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ORIGINAL ARTICLE

Including All Students in Education: Students With Cerebral Palsy†

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Abstract
Countries globally are working towards the Sustainable Development Goals 2030. Goal 4 affirms all students' right to a quality inclusive education. Yet achieving quality inclusive education continues to challenge education providers without reference to economic riches or location on the globe. This exploratory study examines the professional views of 20 teachers about the state of inclusive education in Pakistan with specific reference to learners with cerebral palsy. Using focus groups interviews, we systematically examined the data and identified two key themes: learning together for all and learning environment. In exploring these themes, tensions appeared between what was posed theoretically as inclusive education and the reality of implementation. Some of these tensions result from contextual factors, while others emerge through viewing inclusive education involving a transformation of culture and practice.

Keywords: inclusion; cerebral palsy; Sustainable Development Goal 4

The professional knowledge and understanding required of teachers to work with the full diversity of students within their classrooms is complex and extensive. The COVID-19 pandemic added to this challenge for many teachers seeking to provide educational provisions for students with disability (Dickinson & Yates, 2020; World Bank, 2022). The move to online educational programs resulted in reduced opportunities for social and behavioural support, curriculum modifications, and access to specialist support (Dickinson et al., 2020). Dickinson et al. (2020) reported that individual support for students with disability in Australia was down 44% and access to allied health support was down 23%. Students with disability in different countries (e.g., Pakistan, Indonesia, Malaysia) were locked out of education in terms of quantity and quality (World Bank, 2020, 2022). These complexities have further highlighted the need to develop a stronger understanding of education that is inclusive of all learners and not fractured by local and global events.

The *Global Education Monitoring Report 2020* (UNESCO, 2020) outlined how different countries are addressing their obligations to provide education for all and uphold the vision of quality inclusive education (i.e., Sustainable Development Goal 4; United Nations, 2018). Developed prior to the COVID-19 pandemic, the report emphasised the moral imperative to ensure that every child has the right to appropriate, high-quality education, and for children not to be excluded on the basis of their disability.

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Yet 'persistent challenges' have been identified in meeting the intentions of inclusive education (United Nations Committee on the Rights of Persons with Disabilities, 2016, p. 2). Challenges include the provision of professional support to teachers, collecting data on students with disability in education and excluded from education, and limited articulation of quality inclusive education. These challenges are often impacted or sustained by a lack of political and legislative will, community support, untargeted or insufficient finances, and governance and systems that are not well coordinated and focused on upholding the goals of inclusive education (Lemoine et al., 2024; UNESCO, 2020).

Educational systems are influenced by differing philosophical and socio-political theories. The dual education systems of general education and special education in many countries, for example, maintain principles and practices that segregate students with disability from their peers without disability (Andriana & Evans, 2020). Students with disability educated in regular schools can be present physically, but excluded educationally and socially (Azizah et al., 2022). These instances create the appearance of inclusive education yet uphold practices of exclusion and segregation. Central to this 'mixaphobic' approach is the understanding what educators bring to upholding the intentions of inclusive education (Slee et al., 2021, p. 3).

Understanding inclusive education is confounded by how it is defined (Haug, 2017; Rapp & Corral-Granados, 2024). In this paper, quality inclusive education is defined as 'a transformation in culture, policy and practice in all formal and informal educational environments to accommodate the differing requirements and identities of individual students, together with a commitment to remove the barriers that impede that possibility' (United Nations Committee on the Rights of Persons with Disabilities, 2016, p. 3). For students with disability, this involves providing access to a dignified and meaningful curriculum alongside their peers in the regular or neighbourhood school, breaking down stereotypes, and celebrating diversity in our communities. Despite movement towards upholding inclusive education for students with disability, especially those in low- and middle-income countries, they attain lower levels of literacy and numeracy than their peers without disability (Adjei et al., 2024).

Students with physical impairments are a group of students whose disability is often visible and they receive their education in the regular classroom (Longo et al., 2020, p. 190). Cerebral palsy is the 'most common cause' of physical disability and

> *describes a group of disorders of the development of movement and posture, causing activity limitation, that are attributed to non-progressive disturbances that occurred in the developing fetal or infant brain. The motor disorders of cerebral palsy are often accompanied by disturbances of sensation, cognition, communication, perception, and/or behaviour, and/or by a seizure disorder. (Rosenbaum et al., 2005, p. 572)*

Students with cerebral palsy, however, are less likely to participate in social and physical activities than their peers without disability (Finnvold, 2018; Mantilla et al., 2024). Longo et al. (2020) recruited sixteen 7- to 17-year-olds with cerebral palsy in Spain to a series of focus groups to explore participation in leisure activities. The thematic analysis of interviews found students identified several features in their environment as barriers to participation (e.g., attitudes, health services, technology). Teachers were singled out as a group of adults who needed to be more aware of the barriers that are created within learning environments — both physical and attitudinal — and can prevent students with cerebral palsy from participating fully in the formal and informal aspects of their education.

Teacher understanding of cerebral palsy, the role that environment plays in facilitating and preventing participation in the learning context, and accessing professional support are key to providing students with cerebral palsy full participation in education (Bourke-Taylor et al., 2018). Yet there are tensions between developing this understanding and achieving the intent of inclusive education. Azizah et al. (2022), for example, reported how schools in Indonesia viewed they were upholding the intent of inclusive education through enrolling students with cerebral palsy with limited understanding of how they designed learning environments to address potential barriers.

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Understanding inclusive education is dependent on who is describing its features (e.g., parents, teachers, students). Andriana and Evans (2020) provided evidence that when teachers and students with disability in an Indonesian school were asked about inclusive education, their understanding was different. Teachers and administrators articulated an awareness of inclusive education yet provided little understanding of what it means to access schools and participate in curriculum for students with disability. In contrast, students with disability from this elementary school provided insights into how they understood inclusive education through identifying exclusionary features of their school (e.g., use of language, segregated classrooms, low expectations).

Exploring how teachers in different international contexts understand inclusive education can provide an insight into the complexities of inclusive education (Rapp & Corral-Granados, 2024). This paper explored teachers' general understanding of inclusive education as well as in relation to students with cerebral palsy in schools in the province of Punjab, Pakistan. This group of students was targeted because of the visible nature of their impairment and because they are often educated in the regular classroom and special schools.

Education in Pakistan

Pakistan ratified the Convention on the Rights of Persons with Disabilities (United Nations, 2006) in 2011. Persons with disability are impacted by societal bias and stigma (Shaukat, 2023). Students with disability are highly marginalised from schooling, with little data available on the number of students with disability in and out of school publicly available. Singal et al. (2020) discussed data from a household survey conducted within the Punjab province and reported that children with disability aged 5–16 years were 'less likely to be enrolled in school' (p. 1419). If they were at school, it was more likely they would attend a private school than a public school. Students with more significant disability were more likely to be 'out of schools' (p. 1425).

Education of students with disability in Pakistan is an emerging field. The education systems aim to provide equal education opportunities for all students without discrimination based on gender, age, race, ability, or religion. Everyone has the right to receive and participate in an education without barriers from the social, physical, psychological, and learning environments from childhood to adulthood. Students who require additional support in education due to an impairment should have access to special education services in the general education context. Like many students with disability, these services for students with cerebral palsy are at an early stage of development.

The realities on the ground indicate that much is to be done in developing a fully inclusive education system for all in Pakistan (Hameed & Manzoor, 2016). In the Punjab province, with a population of 110 million people, services provided by the Department of Special Education are beginning to extend their influence at the tehsil, or town, level (Shaukat, 2023). Governments are developing special education resource centres at the tehsil level, but these are separate from general education services. Further, these services are adversely impacted by limited access to therapists and resources.

As a result, schools in Pakistan strive to meet the educational needs of children with cerebral palsy through family and community and non-government agencies. Yet little is known about teachers' understanding of this work and the general concept of inclusive education, in particular, educating students with cerebral palsy. In the current study, conducted in the Punjab province, Pakistan, we explored teachers' understanding of inclusive education as well as the education of students with cerebral palsy within regular and special school education settings.

Methodology

A qualitative research design was used to explore teachers' understanding of inclusive education for students with cerebral palsy in Pakistan. Focus group interviews were used to provide a forum where teachers were able to discuss and debate the area of inclusive education, and what that would look like for students with cerebral palsy. Based on a set of interview questions developed from the

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literature, the first author facilitated groups to allow for open discussion of ideas. The researchers ensured participants were given latitude to discuss ideas while also ensuring confidentiality was upheld (Sim & Waterfield, 2019).

Participants

Ethical approval to conduct the study was provided by the university at which the first author was then enrolled in the doctoral program (i.e., University of the Punjab, Lahore, Pakistan). Permission was granted through existing departmental processes for doctoral students, as there was no formal ethics committee available. Participant teachers were invited from general education and special education schools from Lahore, Pakistan. A stratified purposeful sampling method was used to select schools (Creswell & Plano Clarke, 2018). This sampling method allowed for responses from general and special education teachers to be collected and contrasted; it also allowed participants to be invited from schools that identified enrolling students with cerebral palsy.

Participants were provided with a written summary of the project, including the voluntary nature of the project and the right to withdraw. Prior to commencing the focus group interviews, participants were reminded of their rights as human participants. Participants then provided verbal consent to participate in the study, recorded as part of the interview recording process to allow later analysis.

Twenty teachers — 10 teachers each from general and special education schools — were recruited into the study (see Table 1). Educators were represented from public and private schools, and all held postgraduate qualifications. While well qualified, 16 (80%) teachers had 10 or less years teaching experience. The age of participants indicated that several teachers had strong real-life experience, with half of them being older than 30 years of age.

Teachers within general education schools all held teacher education qualifications. However, teachers within special schools reported several different qualifications. Although most special education teachers held primary education qualifications, there was a small number who had backgrounds in the health sciences (e.g., speech pathologist, behaviour therapists), reflecting staffing in special schools in Pakistan. A number of special schools were from the non-government sector and catered for students with a range of diagnosed disabilities and severity of impairment.

Interview Questions

Eleven questions formed the basis of the semi-structured interview sessions. These questions (see Table 2), which emerged from the literature, centred on the two key foci of the study: teacher understanding of inclusive education and how inclusive education could uphold the right of students with cerebral palsy to access and participate in education. Questions focused on general principles of inclusive education, but they also endeavoured to develop a deeper understanding of how teachers designed and structured the learning environments to facilitate inclusive practices for students with cerebral palsy.

Data Collection

The interviews were undertaken by the first author in English. Although Urdu is the official language of Pakistan, all participants had successfully completed tertiary studies in English. A set of four focus group interviews were undertaken, with two focus groups for both general and special education teachers. The participants who volunteered to be part of the interview were informed that their responses would be recorded for later analysis; participants were reminded that recordings would be stored securely and they would not be identifiable within the dissemination of results.

The four focus groups allowed for all participants to be active members of the discussion. The use of two groups from each of the target groups (i.e., general and special education teachers) provided for a 'more comprehensive understanding of issues to be identified during analysis' (Hennink et al., 2019, p. 1493).

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Table 1. Demographics of Teachers Interviewed

Demographic		Count	Percent
Gender			
	Female	16	80
	Male	4	20
School sector			
	Public	10	50
	Private	10	50
Qualifications			
	Master's	10	50
	Master of Sciences/Master of Philosophy	9	45
	PhD	1	5
Teaching experience			
	0–5 years	7	35
	6–10 years	9	45
	11–15 years	1	5
	16–20 years	2	10
	> 20 years	1	5
Age of participants			
	20–25 years	3	15
	26–30 years	7	35
	31–35 years	2	10
	36–40 years	2	10
	> 40 years	6	30

A grounded theory approach was used to analyse the interview data. This approach enabled the researchers to listen to and undertake a systematic process of 'constant comparison' (Eakin & Gladstone, 2020, p. 4). They initially started by transcribing one focus group interview and independently identifying key actions, ideas, and events within the responses (i.e., open coding; Harry et al., 2005). They brought their responses together, where they undertook comparisons of each other's coding and came to agreement on the codes identified. Once both researchers agreed, the process was undertaken with the other three focus group interview data by the first author.

The next step was to identify conceptual alignment between codes (axial coding); this was initially undertaken by the first author. These categories were reviewed by the second author before undertaking a process of verification and clarification between the researchers. The researchers communicated through meetings conducted online using Zoom and WhatsApp, where they could discuss and visualise analysis of data coding. The final step was to develop themes from the axial coding.

Trustworthiness is a key consideration in reporting qualitative study findings; that is, the reader will interpret the results and conclusions with a 'sense of confidence' (Stahl & King, 2020, p. 26). Trustworthiness as initially conceptualised by Lincoln and Guba (1985) comprises four criteria: credibility, transferability, dependability, and confirmability. Credibility can be established through various forms of triangulation; in this study, the authors undertook a series of comparative iterations of

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Table 2. Interview Questions to Explore Teacher Understanding of Inclusive Education

What does inclusive education mean for you?
How do you think inclusive education will benefit all students?
How do you think your students with disability and students without disability will think about learning alongside each other?
How do you modify instructions and teaching styles to meet the needs of all children in the regular classroom? How? Example?
What support and assistance do you think you need to implement inclusive education to meet the needs of students with disability? What type of support do you currently receive?
How do you work with other teachers or professionals to support students with disability? How do they assist you in catering for all students?
What do you understand by the condition cerebral palsy? (a) How can children with cerebral palsy benefit from inclusive education socially and academically? (b) How do children without disability benefit from being educated with peers with cerebral palsy?
What facilitators enable children with cerebral palsy to benefit from education in the regular classroom? What barriers will children with cerebral palsy face in being educated in the regular classroom?
What do you need to be able to educate children with cerebral palsy with peers without disability?
How might parents assist you in meeting the needs of their child with cerebral palsy? How do parents assist you with students with special needs?

exploring the data, checking on the interpretations with each other through regular online meetings. In another form of triangulation, the sampling methodology ensured that participants from a range of backgrounds were recruited to uphold the concept of environmental triangulation (Stahl & King, 2020). Transferability was addressed through a rich description of the data, using quotes and terminology used by the participants.

Dependability was addressed by the two researchers, who had different backgrounds regarding inclusive education, being able to 'call each other out' about what was reported by the participants and potential bias in their interpretation. The final criterion, conformability, was difficult to achieve owing to the exploratory nature of this work. The researchers were not interested in getting to the 'objective reality' within the qualitative data, but were more interested in understanding as much as possible about how participants viewed inclusive education within the context of their work (Stahl & King, 2020, p. 28).

Results

The data were organised around the two key foci of the study: teachers' general understanding of inclusive education, and their knowledge of cerebral palsy and educating students with cerebral palsy. The themes developed within each area of focus are shown in Figure 1, along with the categories (axial coding) used to develop these themes.

Inclusive Education

Participants in the study were firm in their position that all students from all backgrounds have the right to an education. The notion of this right was summarised as 'education for all' and 'no child should be left behind'. In emphasising this right, participants drew attention to ideas like 'eliminating discrimination', where disability should not be a barrier to participating in education. One special educator stated, 'every child with or without a disability be given equal right to education in his/her nearby school by addressing their needs'.

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Inclusive education	
Learning together for all	Learning environment
Right of everyone to education	Teacher training, resources, facilities
Learning from each other (benefits students without disability)	Limited community understanding
Strengths based	Varied approaches to teaching
Inclusive framework (e.g., universal design for learning)	Multidisciplinary teams
Individual education plan development	
Students with cerebral palsy	
Student centric	Educational space
Social inclusion (peer learning and support, friendship)	Multidisciplinary teams
Assessment and diagnosis	Pre- and in-service training
Parental input	Parental involvement
Focus on student strengths	Learning environment
	Facilities, resources, assistive technology, social

Figure 1. Summary of Themes and Categories.

The strength of this idea of education for all, however, had caveats attached from teachers. The notion of who was 'responsible' for inclusive education emerged as a key point, with special and general education teachers viewing each other as responsible. The notion that achieving the goals of inclusive education was everyone's responsibility was not often explicitly mentioned in conversations. Despite this tension, one general educator captured a holistic view of inclusive education: 'All stakeholders of community should play a role for effective implementation of inclusive education'.

Despite these divergent views of who was responsible, there was agreement in the need for careful planning and additional resources to enhance the outcomes of educating all students in an inclusive learning environment. A general education teacher captured this call, stating that 'inclusive education requires proper setup and planning. Without infrastructure, it cannot be applied'. This call for planning and resources took on greater importance among those participants who reported the vision of inclusive education was not well established among public and private schools in Pakistan. In the words of one special educator participant, there was 'no concept of inclusive education present in Pakistan, in government sector institutions'.

Participants highlighted the benefits of inclusive education for students from all backgrounds. These benefits were linked to the idea that inclusive classrooms would have to adopt a greater range of curriculum and instructional practices if they were to provide all students with access to learning. Participants highlighted practices like learning in collaborative groups and peer-mediated instruction.

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These ideas focused on social aspects of schooling, where students without disability would have 'exposure' to students with disability. In contrast, students with disability would be provided with opportunities to develop friendships and social skills.

Some general education teachers were concerned the presence of students with disability in the regular education environment would lead to less learning on the part of students without disability. This perception aligns with previous research findings (e.g., Hehir et al., 2016; Round et al., 2016). The review of the literature by Hehir et al. (2016), however, also reported that when students with and without disability are learning together, neither is adversely impacted regarding their social and academic progress.

In learning together, participants voiced that the design of classroom learning experiences would need to be revised to meet the needs of all students. The idea of inclusive frameworks, or 'ways of thinking', was discussed, allowing for the learning of all students to be addressed. The universal design for learning (UDL) framework (Meyer et al., 2014) was nominated as a specific inclusive framework: 'For effective implementation of inclusive education, multi-disciplinary teams, UDL model, barrier-free environments, teacher training, and audio-visual aids will be required' (special educator).

The call for designing inclusive learning environments came with a renewed call for sufficient resourcing: 'Maximum resources should be available for proper inclusive education setup' (special educator). Views on how this would be achieved differed between general and special educators; groups differed on where these resources would come from (e.g., general education or special education), and who was going to be responsible for using and administrating these resources (e.g., teachers, volunteers).

A specific focus from special educator participants was the development of individual education plans, seen as a guiding document to the general education teacher. Discussion of these plans, however, focused on the placement of students with disability in the general education classroom, with little attention to how planning within the class would be inclusive of all students. In contrast, the general education teachers reiterated the need to have training in inclusive education so they could 'understand students' special needs'.

In analysing interview data, the concept of students' 'abilities' came through from both groups of participants. Special educators commented about the strengths of students, while general educators focused on how students without disability could provide positive models for peers with disability: 'They can help each other in many areas where they are good. It will provide a forum for friendship. It fosters a culture of respect and valuing each other'. Both groups of teachers, however, were unclear how students with disability would access the formal classroom curriculum on the same basis as their peers without disability.

The category of learning together was accompanied by the call to change learning environments to accommodate students with disability: 'A collaborative learning environment rather than segregated setup in inclusive education may be beneficial in achieving the desired objectives' (special educator). This notion of environment went further than the classroom environment, with emphasis given to the school and school communities. This focus on communities, however, raised concerns for participants due to their perception of restricted understanding of inclusive education within some Pakistani education communities: '[there is] no concept of inclusive education present in the Pakistan public sector, especially' (general educator).

A stronger line of commentary focused on training for teachers at the pre-service and in-service levels of schooling (i.e., primary, secondary). In the words of one special educator, 'pre-service and in-service training of general and special education teachers are required to implement inclusive education'. Although the nature of this training was not elaborated on, examination of interview transcripts located key areas that teachers felt were important in promoting a greater understanding of inclusive education: working in collaboration with other professionals, working with parents and families, and greater awareness in how to design 'barrier-free' learning environments.

Overall, the understanding of inclusive education by special and general education teachers appeared to be directed towards a rights-based approach. These ideas were complicated through a

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limited articulation of how this would be achieved within the differing environments that participants were employed. Some of this was due to perceived limitations in resources and lack of training for teachers; at other times, their calls for education for all were restricted by unconscious attitudinal perspectives. This came, for example, in the form of thinking that educating students with disability was not 'their' (i.e., general education teachers) responsibility, or that inclusive education was a matter of a student with disability enrolling in a school (i.e., inclusion as a place). Further, there was a perception that inclusive education required teachers to be trained in the field of special education: 'Teachers of inclusive education should be well trained and professional in the field of special education'. Neither group considered that the special educators could be valued resources within regular schools and classrooms.

To examine these ideas further, interview data relating specifically to the education of students with cerebral palsy were analysed — in particular, how participants understood how schools in Pakistan worked with the largest group of students identifying with a physical impairment, a group of students who were often likely to be enrolled in a regular school as well as special schools.

Students With Cerebral Palsy

Two key themes emerged from interviews with participants about students with cerebral palsy: 'student centric' and 'educational space' (see Figure 1). Participants interviewed showed evidence of being knowledgeable about the condition of cerebral palsy. They highlighted the neurological nature of the impairment that occurred just prior to, during, or soon after birth (Hasan & Islam, 2020; Rosenbaum et al., 2005). They were aware that a student with cerebral palsy often experienced difficulties in movement and that possibly other areas of functioning were involved (Hasan & Islam, 2020).

Interview data provided evidence that participants were focused on the individual needs of students with cerebral palsy (i.e., student centric). This focus was also perceived to be a barrier in terms of designing learning environments inclusive of all. The focus on assessment of a student and then diagnosis, for example, was more about 'labelling' the student and upholding inclusive education as a location, rather than informing the systematic reform of learning environments: 'The students with cerebral palsy should be placed in inclusive education setup after proper assessment and diagnosis' (special educator).

Teachers felt a diagnosis would allow them to know more about the student, and subsequently design learning activities. This was exemplified by teachers who wanted to know about the background to a child's diagnosis of cerebral palsy (i.e., the cause). There was little evidence from participants how this knowledge, and the impact of cerebral palsy, would assist teachers in designing barrier-free learning environments. The diverse nature and impact of cerebral palsy make it difficult for a singular diagnosis of *cerebral palsy* to inform families, teachers, and practitioners about personalised support for a learner. Further, the context in which the students find themselves can also influence the impact of the condition. One teacher noted, from firsthand experience, that locating the student's class on the ground floor overcame the absence of an elevator to access higher levels within the school. Although this action removed the barrier of an inaccessible classroom and provided access to a place of learning for all students, it also demonstrated a limited understanding that inclusive education involved access and participation in a quality and equitable education curriculum.

The participating teachers were unanimous in their view that inclusive schooling should remove discrimination in education for students with cerebral palsy. They spoke with disappointment about the practice of establishing separate class programs and learning activities for students with cerebral palsy; they went onto describe how a well-designed, rich learning experience could benefit learning for all students. They spoke about the social opportunities for all students and the benefits that this would have on the wider school community. Achieving this outcome was premised on the basis that teachers would be knowledgeable about the field of cerebral palsy: 'The teachers of inclusive education must have expertise in the field of cerebral palsy' (special educator).

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Participants referred to barriers they felt would be present for students with cerebral palsy. Frequently listed barriers were within the physical environment (e.g., stairs, surfaces that were steep or slippery); other concerns related to the social environment (e.g., limited community understanding of cerebral palsy, cultural representations of disability). The consequence of these barriers, according to participants, was that students with cerebral palsy were often enrolled in special schools away from their neighbourhood peers, or they had restricted physical access within the school.

Another barrier reported by teachers for students with cerebral palsy came from peers without cerebral palsy. There were several general education teachers who spoke of situations where students with cerebral palsy were subjected to bullying and harassment by their peers without disability. The personal identity of students with cerebral palsy was often usurped by being identified as a student with disability. This finding of replacement of identity is similar to research with students with disability who voiced how they were often identified as an 'inclusion student', as someone less capable (Andriana & Evans, 2021).

General and special education teachers were firm in their conviction that teachers needed to receive professional learning in the area of students with cerebral palsy. While the need for professional learning in working with students with cerebral palsy is supported (Bourke-Taylor et al., 2018), the need for all teachers to undertake this professional learning on the off chance they may provide education for a student with cerebral palsy may be time consuming for time-poor teachers. A school environment designed to be inclusive of all learners may work as a collaborative team (e.g., teachers, families, student, professional services) to support all involved and to address specific needs (e.g., student need, teacher need).

Collaborating with other key players was essential to participants. Support from speech therapists and physical therapists, for example, was a resource out of reach of many schools and their teachers working with students with cerebral palsy. The other collaborators were the parents of students with cerebral palsy. This source of support was seen as important, but there was caution about how educators and teachers could involve parents constructively to support student learning. In the words of one participant, 'the plan for inclusive education is possible only if all the stakeholders work for the same cause' (general educator).

The interview concluded with a general question about the impact of the COVID-19 pandemic. Both sets of participants commented on the social standing of families with a child with disability; that is, students with disability tended to be from families with lower socio-economic standing. Where classes were provided online, students with disability were often not catered for and/or could not respond due to limited access to, and cost of, technology (e.g., computers, internet links). Students with cerebral palsy, for example, had difficulty at times accessing the physical demands of using technology and needed individualised support.

Schools were, however, resourceful in the way they approached provision of education during the time students had out of school. Teachers in some instances would travel to the homes of students, including students with cerebral palsy, with resources and personalised teaching packages for students to engage. They adapted everyday apps to distribute learning materials (e.g., WhatsApp), with the 'hope' that all students would be able to access learning resources.

Discussion

Pakistan is a signatory of the Convention on the Rights of Persons with Disabilities and has committed to every child receiving a quality inclusive education. The 20 participants in this study expressed their professional position that students with cerebral palsy deserved these rights to an education: 'Every child with or without a disability will be given equal rights to education in his/her nearby school by addressing their needs' (general educator).

Participants highlighted the importance of teacher professional knowledge and understanding of inclusive education. Although participants called for pre-service programs and in-service professional learning to systematically address inclusive education, currently there was a lack of 'investment,

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innovation and relevance' (Lewis et al., 2019, p. 727). While this focus on individual teachers is important, there was limited evidence of how a 'transformation in culture, policy and practice' (United Nations Committee on the Rights of Persons with Disabilities, 2016, p. 3) by all actors was to be achieved. General educators and special educators cannot achieve the intent of inclusive education in isolation of each other or other key actors (e.g., parents, students, resource centres) and local communities. Participants interviewed provided limited understanding of how this could be achieved and continued to compartmentalise responsibility, creating exclusionary forces.

The impact of professional learning in cerebral palsy is less clear in the literature. Using a collaborative problem-solving process involving parents and their child with cerebral palsy, general education teachers, special education teachers, and school leaders can assist in building contextually relevant knowledge to support learners, teachers, schools, and communities (Bourke-Taylor et al., 2018). Working with external agencies and experts can further this process. While participants touched on the need for collaboration, an inclusive educational mindset that assists in transforming professional and cultural beliefs was only partially visible. Limited access to therapy staff and other professionals was often seen as a barrier to achieving the intent of inclusive education. Sustained 'on-the-job' professional learning can support all actors to centre on the learning of all students through a lens of inclusive education (Lewis et al., 2019).

Participants conceptualised inclusive education being of benefit for all students. This positive attribution was countered by concerns raised about the impact a student with disability may have on the learning of students without disability. Although there was general agreement philosophically about educating students together, there was reluctance from general education teachers on how they could uphold the principles of inclusive education in their classrooms. They did not see education of students with disability as 'their job' (i.e., the special educator was responsible) and were concerned about the pressures of time to plan and prepare for classes and accessing resources. Despite naming the UDL framework as a 'way of thinking' about inclusive education, there appeared to be limited understanding of how it could be used to support the education of students diagnosed with cerebral palsy; the recommendation was to provide education in a segregated setting. Participants called for enhanced opportunities for teachers to build stronger mindsets and understanding of inclusive education (e.g., assistive technology, collaborative teaching, developing individualised plans). There were also calls for ways to address neutral and negative attitudes towards the education of students with disability, including students with cerebral palsy, in the regular classroom.

These findings align with a comparative study by Saloviita and Schaffus (2016) involving teachers from Finland and Germany. They also reported that teachers with positive attitudes towards inclusive education had access to a greater set of resources. The provision of resources was considered by special and general education teachers in this study to be key to achieving positive outcomes for the education of students with cerebral palsy in the regular classroom (e.g., assistive technology, mobility devices). The view of participants that these resources were not forthcoming is supported by Shaukat (2023), despite evidence indicating the development of tehsil-based resource centres.

Participants highlighted the role that collaboration played in addressing the specific educational and personal needs of students with cerebral palsy. While collaboration with the family and the student was viewed as beneficial, research participants considered collaboration difficult to achieve. Further, the chance to collaborate with specialists in cerebral palsy (e.g., physical therapists, occupational therapists, technology specialists) was not possible due to limited services. These findings concur with Alharthi and Evans (2017). They reported the results of a survey of 262 middle school teachers in Saudi Arabia who expressed positive attitudes towards the role collaboration plays in achieving the intention of inclusive education, and yet were not clear how this could be achieved. School success for students with cerebral palsy is dependent on the 'capacity of adults in the student's life to collaborate' (Bourke-Taylor et al., 2018, p. 2163).

Underlying these findings is a philosophical tension. While participants promoted the general understanding of the principles of inclusive education (e.g., all students and members of the school community), the transfer to the education of students with cerebral palsy was not as clear. The idea that

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inclusive education was a 'transformation in culture, policy and practice' (United Nations Committee on the Rights of Persons with Disabilities, 2016, p. 3) within an educational environment did not appear through the interviews. The education of a student with cerebral palsy was still articulated in terms of 'inclusive education' as a place or the responsibility of someone else — that 'teachers of inclusive education' or specialist teachers, with knowledge of cerebral palsy and special education, were needed to support or be responsible for students with cerebral palsy. The concept of a 'shared vision' of inclusive education by all members of the schooling community (Hoppey & McLeskey, 2014) was not clearly understood and an area of future focus.

Yet this tension could also be seen as a consequence of how inclusive education is defined across international boundaries and groups of students (Rapp & Corral-Granados, 2024). Using the United Nations (United Nations Committee on the Rights of Persons with Disabilities, 2016) broad definition of inclusive education was potentially exclusionary of some countries working towards achieving education for all. The focus on place of education by participants in this study, and others (e.g., Azizah et al., 2022), highlights an aspect of upholding the right to education for all learners; understanding how to achieve this through curriculum and learning that can be accessed by all is developing. The focus on students with cerebral palsy appeared to focus participants on the diagnosis, while the impact of the impairment was overwhelmed by perceived barriers.

Limitations

This study was conducted with a convenience sample of 20 participants. Each participant had a postgraduate qualification in education and was actively engaged in the debate around inclusive education in their relative contexts (e.g., university teachers, education administrators). These participants were from Lahore, Pakistan, a densely populated area of Pakistan. This study's sample may not be representative of classroom teachers within other schools and locations within Pakistan. A study that engages with classroom teachers in rural areas may well provide a different understanding of inclusive education and cerebral palsy.

The use of a focus group methodology provided the chance for participants to hear each other's points of view and to engage in conversation about the questions posed. While these are positive attributes of focus groups, it may have also prevented participants from expressing alternative views. Use of individual interviews may have resulted in different and possibly more divergent points of view.

The focus on the education of students with cerebral palsy was a narrow one and may have limited participants illustrating their understanding of inclusive education. For example, participants focused on the diagnosis of students with cerebral palsy and what this meant in terms of teaching in the classroom (e.g., resources, time for planning). Future research that examines inclusive education with a wider framework of diversity would allow for a greater understanding of teachers' knowledge about inclusive education. Further, this work engages with members from the full school community (e.g., students, parents).

Conclusion

This exploratory study is part of a larger program of research examining inclusive education in Pakistan. The results highlighted positive formulations of inclusive education, along with identifying ongoing challenges in the reality in education contexts. It is these challenges, or barriers, to inclusive education that future developments in education could be considering. Building capacity among teachers to be professionally prepared to meet the learning needs of all students is a key issue — not only in Pakistan but also in many countries. Further, results highlight a similar pattern from many countries where 'there seems to be a gap between formulations and realizations of inclusive education' (Haug, 2017, p. 206).

The results of this study focused on a particular group of students (i.e., students with cerebral palsy). This group of students is more likely than most groups to be educated within the regular education

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context (Singal et al., 2020). More must be made of this opportunity for all students to be educated together; researchers of future studies could examine the development of professional learning opportunities for teachers (e.g., problem-solving approach to professional learning, communities of practice) or explore in greater detail the voice of students with cerebral palsy about inclusive education.

In celebrating these positives, and working towards enabling school communities, it is key to remember that the benefit for all society is substantial. Investing in the education of students with disability could return many times more for students without disability (Lamichhane, 2015). This is in line with the Sustainable Development Goals (United Nations, 2018), where quality inclusive education underpins the achievement of all goals.

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