants highlighted that communication between parents, teachers, and specialists contributes to a better understanding of students' needs and improves educational planning. Effective collaboration allows the development of individualized support strategies and ensures continuity between home and school environments. This finding supports Cohen's (2015) argument that family support and awareness are essential factors that help students with disabilities develop confidence and overcome educational challenges.

Overall, the findings demonstrate that inclusive education for students with hearing disabilities has the potential to improve academic achievement, social participation, and self-confidence; however, successful inclusion requires comprehensive support systems rather than simple placement in mainstream classrooms. The study highlights the need to reduce the gap between inclusive education policies and actual classroom practices through teacher training, improved resources, technological support, and stronger cooperation among educational stakeholders. These conclusions are consistent with previous research emphasizing that effective inclusion depends on creating accessible, supportive, and responsive learning environments that recognize students' abilities and individual differences rather than focusing only on their disabilities.

6. Conclusion

This study explored the experiences of students with hearing disabilities who are integrated into mainstream classrooms, focusing on the impact of inclusive education on their academic and social development and identifying the main challenges they face within inclusive learning environments. The findings demonstrated that educational inclusion can provide significant benefits for students with hearing disabilities by enhancing their sense of belonging, improving their social interaction with peers, increasing their self-confidence, and creating greater opportunities for academic participation. However, the study also revealed that the success of inclusion is not determined only by placing students in regular classrooms, but rather by the extent to which schools provide appropriate educational, social, and technological support.

The results highlighted that students with hearing disabilities continue to experience several challenges that may limit the effectiveness of inclusion, including communication difficulties, insufficient adaptation of teaching strategies, limited availability of assistive technologies, and differences in teachers' preparedness and awareness. These challenges indicate the importance of moving from the concept of physical integration toward meaningful inclusion, where students are active participants in classroom activities and receive the necessary support to achieve their academic and social potential.

The study emphasizes that effective inclusive education requires a comprehensive approach based on cooperation between general education teachers, special education

teachers, families, and educational institutions. Preparing teachers through professional development programs, improving classroom accessibility, providing appropriate support services, and promoting positive attitudes toward disability are essential steps for ensuring successful inclusion. Furthermore, creating a school culture based on acceptance, respect, and recognition of individual differences contributes significantly to improving the educational experiences of students with hearing disabilities.

In conclusion, inclusive education represents an important opportunity for students with hearing disabilities to participate equally in educational and social life. Nevertheless, achieving successful inclusion requires continuous efforts to bridge the gap between educational policies and practical implementation. By addressing existing barriers and strengthening support systems, mainstream schools can become more responsive environments that enable students with hearing disabilities to learn, communicate, and develop alongside their peers. The findings of this study provide insights that may contribute to improving inclusive practices and guiding future research and educational policies related to students with hearing disabilities.

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Conflict of Interest Statement

The author declares no conflicts of interest.

References

- Aanondsen, C. M., Jozefiak, T., Lydersen, S., Heiling, K., & Rimehaug, T. (2023). Deaf and hard-of-hearing children and adolescents' mental health, quality of life and communication. *BMC Psychiatry*, 23, 297. <https://doi.org/10.1186/s12888-023-04787-9>
- Abdat, my soul is Abdat. (2019). Teachers' attitudes towards integrating students with hearing disabilities into regular schools. *Jordanian Journal of Educational Sciences*, 15(4), 421–438.
- Abdel Azim, Muhammad (2019). *Hearing disability: educational programs and intervention methods*. Cairo, Egypt: Dar Al-Fikr Al-Arabi.

- Abdel Rahman, Muhammad (2019). *Psychological and social compatibility*. Amman, Jordan: Dar Al Masirah.
- Abu Al-Halawa, Muhammad (2017). *The Effectiveness of a Proposed Guidance Program for Developing Emotional Maturity in Improving Social Competence among a Sample of Children Who Have Been Treated Emotionally*. PhD Dissertation, Alexandria University.
- Ainscow, M. (2020). Promoting inclusion and equity in education: Lessons from international experiences. *Nordic Journal of Studies in Educational Policy*, 6(1), 7–16. <https://doi.org/10.1080/20020317.2020.1729587>
- Al-Anazi, Mubarak bin Ghayyad Muhammad. (2025). *The necessary support services for students with hearing disabilities in comprehensive education classes from the point of view of specialists*. King Khalid University Journal of Educational Sciences, Volume 12, Issue 4, 1-23. Retrieved from <http://search.mandumah.com/Record/1616390>
- Al-Asaad, Raneem, and Abu Fakhr, Ghassan Abdul-Hay (2020). Obstacles to Integrating Hearing-Impaired Students with Their Regular Peers from the Perspective of Resource Room Teachers: A Field Study in Homs Governorate. *Al-Baath University Journal, Educational Sciences Series*, Vol. 42, No. 47, pp. 99-147.
- Al-Ashwal, Adel (2010). *Psychological Adjustment*. Cairo, Egypt: Dar Al-Fikr Al-Arabi.
- Alasim, K. N. (2021). Inclusion of students with hearing impairment in mainstream schools: Teachers' perspectives and challenges. *International Journal of Inclusive Education*, 25(10), 1156–1173.
- Al-Barghathi, Maryam (2017). School Principals' and Teachers' Attitudes towards Integrating People with Special Needs in Public Schools in Benghazi. *Journal of Sciences and Humanities*, No. 33, pp. 1-16.
- Al-Barrak, Bayader bint Khalid, and Al-Ajaji, Saleh bin Nasser. (2025). The Reality of Assistive Technology in Developing Communication and Academic Skills among Hearing-Impaired Students from the Teachers' Perspective. *Journal of Educational Sciences and Humanities*, No. 49, pp. 416-439. Retrieved from <http://search.mandumah.com/Record/1614962>
- Al-Biblawi, Ehab (2019). *The Relationship Between Parenting Styles and Aggressive Behavior Among Individuals with Hearing Impairments*. Master's Thesis, Zagazig University.
- Al-Harbi, Amal Bint Saleh Bin Farij, and Mahfouz, Abdul-Raouf Ismail Mahmoud. (2025). Challenges Facing the Provision of Support Services for Deaf and Hard-of-Hearing Students in Makkah from the Teachers' Perspective. *Journal of Special Education and Rehabilitation*, Vol. 19, No. 69, pp. 30-65. Retrieved from <http://search.mandumah.com/Record/1568476>
- Al-Hudhaili, Nihad Saleh (2015). *The effectiveness of a game-based training program in developing innovative thinking among hearing-impaired children in the pre-school stage*, PhD dissertation, College of Graduate Studies, University of Jordan, Amman.
- Al-Humaidah, Abdullah, and Al-Hawasawi, Khalid. (2020). The Reality of Support Services Provided to Students with Disabilities in Saudi Universities from the

- Students' Perspective. *Journal of Educational Sciences, Imam Muhammad ibn Saud Islamic University*, 26(2), pp. 145-188.
- Al-Jamal, Muhammad (2019). The Effectiveness of Inclusion Programs in Improving the Social Interaction of Children with Hearing Impairments. *Journal of the Faculty of Education, Benha University*, 30(118), 223–252.
- Al-Khatib, Jamal (2019). *Introduction to Hearing Impairment*. Amman, Jordan: Dar Al-Fikr.
- Al-Khatib, Jamal, and Al-Hadidi, Mona (2018). *Introduction to Special Education (7th ed.)*. Amman, Jordan: Dar Al-Fikr.
- Al-Khatib, Jamal, and Al-Hadidi, Mona (2021). *Introduction to Special Education (9th ed.)*. Amman, Jordan: Dar Al-Fikr.
- Al-Mallah, Tamer Mohamed (2016). Hearing disability between rehabilitation and technology, Alexandria University, Egypt.
- Al-Mashaqba, Farhan (2021). Basic stage teachers' attitudes towards integrating students with special needs into regular schools in Jordan in light of some variables, *Journal of the Islamic University for Educational and Psychological Studies*, vol. 4, no. 29, 690-714.
- Al-Mudarresi, Muhammad. (2019). *Psychological and social adjustment among people with hearing disabilities*. Amman, Jordan: Al-Yazouri Scientific House.
- Al-Najjar, Abdullah, and Al-Jundi, Murad, (2014), Attitudes of male and female basic stage teachers in South Hebron schools of education towards the inclusion of people with disabilities in their schools from their point of view, *Al-Quds Open University Journal for Research and Studies*, vol. 4, no. 12, 112-126.
- Al-Qamsh, Mustafa, and Al-Maaytah, Khalil. (2020). The effect of educational integration on developing social skills among students with hearing disabilities. *Al-Quds Open University Journal for Educational and Psychological Research and Studies*, 11(31), 78–96.
- Al-Ruwaiti, Noura bint Abdullah. (2021). Support Services Provided to Deaf and Hard-of-Hearing Female Students in Higher Education Institutions in the Kingdom of Saudi Arabia. *Journal of the Faculty of Education, Al-Azhar University*, 40(191), 247–286.
- Al-Saleh Marrakshi. (2017). The role of school integration in developing the oral language of a hearing-impaired child undergoing a cochlear implant. *Psychological and Educational Studies*, 18, 65–76.
- Alsalem, M. A., & Alzahrani, H. A. (2023). The role of institutional practice in promoting inclusive education for deaf and hard of hearing students: A critical analysis. *SAGE Open*, 13(4). <https://doi.org/10.1177/21582440231203435>
- Alsamih, M. (2024). Social experiences of deaf and hard-of-hearing students at a Saudi Arabian university: A qualitative study. *British Journal of Special Education*, 51(1). <https://doi.org/10.1111/1467-8578.12503>
- Al-Sartawi, Zeidan Ahmed, and Al-Shakhs, Abdel Aziz Al-Sayed. (2017). The Impact of Using Educational Aids on Improving Academic Achievement Among Students

- with Hearing Impairments. *Arab Journal of Disability and Talent Sciences*, 1(2), 55–82.
- Alsayed, A. (2024). Social emotional goals for students who are deaf and hard of hearing: Special education teacher interviews. *Cogent Education*, 11(1). <https://doi.org/10.1080/2331186X.2024.2422738>
- Al-Shaheen, Lamis Ihsan (2017). *The effectiveness of an educational program based on individualized instruction in improving the reading skills of a sample of hearing-impaired students at the Institute for the Deaf and Dumb in the city of Damascus*, unpublished master's thesis, University of Damascus, Syria.
- Al-Shahrani, Muhammad (2019). Social support and its relationship to the self-concept of hearing-impaired children, *Journal of Psychological and Educational Sciences*, 5(2), 174-198.
- Al-Sharaa, Nermin (2018). Student Attitudes towards the Integration of Students with Disabilities into University Education, *Journal of Special Education*, p. 25.
- Al-Suwaiti, Ahmed. (2016). The Impact of Educational Inclusion on Developing Social Adjustment Among Children with Hearing Impairments. *Journal of Educational and Psychological Sciences, University of Bahrain*, 17(3), 163–189.
- Altman, R. (2016). *Self-concept and psychological adjustment among children with hearing impairment*. New York, NY: Routledge.
- Al-Zahir, Qahtan Ahmed (2013). *Introduction to Special Education*, 2nd edition, Wael Publishing House, Amman, Jordan.
- Al-Zuraiqat, Ibrahim Abdullah. (2019). *Hearing Impairment: Principles and Educational Methods. (New Edition)*. Amman, Jordan: Dar Al-Fikr.
- Amira, Oraib (2017). *Behavior Modification*, Safaa Publishing and Distribution House, Amman.
- Andrews, J., & Wiener, M. (2014). Social skills and psychological adjustment among children with hearing impairment. *Journal of Deaf Studies and Deaf Education*, 19(3), 315–327.
- Aramburo, L. (2015). Psychological adjustment and social interaction among children with hearing impairment. *International Journal of Special Education*, 30(2), 87–98.
- Baldo, Naji (2018). Primary School Teachers' Attitudes Towards Inclusion: A Comparative Study Between Trained and Untrained Teachers in Special Education in Model Schools in Jabal Awliya Locality, Khartoum State. *Journal of Psychological Studies*, No. 14, pp. 13-34.
- Barakat, Fatima Saeed Ahmed. (2017). The Effectiveness of a Training Program in Developing Phonological Awareness and its Impact on Some Expressive Language Skills among Hearing-Impaired Children. *Egyptian Journal of Psychological Studies*, 27(95), pp. 245-299.
- Bashatoh, Muhammad Othman Muhammad (2021). The Role of Blended Learning in Developing Academic and Social Skills among Deaf and Hard-of-Hearing Students from the Perspective of Their Teachers. *Umm Al-Qura University Journal of Educational and Psychological Sciences*, Vol. 13, No. 2, pp. 170-196.

- Batayneh, Osama and Al-Ruwaili, Madlala (2014). Teachers' Attitudes Towards the Inclusion of Children with Physical Disabilities in Public Schools in Northern Saudi Arabia. *Jordanian Journal of Educational Sciences*, 11(2), pp. 145-168.
- Batayneh, Osama and Al-Ruwaili, Muhammad (2014). *Educational Inclusion of Students with Special Needs*. Amman, Jordan: Dar Al-Fikr.
- CAST. (2024). Universal Design for Learning Guidelines version 3.0. CAST.
- Cebeci, H. İ., & Ghorbani, S. (2020). Integration of Bilateral Trade Between Turkey and Iran: An Application of Nonlinear Gravity Model. *International Journal of Management (IJM)*, 11(08), 2019-2034. Retrieved from https://www.academia.edu/45639965/INTEGRATION_OF_BILATERAL_TRADE_BETWEEN_TURKEY_AND_IRAN_AN_APPLICATION_OF_NONLINEAR_GRAVITY_MODEL
- Farid, Muhammad. (2021). *Strategies for integrating people with special needs into educational institutions*. Amman, Jordan: Dar Al Masirah.
- Forlin, C. (2010). *Teacher education for inclusion: Changing paradigms and innovative approaches*. Routledge. Retrieved from https://hmk.am/wp-content/uploads/2021/04/Chris_Forlin_Teacher_Education_for_Inclusion_ChBookFi.org.pdf
- Friend, M., & Bursuck, W. D. (2019). *Including students with special needs: A practical guide for classroom teachers (8th ed.)*. Pearson. Retrieved from <https://eric.ed.gov/?id=ED468984>
- Friend, M., & Cook, L. (2017). *Interactions: Collaboration skills for school professionals (8th ed.)*. Pearson. Retrieved from https://books.google.ro/books/about/Interactions.html?id=vdT8jgEACAAJ&redir_esc=y
- Haidar, Ruba (2018). Teachers' Attitudes Towards Integrating Students with Disabilities into Regular Classrooms: A Field Study of a Sample of Teachers in Homs and Tartous Governorates. *Tishreen University Journal for Research and Scientific Studies*, Vol. 40, No. 4, pp. 43-58.
- Hallahan, D. P., Kauffman, J. M., & Pullen, P. C. (2022). *Exceptional learners: An introduction to special education (15th ed.)*. Pearson. Retrieved from <https://exchange.pearson.com/products/7f000001-7f96-1c97-817f-ad26d7f0017a/exceptional-learners-an-introduction-to-special-education-15e?uuid=7f000001-7f96-1c97-817f-ad26d7f0017a&ref=collections>
- Hamed, Tanzil, (2019). Teachers' Attitudes Towards the Inclusion of People with Disabilities in Regular Classrooms in Basic Schools in Benghazi Locality. *The International Journal of Arts, Humanities and Social Sciences*, No. 27, 85–104.
- Hanafi, Ali Abdul-Nabi, and Al-Aidi, Abdullah. (2016). The Reality of Support Services Provided to Students with Hearing Impairments in Inclusion Programs. *Journal of Special Education and Rehabilitation*, Special Education and Rehabilitation Organization (SERO), 3(10), pp. 95-134.

- Hedrick, M., Katims, D., & Carr, N. (2012). Support services for students with hearing loss in secondary education. *Journal of Deaf Studies and Deaf Education*, 17(4), 458–472.
- Ismail, Ahmed (2018). Teachers' Attitudes Towards Integrating Students with Special Needs with Regular Students. *Journal of Psychology*, No. 27. Retrieved from <https://gcedclearinghouse.org/en/node/121615>
- Jamieson, J. R. (2014). *Teaching children who are deaf or hard of hearing*. Boston, MA: Pearson.
- Jumaian, Ibrahim, (2013). Teachers' Attitudes Towards the Inclusion of Children with Special Needs in Public Schools: A Cross-Cultural Study in the Jordanian and Saudi Environments. *The Educational Journal*, 27(107).
- Knoors, H., & Marschark, M. (2018). *Evidence-based practices in deaf education*. Oxford University Press.
- Lindsay, G. (2017). Educational psychology and the effectiveness of inclusive education/mainstreaming. *British Journal of Educational Psychology*, 77(1), 1–24. <https://doi.org/10.1348/000709906X156881>
- Luterman, D. (2016). *Counseling persons with communication disorders and their families (5th ed.)*. Pro-Ed. Retrieved from <https://archive.org/details/counselingperson0000lute>
- Mahmoud, Khaled Saleh Saleh (2014). The role of inclusion in developing social relationships among the hearing-impaired: a study applied to inclusion schools for the hearing-impaired in Jeddah. *Journal of Studies in Social Service and Human Sciences*, No. 37, Part 3, 817-854.
- Marschark, M., & Knoors, H. (2019). *The Oxford handbook of deaf studies in learning and cognition*. Oxford University Press. Retrieved from <https://global.oup.com/academic/product/the-oxford-handbook-of-deaf-studies-in-learning-and-cognition-9780190054045?cc=ro&lang=en&>
- Marschark, M., & Spencer, P. E. (2016). *The Oxford handbook of deaf studies, language, and education* (Vol. 2, 2nd ed.). Oxford University Press. Retrieved from https://books.google.ro/books/about/The_Oxford_Handbook_of_Deaf_Studies_Lang.html?id=BYIPxkagQ0AC&redir_esc=y
- Martin, D. S. (2015). Social and emotional development of children with hearing loss. *American Annals of the Deaf*, 160(2), 132–145.
- Micheline, Susan (2016). *Early intervention for children with hearing disabilities*. Cairo, Egypt: Dar Al-Fikr Al-Arabi.
- Mood, D., Sheldon, R., Tabangin, M., Wiley, S., & Meinzen-Derr, J. (2022). Technology assisted language intervention (TALI) for children who are deaf/hard of hearing: Promising impact on pragmatic skills. *Deafness & Education International*, 24(4), 334–355. <https://doi.org/10.1080/14643154.2022.2135731>
- Musa, Muhammad. (2018). *Psychological and social compatibility*. Amman, Jordan: Dar Al Masirah.
- Mustarihi, Haya Ali Zakaria, and Al-Jawalada, Fouad Eid. (2021). Obstacles to the integration of people with hearing disabilities from the perspective of their

- parents. *Amman Arab University Journal of Research - Educational and Psychological Research Series*, Volume 6, No. 1, 361-380.
- Nematian, J., Stanimirović, P. S., Ghorbani, S., Karabašević, D., & Brzaković, P. (2025). A Maximal Covering Location Problem Under Uncertainty Through Possibility Theory. *Mathematics*, 13(22), 3653. <https://doi.org/10.3390/math13223653>
- Noor, A. Z., & Sriyanto, S. (2026). Interaction of deaf students with hearing peers in inclusive elementary schools: A phenomenological study. *Journal of ICSAR*, 10(1), 175–186. <https://doi.org/10.17977/um005v10i12026p175-186>
- Omar, Muhammad (2018). *Primary school teachers' attitudes towards integrating autistic children (autistic children) with their normal peers in public schools, a psychological study in light of some variables*, the Second Scientific Conference of the Department of Mental Health, Faculty of Education, Benha University, July 17-18.
- Othman, Ahmed. (2013). *Partnership between family and school in raising children with special needs*. Cairo, Egypt: World of Books.
- Qaisran, Amal, (2022), Teachers' attitudes towards educational integration of people with special needs in regular schools, *Journal of Educational and Educational Research*, vol. 11, no. 3, 265-282.
- Rosas, R., Espinoza, V., Martinez, C., & Santa-Cruz, C. (2023). The paradoxes of inclusion: Cognitive and socio-emotional developmental trajectories of deaf and blind primary education students in mainstream and special schools. *Frontiers in Education*, 8. <https://doi.org/10.3389/feduc.2023.1227178>
- Rushdi, Sari (2007). Self-Concept and its Relationship to Some Variables among Deaf and Hard-of-Hearing Students in the Special Education Program in Riyadh. *Journal of the College of Education*, Vol. 1(24), pp. 221-234. 24.
- Scheetz, N. A. (2016). *Orientation to deafness (4th ed.)*. Pearson.
- Shaker, Ahmed (2019). *Hearing Impairment and Psychosocial Adjustment*. Amman, Jordan: Dar Al-Yazouri Scientific.
- Smith, D. D. (2011). *Introduction to special education: Making a difference (7th ed.)*. Pearson. Retrieved from https://books.google.ro/books/about/Introduction_to_Special_Education.html?id=CQCzcQAACAAJ&redir_esc=y
- Strange, symbolic. (2018). *Psychological and social compatibility*. Cairo, Egypt: Anglo-Egyptian Library.
- Yahya, Khawla Ahmed. (2013). *Educational programs for people with special needs*. Amman, Jordan: Dar Al Masirah.
- Yetman, R. (2016). Psychological adjustment and quality of life among adolescents with disabilities. *Journal of Child Psychology and Psychiatry*, 57(4), 421–430.
- Zahran, Hamed Abdel Salam. (2018). *Mental Health and Psychotherapy*. Cairo, Egypt: Alam Al-Kutub.