

THE LINGUISTIC MATRIX OF NEURODIVERGENCE: ENGLISH AS A MEDIUM OF INSTRUCTION (EMI) IN THERAPY CENTERS AND DOMESTIC SPACES OF PESHAWAR

Nelofur Marwat

Department of English, City University of Science and Information Technology, Peshawar

Corresponding Author: *

Nelofur Marwat

DOI: <http://doi.org/10.5281/zenodo.20715095>

Received	Accepted	Published
16 October 2025	28 November 2025	13 December 2025

ABSTRACT

English language plays a pivotal role in the educational system of Pakistan and is considered a hallmark of social mobility and success in the affluent private school sector. In recent year, English has also become a medium of instruction in therapy centers in the main cities of Pakistan, including Peshawar, where Pashto and Hindko are vernacular languages. However, the adoption of English as a medium of instruction (EMI) in therapy centers creates a further comprehension and communication gap for children who are enrolled for therapy in such centers for challenges such as the neurodivergence and speech. EMI has now seeped into therapy centers as and is considered as the only appropriate language of instruction for neurodivergent children—specifically those who are on the Autism Spectrum ignoring the fact that these children already face challenges regarding language comprehension, resulting in a stark linguistic mismatch as the language spoken at their homes is mostly Pashto. Semi structured interviews with 10 parents/guardians of neurodivergent children and 10 therapists from therapy center, and 06 maids/helpers caring for such children in Peshawar reveal that English is preferred as a medium of instruction because the parents believe that it will help their kids to secure a placement in the mainstream schools after successful therapies. The theoretical framework of the study is informed by Lev Vygotsky's Sociocultural Theory, according to which language is learned through social interaction, using English in therapy settings thus limits such process of language learning as put forth by the findings of this study. It further unraveled that the materials available and incorporated by the therapists during their therapy sessions are all designed in English language and that the parents, masquerading behind the colonial prestige of the English language, feel more confident to present their child with supposed "disabilities" communicating in English. There is an undeniable mismatch between the language spoken at home and that employed at therapy centers which adversely affects the learning process of the children. While there is extensive literature on EMI in Pakistani schools, colleges and universities, limited research has explored its usage and role in therapy centers in Pakistan. The purpose of this study is to bring into the light the need of introduction of balanced multilingual approaches in therapy centers that will benefit the differently-abled children and enhance the scaffolding of therapy practices in the therapy centers of Pakistan.

Keywords: Neurodivergent, English as a Medium of Instruction (EMI), Autism Spectrum, Peshawar, Differently-abled, Speech Therapy, Sociolinguistics.

INTRODUCTION

Language learning plays a central role in a child's cognition, emotional and social development. In fact, learning a language is among the most

important milestones of a child developmental journey. In Peshawar, the capital of the province Khyber Pakhtunkhwa, Pakistan, English is in

high demand and is regarded as a symbol of intellect and the language of the elite to the

extent that private schools even fine children who speak their mother tongue during school hours. The vernacular linguistic landscape of this city, however, is characterized by the use of Pashto, Hindko or Urdu. Yet, private schools as well as therapy centers or early intervention clinics for neurodivergent children in Peshawar prefer English-centric therapy programs that are designed specifically to be implemented in the English language employing diagnostic and therapy tools rooted in English language.

EMI— which is an instrument of social mobility on account of its colonial legacy— has trickled down from higher education into early childhood and therapeutic care system which triggers a psychological and structural conflict when this linguistic standard is implemented on children who are differently-abled with challenges like speech or cognitive delays or autism.

Nelson Mandela (2006) once said, “If you speak to a man in a language he understands, you speak to his head, and if you speak to a man in his own language you speak to his heart”. Haq et al. (2023) state that the medium holds primary importance in education in Pakistan. Though Pakistan is a multilingual country with Urdu as its national language and lingua franca, many local languages like Pashto, Hindko, Seraiki, Punjabi, Sindhi, Kohistani, and Balochi are widely used, spoken and understood. Yet, English has acquired the standard status of instruction throughout the country’s educational institutions. Mustafa (2016) reasons that parents are often impressed with EMI as mastery over English is considered the entry-ticket into elite class in Pakistan.

In most of Pakistan’s private school which cater for the middle and upper financial classes, English is employed as a medium of instruction (Pervez, 2024). It is assumed that English helps children in learning and understanding complex topics better (Zhou et al., 2023). Though some teachers employ the use of local language while teaching; yet there remains the need of English language as most of the terminologies could only be conveyed in English to the students (Haq et al., 2023).

Language, it must be pointed out, is more than just some fixed rules of grammar. Rather, it is a tool to create a social world where people could interact while code switching is a deliberate act of tactic to convey information better (Mustafa et al., 2023). He further states that language barrier might negatively affect patient- doctor interaction, thereby reducing the process of treatment (Mustafa et al., 2023).

The use of English in therapy spaces is likely to create a sociolinguistic friction as Pashto and Hindko are spoken in domestic spaces of Peshawar. In middle or upper middle households in Peshawar usually a helper or helpers are hired to execute daily chores as well as to provide care to children. Such households hire caretakers or nannies for the daily care of their neurodivergent children. Interestingly, these helpers are monolingual speaking either Pashto or Hindko with no formal education or exposure to English language who are then expected to enforce basic English behavioral commands to maintain a therapeutic consistency which is yet another challenge forced upon the neurodivergent children. Since language is learned through social interaction but their social interaction with their caretakers is limited to few basic phrases such as “come”, “stop”, “sit”, “eat” etc.

Another issue is that while schools eagerly adopt EMI, yet the teachers are unable to effectively communicate in English (Fareed et al., 2022). Aftab et al. (2024) conclude that the lack of proper teachers training and poor foundational knowledge in English further aggravates the situation.

There is vast research carried out on EMI in schools, colleges and universities of Pakistan as compared to EMI in therapy centers of Pakistan. Thus, the empirical study on examining English as a medium of instruction in therapy places for neurodivergent children remains limited despite the fact that there is an extensive and thorough research done on EMI in the educational institutions of Pakistan which leaves it an open subject for researchers to be explored.

Research Objectives

- i. To identify factors responsible for the selection of EMI in therapy centers.

- ii. To unravel the therapists' point of views regarding the choice of English language in their therapy sessions.
- iii. To investigate the parents' perceptions regarding EMI in their required therapy set up.
- iv. To explore the challenges as well as advantages of EMI for neurodivergent children seeking therapies.

Research Questions

- a. What are the factors that motivate the therapy centers in Peshawar to adopt EMI?
- b. What are the effects of adopting EMI in therapy centers on the neurodivergent therapy seeking children?
- c. How do parents perceive the English medium therapies for their therapy seeking children?

Methodology

This study has utilized the qualitative research design in order to examine the use of English as a Medium of Instruction (EMI) in therapy centers of Peshawar. A qualitative approach was considered appropriate because the study seeks to understand participants' experiences, perceptions, and attitudes regarding language practices within therapeutic settings. Additionally, this study aims to generate an in-depth understanding of how the use of English language is perceived by both the therapists and parents during the therapy sessions with the neurodivergent children whose first language is either Pashto or Hindko.

Theoretical Framework

The theoretical framework of this study is informed by Lev Vygotsky's Sociocultural Theory (1978), which lays emphasis on the learning of language through social interaction. Vygotsky believes that a child's cognition does not stand alone but is rather built by contexts such as their social, cultural and linguistic context. It further highlights that language learning occurs through interaction of individuals with one another while language serves as the primary tool to drive meanings and construct knowledge.

If we take Vygotsky's Sociocultural Theory in the context of therapy centers, language does not remain only as a means of communication but a therapeutic tool aimed at therapeutic goals.

Neurodivergent and speech delayed children face challenges regarding language learning and meaningful communication. Hence the need for therapies. Such children thus develop communication and language learning through one-to-one interaction with their therapists. The language employed during such one-to-one therapy sessions may influence comprehension, participation and learning of the child involved. Vygotsky's Theory, therefore, is an apt framework for the investigation of how English language functions within therapeutic set-ups and how stakeholders perceive its role in child cognitive, linguistic and social development.

Research Setting

The study was conducted in selected five private therapy centers located in Peshawar, Khyber Pakhtunkhwa, Pakistan. These centers provide services including speech and language therapy, occupational therapy, behavioral intervention, and special education support for neurodivergent children.

Participants

The participants consisted of twenty-six individuals selected through purposive sampling. The sample included ten therapists working in therapy centers and ten parents or guardians of neurodivergent children receiving therapy in these centers. While six maids/helpers were also interviewed who were hired by the parents of such children and who spent more than seven hours with their neurodivergent children. Participants were selected because of their direct involvement in therapy processes and their ability to provide rich information regarding language use in therapeutic settings.

Sampling Technique

Purposive sampling was employed to recruit participants who possessed relevant experience and knowledge regarding the phenomenon under investigation. This sampling technique enabled the researcher to select information-rich participants capable of providing detailed insights into the use of English as a Medium of Instruction in therapy centers of Peshawar.

Data Collection

Data was collected through semi-structured interviews. This method allowed the researcher to explore predetermined topics while also providing participants with the flexibility to elaborate on their experiences and perspectives. Separate interview protocols were developed for therapists and parents/guardians.

The semi-structured interviews focused on participants' perceptions of English-medium therapy, reasons for using English, perceived benefits and challenges of EMI, language preferences of children and families, and the role of language in therapeutic effectiveness. With participants' consent, interviews were audio-recorded and later transcribed for analysis.

Data Analysis

The collected data was analyzed using thematic analysis. The interview transcripts were read and analyzed multiple times to achieve familiarity with the data. Relevant segments were coded and organized into categories based on recurring patterns and meanings. These categories were subsequently developed into broader themes that addressed the research objectives and questions.

The analysis was guided by the principles of Sociocultural Theory, particularly the concept of language as a mediational tool within social interaction. The identified themes were interpreted in relation to participants' perceptions of English-medium therapy and its implications for communication, learning, and therapeutic practice.

Ethical Considerations

Ethical principles were observed throughout the research process. Participants were kept fully informed about the methods as well as the aim of the study. The participants anonymity and confidentiality were maintained while conducting their interviews by assigning them pseudonyms. All the data retrieved and collected during this study was solely used for academic purposes.

Delimitations of the Study

This study was only conducted in the selected 5 therapy centers operating in Peshawar. Therefore, the findings of this study may not be generalized to a larger population. Further

studies however might be conducted in other cities of Pakistan to broaden the scope of this study as stated earlier that it is an underexplored area of research.

Significance of the Study

The present study may highlight the issue of language selection in helping the neurodivergent children who face challenges in language learning. This study may also be helpful for the policy makers and custodians of therapy centers to provide resources in the children's first language to facilitate the therapists as well as the neurodivergent children. Communication aids, worksheets, visual supports, and parent-training materials should be made available in Urdu and regional languages such as Pashto, Hindko, Punjabi etc. to support diverse linguistic communities.

Findings and Discussion

This study explored parental perceptions as well as those of therapists regarding the use of English as a Medium of Instruction (EMI) in therapy centers serving neurodivergent children in Peshawar. Semi-structured interviews were conducted with ten parents/guardians whose children were receiving therapeutic services and ten therapists who were engaged in providing therapy. In addition to these six maid/helpers were also interviewed who spent more than 8 hours with children seeking therapy. The language of the interview was English, Urdu and Pashto which ever suited the parents and therapists. While the maids/helpers were entirely interviewed in their own regional languages which was Pashto for 5 of them while Urdu for the remaining one. Thematic analysis of the interview data revealed five major themes that illuminate the social, educational, and linguistic factors influencing language practices in therapy settings.

The Utilitarianism of English language

Several therapists recorded that their conduction of therapies in English Language has a very impressive impact on the parents of the therapy seeking children. Several parents also reported that they viewed as an international language and a need of time for their children to excel in academics as well as in the prospective career opportunities in future. 9 out of 10

participants parents conveyed that their opted therapy services are quite costly and therefore exposure to English language should be considered a mandatory part of the fees paid by the parents.

"If we are paying more than half of our monthly income to therapy center, I think my child deserve to learn and understand English language at least" (Parent 5).

Consequently, the use of English in therapy settings was often interpreted as evidence of professionalism and modernity. This finding reflects the broader sociolinguistic status of English in Pakistan, where English is regarded as a language of prestige, elite and successful future endeavors. Such positive stances conveyed by the participants demonstrate how language ideologies influence parental expectations regarding therapeutic services.

Available Therapeutic Resources Designed for The English-Speakers By The English-Speakers

A major theme concerned the widespread use of English-language materials within therapy centers. Participants reported that therapists commonly relied on English-language worksheets, assessment tools, intervention manuals, communication aids, and educational resources. Parents observed that much of the terminology used during therapy sessions was derived from English-language professional training and international therapeutic frameworks.

A second major theme highlighted the main reason behind the EMI in therapy centers by the therapists. Almost all the diagnostic tools such as CARS, and the resources employed during the therapy sessions such as flash cards, sorting shapes etc. are only available in English language. Therefore, English by default becomes the language of communication and conveyance of therapy sessions. Several therapists were unable to have literal translations for colors, shapes and feelings in their own mother tongue as recorded one participant,

"I am a speech therapist and I am pursuing my MS degree in this field but if you ask me, I as a grown adult, speaking Pashto since my childhood, cannot tell you the Pashto translation of the color purple or the exact word for square in Pashto" (Therapist 2).

Even the domestic helpers interviewed reported that they also communicate the colors or basic

commands in English as they heard their therapist or parent doing the same.

"If I tell Zoey to stop throwing water ten times in Pashto, she will never look at me but once I say "Stop" like her mother she looks at me instantly, and when I ask her if she wants to wear 'gulabi' dress, she hardly responds but saying 'pink' brings a smile on her face, so I think these poor kids have English 'diseases' therefore they understand English only" (Helper 2).

The helpers due to lack of awareness about neurodivergence call it an English 'disease' which require English language to be managed. Thus, the therapists as well as the parents and helpers have sometimes no option for any other language other than English due to limited resources and trainings.

Linguistic Mismatch: English in the Therapy Sessions vs Urdu/Pashto at Homes

The language employed at the therapy center was primarily English while the participants used a different language in their domestic spaces. Most of the participants reported the use of Pashto and Urdu in their day-to-day interactions at home or at work. According to Sociocultural Theory, language is learned through social interaction, thus the two different languages created further challenges for the children who were already struggling with language and communication challenges. While the children displayed familiarity with the language of their therapy yet it limited their interactions with parents and helpers as they also relied on the few words of English to deal them for the rest of their day. This seriously affected their language learning abilities as the cultural contexts and daily interactions went missing due to usage of few one worded command in English like come, go, stop, eat etc.

Code-Switching: An Effective Communication Strategy

Despite the prominence of English within therapy centers, participants reported that therapists rarely relied on English exclusively. Instead, therapists frequently switched between English, Urdu, and local languages according to the needs of individual children and families.

Parents generally viewed code-switching as beneficial because it facilitated comprehension and increased engagement during therapy sessions. Therapists appeared to use multilingual

communication strategies to clarify instructions, explain concepts, and establish rapport with children and caregivers. This practice enabled therapists to balance institutional preferences for English with the practical realities of multilingual communication.

Therapists also insisted that they always inquired the language of preference from the parents prior to commencing therapies with their child to make language learning more effective. The findings indicate that EMI in therapy centers is not implemented as a rigid English-only model as is prevalent in private schools. Rather, it functions as a flexible and adaptive practice shaped by the linguistic needs of the participants. Code-switching emerged as an important mechanism through which therapists as well as parents bridged communication gaps and promoted understanding.

Benefits and Challenges of English-Medium Therapy

The final theme highlighted participants' recognition of both the advantages and limitations of EMI. Parents identified several perceived benefits, including increased exposure to English, familiarity with educational terminology, preparation for English-medium schooling, and access to globally recognized forms of communication.

At the same time, participants acknowledged a number of challenges. These included difficulties in understanding technical terminology, limited parental involvement when instructions were provided primarily in English, and occasional communication barriers for children whose primary language was not English. Participants emphasized that the effectiveness of therapy depended not only on the use of English but also on the extent to which communication remained accessible and meaningful for children and families.

Overall, the findings suggest that EMI presents both opportunities and constraints. While English may provide educational and social advantages, its effectiveness is influenced by the linguistic realities of the neurodivergent children's everyday lives.

Discussion

The findings reveal that the use of English as a Medium of Instruction in therapy centers is

shaped by a complex interaction of social, educational, and professional factors. Parents generally perceive English positively because of its association with prestige, academic achievement, and future opportunities. At the same time, practical challenges arise when therapeutic language differs from the language used in home and community settings.

The findings strongly support the relevance of Vygotsky's Sociocultural Theory. Vygotsky emphasized that language serves as a primary tool of mediation through which learning and development occur. Children's cognitive and communicative growth is influenced by the social interactions and cultural environments in which they participate. The linguistic mismatch identified by participants demonstrates the importance of considering children's sociocultural contexts when designing and implementing therapeutic interventions.

Furthermore, the widespread use of code-switching indicates that therapists already recognize the value of multilingual communication practices. Rather than viewing English and local languages as competing alternatives, participants' experiences suggest that both can play complementary roles in supporting communication development. Therefore, effective therapeutic intervention may require a balance between the advantages of English and the linguistic resources available within children's families and communities.

Conclusion

This study has examined the choices of parents of neurodivergent children in selecting English as a medium of instruction for their therapy sessions in the therapy centers of Peshawar. The outcomes of the study highlights that the parents perceive English as a language of prestige due to its utilitarian and post-colonial benefits. Almost all the parents deemed it necessary to provide their children with challenges the exposure of English language to prepare them for the mainstream schools as well as the society which considers English as a superior language.

This study further highlighted the fact that the selection of English language by the therapy centers is because of the availability of the resources and therapy designs and tools in English language. The behavioral tracking sheets and educational flashcards usually are imported

from the English-speaking regions. Additionally, the diagnostic tools for ASD like the Childhood Autism Rating Scale (CARS) and the Autism Diagnostic Observation Schedule (ADOS) are all designed and suited for the English-speaking communities. The translation of all such and many other resources is not available so far in Pakistan.

The analysis demonstrated that therapists frequently employ code-switching. The findings therefore highlight the importance of adapting language practices to the linguistic needs and sociocultural realities of children and their families.

In order to make the therapy sessions fruitful, the therapists try to employ the method of code switching to overcome the linguistic friction that might arise due to the difference in the child's first language and English.

Drawing upon Vygotsky's Sociocultural Theory, the present study puts forth that the choice of picking a language for the therapy session should be based upon the social and cultural contexts of the child in need of therapy. The therapy session and intervention become effective when connection is built between the therapeutic practices and the children's daily linguistic experiences and encounters. This study was purely conducted with the intentions to contribute to the limited body of research on EMI in the therapy centers of Pakistan. This might provide a foundation for future studies about the use of EMI in therapeutic setups which will ultimately benefit the children with challenges.

References

- Aftab, S., Sadiq, M., & Alam, M. (2024). Exploring students' beliefs and attitudes on the use of English as a medium of instruction at secondary level. *Pakistan Languages and Humanities Review*. <https://ojs.plhr.org.pk/journal/article/view/883>
- Arshad, M., Akram, M., & Hussain, S. (2022). Attitudes of teachers towards English as medium of instruction in Pakistan. *Pakistan Languages and Humanities Review*. <https://ojs.plhr.org.pk/journal/article/view/50>
- Fareed, M., Khan, M. Y., & Ghangro, A. S. (2022). English as medium of instruction at school level in Pakistan: Challenges and solutions. *Pakistan Journal of Educational Research*, 5(2). <https://pjer.org/index.php/pjer/article/view/572>
- Gopang, I. B., Umrani, T. H., Bughio, F. A., & Lohar, S. A. (2019). Issue of language as the medium of instruction in Pakistan: An analytical study. *The Shield: Research Journal of Physical Education & Sports Science*. <https://sujo.usindh.edu.pk/index.php/THE-SHIELD/article/view/371>
- Haq, M. A., Wasti, S. Y., & Hassan, M. (2023). Perceptions of students and teachers about the practices of English as the medium of instruction at higher education level in Pakistan. *Pakistan Languages and Humanities Review*. <https://ojs.plhr.org.pk/journal/article/view/637>
- Imran, M., Farooqi, S., & Saleem, M. (2025). Quality of education and English as medium of instruction: A correlational study of secondary schools of Punjab, Pakistan. *Qlantic Journal of Social Sciences*. <https://qjss.com.pk/index.php/qjss/article/view/468>
- Naz, A., Raheem, A., & Usman, M. (2025). Perception of elementary school teachers and 8th grade students regarding English as a medium of instruction at elementary level. *Pakistan Languages and Humanities Review*. <https://ojs.plhr.org.pk/journal/article/view/1216>
- Siddiqui, N. (2022). English medium instruction in higher education in Pakistan: A retrospective analysis using the ROAD-MAPPING framework. In R. Kirkpatrick (Ed.), *English language education policy in Asia* (pp. xx-xx). Springer.
- Suleman, Q., Sadiq, M., & Shahnaz, A. (2024). English as a medium of instruction in Pakistan: Equity, inclusion and social justice issues. *Journal of Language, Education and Society*. https://www.researchgate.net/publication/385255452_English_as_a_Medium_of_Instruction_in_Pakistan_Equity_inclusion_and_Social_Justice_Issues

- Mustafa, Zubaida. (2016, November 11). Why English?
- Dawn. Mustafa, Zubeida. (2012, Jan 10). Pakistan Ruined by Language Myth. The Guardian. Mustafa, Zubaida. (2016, November 11). Why English?
- Rahman, T. (1997). The medium of instruction controversy in Pakistan. *Journal of Multilingual and Multicultural Development*, 18(2), 145–154.
<https://doi.org/10.1080/01434639708666310>
- Sabih-Ul-Hassan, S., Gul, N., & Imran, S. (2023). Factors responsible for wrong pronunciation of English words by students at undergraduate level in Khyber Pakhtunkhwa, Pakistan. *Journal of Education and Social Studies*, 4(1), 70–78.
- Shah, R. (2017, July 10). Early education. *Dawn*.
- Shamim, F., Abdelhalim, A., & Hamid, N. (2016). English medium instruction in the transition year: Case from KSA. *Arab World English Journal*, 7(1), 32–47.

