



EXPLORING TWICE-EXCEPTIONAL STRENGTHS IN CHILDREN WITH ADHD: A QUALITATIVE STUDY OF PARENTAL AND TEACHER PERSPECTIVES IN PAKISTAN

Muhammad Dawood Aslam

MS Scholar, Department of Clinical Psychology, The Superior University, Lahore

Email: su92-mscpw-f23-060@superior.edu.pk

Ayesha Zafar

Lecturer, Department of Clinical Psychology, The Superior University, Lahore

Email: ayesha.zafar@superior.edu.pk

Amina

MS Scholar, Department of Clinical Psychology, The Superior University, Lahore

Email: su92-mscpw-f23-089@superior.edu.pk

Abstract

The twice-exceptional (2e) children are not only gifted children, they display neurodevelopmental disorders such as ADHD. The lack of trained professionals and cultural stigma in Pakistan are the hindrances in locating and helping these kids. The study was a qualitative research investigating the views of parents and teachers on the strengths and weaknesses of twice exceptional children in ADHD in Pakistan. The phenomenological design consisted in assigning the interviews with an animal of semi-structured type to 15 parents and 12 teachers. Thematic analysis was used in data analysis. Six themes were identified: (1) complicated patterns of recognition and delayed diagnosing and masking behaviors, (2) contingent advantages in academic, creative, and leadership potentials, (3) unreliable support systems and lack of professional cooperation, (4) cultural stigma influencing knowledge about neurodiversity, (5) educational disparities such as lack of resources and training programs in practice, and (6) developed inspirations in the sense of strength-based practices. The paper shows that culturally, systematically, and resource related issues make it very difficult to identify and assist 2e children in Pakistan. The results demonstrate that it is necessary to have culturally responsive education systems, teacher education, destigmatization and strength-based interventions.

Keywords: Twice-exceptional, ADHD, giftedness, Pakistan, qualitative research, cultural context, educational barriers.

Introduction

Attention-Deficit/Hyperactivity Disorder (ADHD) is a widely recognized neurodevelopmental condition marked by persistent symptoms of inattention, hyperactivity, and impulsivity, which interfere with cognitive, social, and emotional functioning (Antshel et al., 2018). Globally, ADHD affects approximately 2–7% of children and adolescents, presenting a serious concern for educational systems due to its impact on behavioral regulation, information processing, and academic performance. The American Psychiatric Association (2022) categorizes ADHD into three primary subtypes: predominantly inattentive, predominantly hyperactive-impulsive, and combined presentation—each with its own unique implications for learning and classroom behavior.

Historically, the dominant perspective on ADHD has emphasized deficits, focusing primarily on behavioral challenges and developmental delays. This deficit-oriented model has informed most diagnostic and treatment approaches, often leading to an underestimation of the broader cognitive profile associated with the disorder (Barkley, 2020). Untreated ADHD has been associated with a wide range of long-term negative outcomes, including academic underachievement, strained interpersonal relationships, increased susceptibility to mood disorders, and reduced occupational success (Baum et al., 2018). Meta-analyses have reinforced the need for early diagnosis and intervention by demonstrating that children with



ADHD—both from clinical and community samples face a higher risk of developing mood disorders and emotional difficulties later in life.

However, an emerging body of research challenges the singular focus on deficits by identifying strengths that often coexist with ADHD. In particular, several studies have documented overlaps between ADHD traits and cognitive characteristics typically associated with giftedness. Among these are creativity, divergent thinking, ideational fluency, and problem-solving originality (Antshel, 2018; Kaufman et al., 2021). This has given rise to growing interest in a population referred to as twice-exceptional (2e) children who exhibit high intellectual potential alongside neurodevelopmental disorders such as ADHD (Burger-Veltmeijer et al., 2021).

2e children often display advanced vocabulary, critical thinking, and creativity. At the same time, they may struggle with executive functioning, attention regulation, emotional self-control, and motivation (Cramond et al., 2020; Daugherty et al., 2019). These contradictory traits can mask one another, complicating efforts to correctly identify and support such children within traditional school settings (Foley-Nicpon et al., 2020). As Gomez et al. (2023) note, this coexistence of high ability and cognitive difficulty blurs the lines between commonly accepted definitions of disability and talent, necessitating a more nuanced educational response.

The creative potential is one of the most well-documented strengths in people with the ADHD. Indeed, in one study (Healey and Rucklidge, 2006), ADHD children were proven to be more original in solving problems, and in another research (Karpinski et al., 2018), these abilities tend to be skipped over due to the current focus on correcting behavior rather than learn the strengths of these children. According to White and Shah (2006), adults with ADHD performed considerably better on creativity activities than those individuals with neurotypical development, whereas neuroimaging research indicates an enhancement in creativity-related cerebral stimulation on tasks of divergent thinking (Leroux & Levitt-Perlman, 2018). Other advantages are the speed of speech production, narration skills, high emotional involvement, and the ability of hyperfocus (intense, goal-oriented concentration that may lead to exceptionally productive work (Makel et al., 2022; Mowbray et al., 2019).

However, there is not much research on ADHD and twice-exceptionality in developing countries like Pakistan even in the face of this increased awareness around the world. In Pakistan, the problem of awareness creation, uniform diagnosis process, and skilled human resources to find and support 2e children is one of the most severe (Mullet & Rinn, 2023). The situation is also complicated by cultural and socio economic variables. Neihart (2020) asserts that societal norms, parental beliefs, and biases of the teachers in low-income countries influence the perception and treatment of ADHD and giftedness considerably.

Pakistani education system is based on rote learning, obedience, and conformity and does not often suit children who do not conform to the stereotype (Oswald & Rinn, 2021). Individuals with ADHD are labeled often and erroneously as lazy, disobedient, or underachieving; these labels do not always take into account the potential of ADHD to be accompanied by cognitive strengths (Pfeiffer & Foley-Nicpon, 2018). Such misperceptions are caused by popular stigmatization of mental health and neurodiversity as well as lack of a sufficient amount of psychologists (special educators, psychiatrists) specialising in working with children (Rinn & Reynolds, 2024).

There are also teacher misconceptions which lead to underdiagnosis. Pakistan In a study by Khan et al. (2019), it was discovered that most school teachers had little to no correct information on the symptoms of ADHD and most people were likely to correlate disruptive behavior to bad character rather than a difference in the neurological system. Due to this reason,

classroom practices are often based on discipline and compliance, as opposed to singular support or talent training (Renzulli & Reis, 2019).

Another aspect of the complex situation in Pakistan is language development. Variations in speech and language are often overlooked or confused when it comes to suggesting cognitive delay instead of being perceived as regular attributes of the bilingual or even multilingual learner (Shah et al., 2014; Subotnik et al., 2018). This kind of misunderstanding can result in failure to refer to special programs effectively and limit the access to stimulating environments to learn. According to Trail (2020), in a system without training on the uniqueness of development, it is rather challenging to detect the lack of synchronicity in developing (a pillar of twice-exceptionality).

These overlapping issues are stigma, shortage of diagnostic facilities, deficiency of trained educators and the cultural misperception that contributes to a severe deficiency in the discovery and assistance of twice-exceptional children in Pakistan. Silverman (2022) warns that in targeting deficits only, without appreciating strengths, one potentially will allow potentials to be wasted, not only of the individual but also of society as a whole. In the absence of the system change, 2e children can also remain misidentified, under-served, and ineligible to attend the programs that can foster their extraordinary abilities.

It is reported that Pakistan has the highest prevalence rates estimation of ADHD in South Asia, but this figure should be taken carefully because there are variability of diagnostic standards and understanding of behavior has been found to vary culturally (White & Shah, 2018). Vanderbrook et al. (2019) underline the role of local context in the creation of effective identification and intervention strategies, particularly in those countries that have limited resources and the high influence of culture on education.

The current study will help understand the attitudes and opinions of parents and teachers about strengths and issues of twice-exceptional children with ADHD in Pakistan. It is based on these insights that the study attempts to address gaps and advance culturally appropriate practices that can be used in identifying and assisting this underserved group.

Methodology

Study Design

In this qualitative study, a phenomenological approach to research design was utilized to determine the experiences and views of twice-exceptional (2e) children parents and teachers with attention deficit hyperactivity disorder (ADHD) in Pakistan. Phenomenological approach was chosen to reflect the degree of depth and richness of the participants beliefs, emotions and their cultural interpretations touching on twice-exceptionality.

Research Objectives

- To examine how the Pakistani parents perceive the benefits and limitations of children having ADHD as being twice-exceptional.
- To investigate the way the 2e students with ADHD are seen by the teachers in the learning environments.
- To analyze how cultural influences play out in terms of identification and comprehension of strength of twice exceptional.
- To determine the presence of barriers and facilitators, which may affect the support of the 2e children with ADHD by parents and teachers.

Sample and Sampling

Purposive sampling technique was employed in order to select people who have relevant views upon the phenomenon that is to be studied. It was tabulated as follows into two groups.

- **Parent Participants (n = 15):** Parents of children aged between 6 and 16 years, where there is a formal diagnosis of ADHD, but such a child has one or more areas of strength (academic, creative or intellectual). The people were living in different urban and semi-urban region in Punjab and they belonged to different classes of socioeconomic setup.
- **Teacher Participants (n = 12):** Any teachers of both general and special education who have at least 3 years of experience and are currently teaching or have past experiences teaching students with ADHD in both the public and private sector of primary or secondary schools.

Inclusion Criteria

- **Parents:** The legal guardians of the children with the ADHD who are fluent in Urdu or English and would be willing to take part in a 60-90-minute interview.
- **Teachers:** The real teachers so that they can be able to talk on how they have been facing the strengths and challenges they have been witnessing on students with ADHD.

Exclusion Criteria

- Parents who find their children having ADHD but not exceptional ability in mind.
- Teachers who have accommodated less than 1 year of experiences taken with ADHD children.
- Those individuals who are not willing for informed consent.

Data Collection Methods

Semi-Structured Interviews: Semi-structured in-depth interviews were used because of the desired adaptability along with addressing all the vital themes. Interview guides that would be specific to the field of recognition of strengths, challenges, and support needs as well as cultural influence on parents and teachers were provided.

Demographic Questionnaire: Participants were asked to fill in a short survey asking them some basic questions like socio economic status, education level, grade level of the child and areas of strength of the child (parents), and experience in teaching and kind of school (teachers).

Interview Protocol

Parental interview questions examined how parents themselves perceived the process of raising a child who is both gifted and has ADHD both in terms of cultural interpretations of this situation as well as the help provided by the school. Teacher interviews tended to center on teacher responses to teaching and learning experiences, classroom identification procedures, instructional issues and cultural views of ADHD and giftedness within classrooms. Both guides had taken into account the value of collaborative support within and across families, schools and even professionals

Data Collection Procedures

The interviews were either in English or in Urdu depending on the preference of the participants and carried out in confidential and comfortable places. The sessions were between 60 and 90 minutes each. The agreement to be used with the interviews was audio-recording. Eight of the participants were followed up in post-interview (20-30 minutes) to confirm initial findings and to clarify them.

Ethical Considerations

The Institutional Review Board of the university approved the study ethically. All the participants provided informed consent that was obtained in writing. Pseudonyms and a safe storage of data were used as a guarantee of confidentiality. During the research, cultural sensitivity has been noted and the participants have been advised that they had the freedom to withdraw any time.

Data Analysis

Thematic analysis developed by Braun, and Clarke (2006) to be specific was used to analyze the data. The following stages were followed: (1) familiarization with the information by transcribing and going through a series of readings, (2) preliminary coding, (3) the identification of themes, (4) the review of themes, (5) the naming and defining of themes, (6) the end reporting. This procedure was undertaken systematically and made sure that significant patterns and findings were being identified according to objectives of the study.

Results

This chapter includes the findings of an article that is based on a qualitative research on various life experiences of the parents and teachers of twice-exceptional (2e) children with ADHD in Pakistan. Theme analysis of the interview results created six primary themes based on the results obtained which give us an understanding of how dual exceptionality is identified, perceived, and accommodated in the context of the Pakistani cultural and educational arenas. The themes are, (1) Dual Exceptionality Recognition and Understanding, (2) Strength Identification and Manifestation, (3) Support Systems and Interventions, (4) Cultural Context and Societal Perspectives, (5) Educational System Challenges and Barriers, and (6) Future Aspirations and Recommendations. The parent and teacher statements have been categorized into these themes to indicate the variation and complexity of a specific theme.

Theme 1: Dual Exceptionality Recognition and Understanding

Diagnostic Journey and Awareness

The work of identifying dual exceptionality usually took long, complicated and was emotionally draining to the family. Early hyperactivity or inattention (e.g. not being able to sit still or quickly changing focus) came to the parents common knowledge, they told how the first visits to general physicians and pediatricians were futile. One of the parents said, “We visited physicians during the two years, all of them advised me to use other medicines.”

The psychological reaction to diagnosis was guilt and relief. One mother shared that it was relieving, and, at the same time, scary as she discovered that she now knew, but what was the next step? Some parents even complained that they felt guilty about the problem as it was their fault regarding the problem. They started to see early indicators of high capabilities in their children at the same time, problem solving and early reading.

There were also gaps in consistency in the performance of students as teachers described children as intelligent but disruptive or as a source of genius but could not sit still. This kind of duality would regularly make it difficult to comprehend and assist the child in the classroom sufficiently.

Manifestation Patterns

One of the behaviors noticed by parents and teachers in the 2e children was contrasting behaviors in accordance with setting. Parents at home noted that their kids are highly creative, intrinsically motivated, and empathetic individuals who, in their turn, are protective towards their younger sibling: “He turns out to be a leader of his brother and sisters” or “He is protective of his small brother.”

Performance at school would, in comparison, go up and down. According to teachers, the student at times topped the class and at times failed and stated that he/she paid lots of attention and/or behaved well at different times of the school day and during different subjects (e.g., was good in math but bad in Urdu). Dual exceptionality as such was difficult to acknowledge partly due to such discrepancies.

Masking and Camouflaging Effects

Of interest also was that some of the 2e children could so successfully camouflage their trouble in socially pleasing situations. They observed that the children were completely normal with guests or when driven by personal interests: He behaves perfectly when it comes to what he wants.

This disguise led to confusion and most of the times the needs of this child were misunderstood. Teachers and parents alike referred to the students, who would otherwise be described as smart, but as careless or brilliant one day and distracted the next. This unreliability discouraged the development of solid support since it was only during the period when the person would be performing well that expectations were created, yet no efforts were being made to appreciate the difficulties being faced.

Theme 2: Strength Identification and Manifestation

Multifaceted Talent Expression

High level talents in academic and non-academic areas were noted by the parents. Advanced mathematical reasoning was exhibited by some of the children who were described as having, e.g. solved problems fast, or had grasped abstract concepts. Science was attractive to others as well: they made up experiments on their own. Creativity was also featured here and some samples of such are: storytelling, drawing and making up games, as part of the sample is: Makes up stories that amaze us.

I was found to be strong in problem-solving. Such examples as breaking toys in order to fix them in an original way and coping with all the everyday problems were shared by parents. Such talents were accompanied with formidable memory and extensive learning.

Educators too identified areas of expertise in the subject taught-especially math and science and distinctive contributions in the classroom. They noted that 2e students posed deep inquiries and developed meaningful interrelations between subjects.

The charismatic characteristics came in the home and school environment. Parents spoke of how their children would naturally lead amongst siblings and cousins and the teachers echoed the same with peers: Classmates look up to him and He mentors other without being asked.

Contextual Strength Demonstration

Depending on the environment, there were strengths that appeared differently. The parents stressed that children thrived in comfortable spaces and had a sense of familiarity, most particularly at home where they got free to look into things they were interested in. On the other hand, these strengths were often repressed in traditional school environments, because of strict organization and performance standards.

There were some particular teaching styles and classroom situations, which could evoke the best in these learners, the teachers observed--group work, or visual aids, etc. Performance was additionally found to depend on subject matter and time of day, as well as on classroom climate, and this again suggests reasons to adapt to context sensitivity.

Recognition Indicators

Parents and teachers were able to detect different signs that would lead them to identify giftedness. Asking philosophical questions or quick-learning technology were some of the behaviors, which parents became sensitive to. Teachers also cited the capacity of the students to bridge knowledge in different areas: "He bridges science and history" or "His knowledge is beyond his age."

These are subtle cues, but very often, they were the early signs that stimulated adults to reconsider the previous view of the child abilities.

Theme 3: Support Systems and Interventions

Educational Support Mechanisms

Parents and teachers both recognized the value of support at school but its availability and reliability was not always reliable. According to parents, the accommodations including extended time in general exams, sensory breaks, and differentiated instructions were needed; however, not every school was ready to introduce them properly. As one parent said, he requires sensory breaks, yet the school does not make any. Parent-teacher communication was also unstable; on the one hand, some parents reported positive experiences and positive interactions with the teacher, on the other hand, some believed that the teacher might judge them or disregard them- "Some teachers comprehend, others do not even hear."

There was inconsistent success in the support provided by teachers. Others incorporated new methods such as alternative seating plans, visual integration, and physical activity to keep the students engaged. Some of them said that they use other forms of assessment: "Oral tests suit him better than written tests." These methods were not commonplace, though, and a lot of educators believed that they were not well-enough trained (or properly equipped) to accommodate 2e learners to their full potential.

Home-Based Support Strategies:

Parents developed formal schedules and, soothing space at home to facilitate the regulation and productivity of their children. Consistency was most imperative- "Having to set out a time when there would be homework to be done had to be established," said one parent. Others have stressed on the emotional work required to learn to appreciate the swings of moods or bursts and also applying patience.

The family members were also involved in the provision of a secure and favorable home environment. Better emotional connection was possible thanks to trust and familiarity- one parent said, when he trusts you, he opens up completely. Such personalized interventions were in many cases, contrasting with minimal intervention in schools.

Professional Collaboration:

Parents and teachers reported having struggled to access and coordinate specialists support, though both parents and teachers acknowledged that they needed to collaborate with specialists. Parents reported being frustrated by having to wade through disjointed services: "It takes several specialists to work with us and yet they do not coordinate with each other." Having additional professional development and in-school highly skilled help with things became a comment by the teachers as well, as one teacher stated, "We do not get the training on this." There was lack of professional guidance in home as well as school set-up that made it difficult to intervene effectively, with most of the caregivers being left on their own devices and intuition.

Theme 4: Cultural Context and Societal Perspectives

Cultural Attitudes Toward Neurodiversity

A significant obstacle to the early diagnosis and acceptance of ADHD and neurodiversity is stigma in the cultures. Extended family members criticized and blamed parents most of the time. One of the parents said, "Family members also blame us- that we have failed to teach him." Social-related worries were common, including even affecting the families as they worried of the gossip and prospects ahead like marriage- "What will people say?"

There was a particular stigma against mental health problems. There was a tendency to view professional help as a sign of weakness or failure and this slowed down the diagnosis and support. There was talk about cultural notions of how well-behaved and high-achieving, gifted

children are supposed to be which provided the parents with the impression of misunderstanding dual exceptionality—"They say he is just lazy, not gifted;" as one parent put it. The same sentiments were echoed by the teachers who reported that formal evaluation is highly rejected by most families because of such societal influences.

Educational Cultural Pressures

The inflexible characteristics of the education system centering on grades, conformity and standard performance put extra pressure on 2e children and their families. Parents saw themselves at crossroads where they had to be involved with the traditional requirements about the academic needs of their children and those of their special needs. There were institutional impediments among teachers too. Others described resistance by the implanting administration to inventiveness or integration--one educator related, it is that the management is extremely traditional.

Beliefs were also rooted in culture and religion and influenced how families interpreted ADHD and giftedness. Others took time before going to a professional while others chose spiritual or cultural solutions. Some parents showed an early preference of religious etiology or treatment compared to clinical diagnosis. Educators in religious institutes said that the tension between the values of faith and inclusive pedagogy was most difficult to circumvent.

In sum, neurodiversity and giftedness were culturally bound and thus beliefs about them, either traditionally, religiously, or through societal norms, played an eminent role in understanding, discussing, and intervening in neurodiversity and giftedness. Such opinions frequently clashed with the professional knowledge, and it was very challenging to join the efforts of families and educators to promote the successful identification and support of 2e students.

Theme 5: Educational System Challenges and Barriers

Resource and Infrastructure Limitations

According to their remarks, both parents and teachers noted serious shortages of financial resources both in the context of public and private schools. The lack of basic facilities, the absence of specialized staff, and overcrowded classrooms were common among the parents. One of the parents claimed, There is no counselor at the school, and the other said, Overcrowded classes are one of the major problems. Technology, which imposed limitations and did not provide sensory-friendly spaces, also contributed to ineffective support of 2e learners. These sentiments were reiterated by the teachers who raised issues on the lack of teaching resources, a low financial allocation, and the undesirable absence of the right learning devices, all of which undermined the capacity to support the special needs of twice exceptional students.

Training and Professional Development Gaps:

One of the vital obstacles that were noticed by the stakeholders was that educators lacked professional training. Lack of understanding and awareness among the teachers was noted among the parents, which is stated in form of limited knowledge and competency issues. This gap was even pointed out by the teachers themselves who identified that majority had not had any pre-service or in-service training in matters regarding ADHD or giftedness. Professional development was a necessity; this was reflected in various ways by teachers who felt the need to have current information and inclusive curriculum in order to accommodate the needs of their students.

Policy and Systemic Constraints:

In addition to logistical obstacles, there were often policy level and systemic constraints spoken about. Parents complained about inflexible curricula, inflexible assessments and the bureaucracy. One parent complained that the system was simply not changeable because a lot

of individual care was unknown. Administrative requirements and compliance pressure to policies would also end up restricting teachers and in most cases they would override their professional judgment in trying to accommodate their classes. Such structural constraints could not accommodate 2e learners in a meaningful way in mainstream education system.

Theme 6: Future Aspirations and Recommendations

Parental Hopes and Dreams

With time, there were so many parents who underwent revising the meaning of success to their kids. They started with more traditional ideas on tracks in education moving to the more encompassing ones independence, happiness and a career driven by the realization of the strengths of the child. As one parent put it, it is no longer about being an engineer or not, it was about happiness in whatever job he pursues. This change was an indicator that more and more parents were recognizing the two-fold needs of their child and the wish to instill a sense of well-being and performance. These views were justified by the teachers who stated that strength-based planning is important and children should follow their interests, thus concentrating on them.

Educational Reform Recommendations

The members of the two groups provided practical ideas regarding what can be done to help 2e students get better education. Among the changes implemented through the advocacy by parents, there were more resources allocated, preparing teachers and creating awareness campaigns to develop inclusive attitudes. The demands on curriculum flexibility, differentiated assessment, and greater professional development opportunities in terms of twice-exceptionality were also stressed by teachers. The two groups concurred that initiatives must focus on the potential of an individual rather than the fixed academic standards.

Practical Wisdom and Advice:

Besides recommendations on the policy level, the participants were able to offer Ample insights based on the personal experience. Parents reported on the necessity to create support groups, sustain the unity of the family and change the methods of the household activity to serve the needs of their kid. According to one parent, the issue of remaining patient and connected is central. Classroom personalisation strategies included the use of different assessment and engagement practices by teachers based on the strengths of the students. Their recommendations spoke volumes of the combination of compassion and practicality that was founded upon every day association with 2e learners.

Cross-Cutting Dimensions: Temporal and Stakeholder Perspectives

The stories shared also indicated the way in which experiences of the participants changed over time. Scores of parents lamented the chances that have been lost during the early intervention period: The signs were not missed; we just did not know.” Although in the present experiences, it was difficult, families and educators reported increased awareness and gradual improvement. They hoped that in the future there would be improved systems, that more people could see and understand their strengths, and that with better understanding more people would dare to support them.

The various stakeholder opinions enriched the findings of the study. The parents focused on the emotional strength and advancement and the ride was referred to as an emotional rollercoaster. The professional issues that teachers mentioned included classroom management and lack of training. Children even were less presented showing similar voice of urgent need to comprehend: I am not bad, I am different. The voices at the system level refer to scarcity of resources and policy stubbornness, but also to readiness to change.

Conclusion

The current thematic analysis presents rich and multidimensional reality of twice-exceptionality in Pakistan. It highlights how there is an acute need to reform current education systems to be culturally responsive so that the strengths and weaknesses of 2e learners can be identified, catered to, and fostered. This study forms a rich source of information on the lived experiences that surround ADHD and giftedness in the context of a developing country, through the sheer voices of parents, teachers and children, producing rich information on what the daily lives entail.

The six grand themes offer an excellent structure in contemplating how identification, manifestation, and support of 2e students work. Such findings raise important concerns about the infrastructural, policy, and training gaps, indicating that there are opportunities to implement meaningful changes. Most importantly, the research recommendations request a caring, strength-focused practice that would respect the neurodiversity values and foster overall improvement among children which is not only capable of letting students perform but allows them to shine.

Discussion

This paper discussed the lived experience of parents and teachers of twice-exceptional (2e) children with ADHD in Pakistan- a region that was unexplored in terms of research. The six emergent themes further provide details to some of the distinctive issues and abilities portrayed by these children especially in the context of a developing country that explores the sociocultural and educational perspectives. These findings are backed by the global studies but it shows the gaps in the awareness, infrastructure and the culturally responsive interventions.

Complexity of Dual Exceptionality Recognition

The statement above which is prompted by the fact that the 2e children are not always recognized, and it takes a long time to identify them or they are frequently misdiagnosed is similar to the results of the world literature (Vilarinho-Rezende et al., 2015; Al-Hroub, 2013). The delays are worsened further on by a lack of specialized training and awareness of the professionals on the issue in Pakistan which aligns with Khan & Khan (2023), who reiterated the importance of a multidisciplinary approach when identifying the issue. The emotional response of the parents, with its relief followed by guilt, is consistent with the patterns reported in previous studies (Da Silva et al., 2025), but also augmented by the cultural stigma and expectations on the topic of normal development.

Manifestation Patterns and Environmental Sensitivity

In this research, confirmation of previous evidence indicates that 2e children tend to express context-dependent behaviors and abilities (Dean et al., 2022). The functioning between children with ADHD at home and school may be considerably different, which is determined by environmental triggers and sensory susceptibilities, as noted by Little et al. (2018). Like the study by Delgado-Lobete et al. (2020), camouflaging behaviors can result in an incorrect educational placement or misdiagnosis when regimens are stiff. The observed masking effect is consistent with what can be found across the world in terms of performance inconsistency of gifted children with ADHD (Khan & Khan, 2023).

Support Systems and Interventions

Poor accommodation during education and disunity in parent-teacher cooperation are indicative of larger-scale system obstacles presented by Foley-Nicpon et al. (2013) and Pfeiffer & Foley-Nicpon (2018). Although they know that differentiated instruction and flexible assessments are necessary, there is a barrier to their implementation in the form of resource limitations and training shortages (Renzulli & Reis, 2019). The home-based interventions

identified in this research underline the existing data about the fact that family support is the focus of the way to overcome 2e issues (Makel et al., 2022).

Cultural Context and Societal Perspectives

The neurodiversity stigma and mental health stigma are also one of the essential forms of barriers and align with the results of Rinn & Reynolds (2024) as well as Shah et al. (2014). The lack of intervention during early years occurs because of misconceptions about ADHD and giftedness, as well as religious or traditional conceptions of behavior issues (Neihart, 2020). According to Oswald & Rinn (2021), collectivistic cultures tend to emphasize conformity and as a result, it becomes more difficult to see non-normative behaviors through the prism of neurodiversity.

Educational System Challenges and Barriers

This paper supports the common difficulties in infrastructure, policy, and preparedness of teachers. Earlier sources (Vanderbrook et al., 2019; Trail, 2020) have underlined the fact that 2e students receive no support in mainstream classes unless structural changes are made and the corresponding training of teachers is provided for. The results are also consistent with those of Karpinski et al. (2018) who argue that the systems of assessment, like that that punishes and incapacitates neurodivergent learners, need to be reformed.

Future Aspirations and Recommendations

The change of fixated academic goals reflected in parents and teachers in this study to a strength-based planning is a reflection of what should be shared globally in redefining success in education (Silverman, 2022). Their proposed systematic changes and culturally responsive interventions are consistent with the studies by Kaufman et al. (2021) and Mullet & Rinn (2023), which emphasize the necessity to design specific policies, curriculum inclusivity, and capacity development among the teachers.

Conclusion

This study contributes to the limited body of research on 2e children in Pakistan by integrating cultural, educational, and psychological perspectives. It reinforces global findings while identifying unique barriers tied to cultural stigma, inadequate infrastructure, and systemic inflexibility. These insights highlight the urgency for culturally responsive teacher training, cross-sector collaboration, and multidimensional assessment practices to support 2e learners in developing countries.

Limitations:

The research has a number of research limitations. It is also rather specific since the sample base was oriented more towards the family of the urban and educated population, thus underrepresenting rural or less educated people. The research is a qualitative research hence loses generalizability to wider populations. Also, the subjective voice of 2e (twice-exceptional) children was hardly addressed, whereas the cultural representativeness was confined to certain Pakistani environments. There was also a limitation of how developmental patterns could be traced with time since this is a cross-sectional study.

Recommendations for Future Research:

The research of the future ought to be more comprehensive. This involves doing longitudinal research to monitor the evolving needs of 2e children, adopting mixed-methods studies in an attempt to strike a compromise between qualitative richness and quantitative instruments and doing cross-cultural comparisons. One of the most significant suggestions is to focus on the personal experience and opinion of children. Also, researchers must examine the effectiveness of interventions, come up with culturally specific identification tools as well as developing cultural-based adjustments support models.

Implications for Practice and Policy:**Education Sector:**

The results support the argument that overall teacher education on the topic is necessary in order to recognize and accommodate twice-exceptional students. It entails the formulation of accommodative and adaptive assessment and accommodation strategies as well as the adoption of individualized modes of teaching to fit the available resource base.

Healthcare System:

One of the recommendations involves implementing 2e-expert clinics, enhancing the harmonization of services in educational and health care, and the facilitation of diagnostic processes to minimize the stress of the family.

The most important recommendations include educating the community on the concept of neurodiversity, establishing parent support groups, and incorporating culture and religious attitudes to acquire knowledge about neurodevelopmental differences.

Contributions of Theory and Research:

The research suggests the extension of the dual exceptionality models with the inclusion of cultural factors, the creation of the environmentally-friendly models, as well as adopting the existing support models to non-Western realities culturally.

The following recommendations seek to establish a more accommodative, patient, and caring environment of twice exceptional people in Pakistani society taking into consideration the individual circumstances and needs, the cultural and societal environments, and the provision of care facilities.

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