Article

Engaging in language therapy to enhance the proficiency of simultaneous bilingualism: A case study of a multilingual child

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Abstract: Bilingualism and multilingualism are no longer exceptional occurrences on today’s globe; instead, they have become the prevailing standards in cultures worldwide. Individuals can become bilingual by either simultaneous acquisition of two languages from childhood or sequential acquisition over time as bilinguals. The primary objective of this study is to determine the role of language therapists in assisting parents and teachers in optimizing the dual-language proficiency of young children. This case study was conducted to investigate this matter, and it was determined that a balanced utilization of both languages, coupled with guidance from language professionals to parents and teachers, dramatically enhances a child’s performance. In addition, parents consistently strive for their child to become multilingual, as they perceive it as a beneficial factor for their child’s future. The data was gathered through a semi-structured interview session with parents and real-life scenario observations. This case study illustrates the advantages and disadvantages of being bilingual or multilingual. The study findings will assist parents and early childhood educators in dealing with children coping with different language encounters at home and school.

Keywords: bilingualism; language therapy; code-switching; monolinguals; cognitive skills

1. Introduction

In the present era of globalization, possessing the skill to communicate in various languages effectively is a precious advantage, as it enables individuals to engage with a wide range of cultures and experiences. Simultaneous bilingualism refers to the process of acquiring two languages at a young age. This linguistic journey is distinct and demands special attention and assistance. This chapter introduces the topic of simultaneous bilingualism and aims to provide caregivers, educators, and language therapists with the necessary knowledge and skills to support the language development of individuals who are learning two languages at the same time. It is essential to clarify a widespread misunderstanding as we explore this topic. Acquiring proficiency in two languages at a young age does not automatically imply mastery of either language. Bilingual youngsters, like their monolingual counterparts, develop and improve their language skills as they grow. They acquire languages at a similar rate, regardless of whether they are exposed to one or numerous linguistic settings.

Comparing the EF of Spanish-English bilingual preschoolers to that of monolingual English children, one study discovered that bilingual children performed better on EF tasks when parental education and socioeconomic status were controlled for (Carlson and Meltzoff, 2008). An additional preliminary investigation slowed the
progress of bilingual preschoolers on the Dimensional Change Card Sorting (DCCS) task, which measures cognitive flexibility (Bialystok, 1999). Children demonstrate effective completion of the task when they correctly arrange the cards in both the prescribed manner and after the instruction changes (Zelazo et al., 2003). In other words, they must employ inhibitory control and cognitive flexibility. Bilingual individuals, according to Bialystok (1999), employ inhibitory control when selecting the appropriate language and inhibiting irrelevant ones.

Moreover, scientific evidence contradicts the idea that children facing specific developmental or language difficulties are incapable of acquiring many languages. Conversely, a youngster who experiences difficulties with speech and language might derive significant advantages from an environment that provides ample linguistic role models and assistance. Notably, almost two-thirds of children across the globe are raised bilingual, highlighting the widespread occurrence and importance of this linguistic phenomenon. Language, as a complex framework, has a crucial impact on how we perceive and communicate our understanding of the world. Furthermore, language serves as a reservoir of cultural information and functions as a means for individuals to shape their personal and social identities within a given culture.

The shift from primarily local and national viewpoints in the 20th century to the current globalized and interconnected globe has had a significant impact on the dynamics of language. De Mejia (2002) highlights that this change emphasizes the progressing process of language acquisition in our swiftly transforming global environment. In this book, we will explore the several advantages linked to bilingualism, which include improved cognitive skills and a more profound comprehension of complex aspects of society. Language is a crucial element of cultural identity, as it serves as a means to pass down valuable traditions from one generation to another. Caregivers and educators must communicate in the language they are most skilled in, as this establishes a solid basis for both social and linguistic growth. Throughout this research, we will tackle prevalent misunderstandings related to bilingualism. We aim to dispute the belief that multilingualism impedes a child’s cognitive growth, highlighting instead the crucial influence of language exposure and high-quality interaction in shaping linguistic aptitude. Moreover, we shall elucidate the phenomenon of code-switching, illustrating how it functions as a linguistic instrument rather than an indication of perplexity.

The study has explored the complexities of simultaneous bilingualism, analyzing its influence on cognitive growth, language aptitude, and cultural sense of self. The objective is to empower caregivers, educators, and language therapists to promote the linguistic development and cultural enrichment of individuals who are bilingual from birth, using a well-rounded and knowledgeable approach.

2. Literature review

With the increasing prevalence of bilingualism and growing recognition of this phenomenon, research in this sector is also on the rise. Additionally, some studies examine bilingualism from various viewpoints. Kalamala et al. (2022) researched optimal methods for assessing bilingualism. Torregrossa et al. (2021) examined the utilization of references in bilingual children. Şenaydın and Dikilitaş (2022) explored
the correlation between bilingualism and identity. Studies on code Switching in bilinguals were undertaken by Broersma et al. (2020), Byers-Heinlein et al. (2022), Gardner-Chloros (2009), Moriguchi and Kanda (2020), Soesman and Joel (2021), Tomić and Valdés (2022), and Tomoschuk et al. (2021). Gonçalves et al. (2021) investigated potential disparities in the reading and writing proficiency of bilingual and monolingual youngsters.

Stoehr and Martin (2022) conducted a study investigating the reciprocal impact of language abilities in bilingual individuals, whereas Engemann (2022) highlighted the distinction between bilingual and monolingual children. Bogulski et al. (2019), Cheung et al. (2019), Cornut et al. (2022), Iniesta et al. (2022), and Mergen and Kuruoğlu (2021) discussed the topic of vocabulary acquisition in bilingual individuals. Bican (2017), Bölükbaş Kaya et al. (2019), Ertek and Süverdem (2020), and Uyar (2012) have examined the definition and categorization of bilingualism. In her study, Saydi (2013) investigated the topic of bilingualism and bilingual education in Europe. Akınçi (2016), Yağmur (2010) and Yıldız (2013) researched multilingual Turkish children living abroad. In their study, Plonsky et al. (2021) performed a meta-analysis of research on bilingualism. Various variables, including authors, title, sample size, method, effect size, and measurement, were examined and coded. In contrast, Günaydın (2020) conducted a comprehensive analysis of fifty-seven papers from thirty-eight journals on bilingualism using descriptive content analysis. Upon conducting a literature search, it was found that there was a limited amount of bibliometric research on bilingualism. Zhang (2020) conducted a comprehensive analysis of the entire literature on the topic of bilingualism from 1997 to 2020. In their study, Agulló and Herrero (2019) conducted a search using the keywords “bilingual education” and “multilingual education”.

Similarly, Sanchez-Azanza et al. (2017) conducted a study focusing on the benefits of bilingualism. No comprehensive study has been discovered that encompasses a broader time frame and focuses explicitly on the concept of “bilingualism”. For researchers, it is crucial to access scientific studies, familiarize themselves with experts in the field, and stay updated on the latest research in the topic area. In this context, providing a bibliometric study of publications on bilingualism in the field of education will contribute to the overall understanding of the subject. Ben-Zeev’s (1977) seminal work laid the foundation for understanding how bilingualism influences cognitive strategies and development. His research demonstrated that bilingual children exhibit enhanced cognitive flexibility, particularly in tasks involving language processing.

Further studies have corroborated these findings, emphasizing the cognitive advantages of bilingualism. Bialystok et al. (2004) demonstrated that bilingual individuals exhibit heightened cognitive control compared to their monolingual counterparts when engaged in tasks like the Simon Task. This enhanced cognitive control is a result of the constant need to manage two linguistic systems. Moreover, Gold et al. (2013) explored the impact of lifelong bilingualism on neural efficiency for cognitive control in aging individuals. Their research revealed that bilingualism confers a protective effect, maintaining neural efficiency and cognitive control in aging populations.

Addressing misconceptions surrounding bilingualism is crucial for informed decision-making in educational and familial settings. Callan (2008) critically reviewed prevailing beliefs about bilingualism and highlighted the need to dispel unfounded concerns about its potential to impede language development in children. Lowry’s (2015) work further distinguishes between fact and fiction in relation to bilingualism in young children. The article provides practical insights for parents and educators, guiding them to effectively support bilingual language acquisition. Hamers and Blanc’s seminal work (2000) delves into the psychosocial and pedagogical implications of bilingualism in multilingual societies. Their research emphasizes the dynamic relationship between language and cultural identity, shedding light on the complex interplay between these two fundamental aspects of individual and societal development. Cortina et al. (2015) explore dual language as a social movement, advocating for equitable treatment of languages in educational settings. Their research underscores the importance of recognizing and valuing linguistic diversity within educational systems.

3. Research questions

The objective of this research is to investigate the difficulties that parents encounter when parenting a child who is fluent in two languages and to examine the potential assistance that a language therapist can offer. This will be accomplished through a detailed analysis of a specific bilingual family as a case study. Furthermore, an examination will be conducted to explore the factors influencing parental decisions to raise their children bilingually. The primary objective of this project is to investigate the following research inquiries:

1. What is the impact of bilingualism on a child?
2. What are the primary considerations for parents when choosing to raise their child bilingually with language therapist support?
3. Do the benefits of bilingualism outweigh the drawbacks?

3.1. Description of the data

The study is grounded in a case analysis of a Pakistani family living in Germany, with data being gathered through semi-structured interviews. One of the interviewees from the selected family is the mother of the child, who is fluent in Urdu as her first language and has a strong command of English as her second language. Additionally, the mother is multilingual herself and speaks both English and German at home. The child is proficient in two languages. The other interviewee is a father who is bilingual in English and German. His preferred language is German due to professional obligations. Their young daughter is currently four years old and has been enrolled in kindergarten since she turned three. This study examines two distinct times of
observation: the initial period when the child is around three years old and the latter half of their fourth year. Initially, both parents were interviewed regarding the effects of bilingualism, while the child was subsequently observed and interviewed on two separate occasions.

3.2. Method of analysis

Following the interviews with the parents, the researcher transcribed the pertinent segments of the interviews and conducted data analysis to obtain solutions to research inquiries. The variations in the interviewees’ backgrounds and countries of origin were considered. Hamel et al. (1993) assert that case studies can include many methodologies, including interviews, participant observations, and field investigations. They assert that the objectives of a case study are “to reconstruct and analyze a case from a sociological standpoint”. From a sociological standpoint, the purpose of a case study is to emphasize the characteristics or qualities of social existence (Hamel et al., 1993). The sociological perspective recognizes bilingualism as it acknowledges that language is an inherent aspect of social existence. The objective of this investigation was to attain the goal above by examining bilingualism and its pragmatic ramifications in relation to language development. During the second period of observation, we examined the impact of language therapy on language development. The results clearly demonstrated that the child exhibited enhanced code-switching abilities, indicating increased linguistic intelligence.

4. Methodology

The study employed a qualitative research method through Semi-Structured Interviews and observations. The interview session was conducted with parents, teachers, and language therapists to gather in-depth insights into their experiences and perceptions. The interview questions focused on strategies used to support bilingualism, perceived benefits, challenges, and the role of language therapists. Real-life scenarios were observed in both home and school settings to see how bilingual children interact and how support strategies are implemented.

4.1. Data analysis

The interview transcripts and observation notes were analyzed thematically. Codes were developed to identify recurring themes and patterns related to the role of language therapists, the benefits and challenges of bilingualism, and strategies for optimizing dual-language proficiency. Data from interviews and observations were cross-validated to ensure the reliability and validity of the findings.

4.2. Ethical considerations

Written consent was obtained from all participants, including parents or guardians for child participants. Participants’ identities were anonymized, and data was stored securely to ensure confidentiality.

4.3. Instruments and timeline

The study procedure with implications for research instruments and time is
mentioned in Table 1.

Table 1. Procedure and timeline of the study.

<table>
<thead>
<tr>
<th>Time (Months)</th>
<th>Process</th>
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<tbody>
<tr>
<td>1–2</td>
<td>Participant recruitment and obtaining ethical approvals</td>
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<tr>
<td>3–4</td>
<td>Conducting semi-structured interviews</td>
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<td>5–6</td>
<td>Conducting observations</td>
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<tr>
<td>7–8</td>
<td>Data transcription and initial analysis.</td>
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<td>9–10</td>
<td>Thematic analysis and triangulation</td>
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<tr>
<td>11</td>
<td>Drafting the final report.</td>
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<tr>
<td>12</td>
<td>Review and dissemination of findings.</td>
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</tbody>
</table>

4.4. Interview questionnaire

The interviews were conducted in a semi-structured manner, involving the use of predetermined open-ended questions. Additionally, the researcher posed follow-up questions as necessary. This interviewing strategy was chosen because it facilitated the acquisition of the necessary information and data. The study selected these particular questions due to their deliberate design to elicit extensive and authentic responses from the interviews. This approach allows for the collection of a greater amount of information on the issue. The questions during interview sessions were as follows:

(1) Are you acquainted with a substantial number of bilingual families around you?
(2) Does your child speak two languages fluently? If so, what were the determining factors that led you to choose to raise her as bilingual?
(3) If you did not, what specific issues influenced your decision?
(4) Which languages do you and your spouse employ while communicating with your child? What language or languages do you utilize when engaging in family activities?
(5) Have you observed any visible impact on your child’s life because of bilingualism?
(6) What strategies have you employed to ensure your child’s bilingual upbringing? Have you employed any specific methodologies?
(7) What is your opinion on bilingualism? Do you believe it possesses any benefits or drawbacks?
(8) How might a speech therapist contribute to mitigating the drawbacks of bilingualism and optimizing the benefits?

5. Interview data analysis

The parents were asked some questions about the challenges and real-life scenarios of bilingual situations. The number of households that speak more than one language is growing in many places, and bilingualism is becoming increasingly prevalent. Different geographical locations, different cultural backgrounds, and different societal variables can all have an impact on this trend. During the interview, the parents shared,
"We have a lot of bilinguals, even multilingual families around us... We often visit and spend time with each other."

When they were asked about their choice of raising their child bilingually, they expressed,

"Many parents choose to raise their children bilingual for various reasons such as education, family and social communication and then to survive for future career or job."

Due to the possibility of their children experiencing language delays or disorientation, some parents may choose not to raise their children in a multilingual environment. In addition, practical issues such as the accessibility of resources and the availability of language support opportunities may influence this selection. However, the parents of this case study intended to raise their child bilingually; as they stated, "It’s a need of the time."

The decision to converse with one’s child in a language other than their native tongue is frequently made by parents in multilingual households. During activities that involve the family, the language that is spoken may change depending on the circumstances and the languages that members of the extended family speak. The parents of the present study shared the situation of using two or rarely three languages with the child,

"Because we video call the grandparents sometimes, and she (the child) talks to them in Urdu; I (father) usually prefer German because my job and routine allow me to speak German frequently mixed with English. Here, her mother switched English with Urdu, usually."

While asking about the impact of bilingualism on their child’s life, the mother showed her concerns as “she responds late sometimes and hesitates to answer.” The father said, “She usually thinks before responding and takes long pauses. That is worrying.”

“A continuous use of both languages at home,” said the father, is the strategy we are employing these days. Exposure to both languages through a variety of media and the possibility of enrolling in bilingual school programs are all factors that are frequently considered as strategies for multilingual raising. No methodology is universally applicable, and families may choose to proceed in a variety of ways depending on the specifics of their situation.

The parents shared their opinion about the role of language therapists in helping parents and children overcome challenges and obstacles by saying, “We felt blessed that the school teacher of my girl observed the same situation as we did about her problems during communication, which led us to consult a language therapist. Now the situation is much better and improving because of therapy.”

The ability to speak two languages is widely regarded as advantageous, with potential benefits in cognitive flexibility, problem-solving skills, and cultural knowledge. Despite the fact that there may be difficulties, such as the mixing of languages during the early years, these issues typically disappear as language skills progress. Speech therapists can help with concerns about language development in multilingual children. They are in a prime position to help with language development by outlining expected milestones, pointing out possible delays, and suggesting ways
to strengthen both languages. For a holistic strategy to address language development, parents, teachers, and speech therapists must work together.

**Discussion in relation to observations and interviews**

The family in this case study exhibits distinct circumstances. German is the predominant language in the country, spoken by the majority of the population. English, on the other hand, is a minority language with fewer speakers in the local community. This poses an incredible difficulty for youngsters in acquiring the additional minority language. In the household, the primary language spoken by the mother is English, with occasional influence from her original language, Urdu.

Additionally, due to her husband’s proficiency in German, there is also a blending of German vocabulary. Conversely, the child’s father communicates in German primarily due to professional and social factors, with some influence from English and Urdu due to his wife. The infant, however, is born with the ability to speak two languages at the same time. Over time, they may also be exposed to a third language, but this occurs in uncommon cases. The child’s initial difficulty in performing in the kindergarten class was attributed to communicative issues. The school language counselor organized a meeting with the parents to address this concern. During the session, it was decided that a balanced approach would be taken, incorporating both English and German into the child’s daily routine. The parents have adhered to this guideline since the child’s third year up until the present.

By utilizing observations, interviews, and background studies, the first research question, “What is the impact of bilingualism on a child?” was answered. Based on the interviews, it was shown that the impact of bilingualism varies significantly depending on the child, their background, and whether the languages being learned are widely spoken or less familiar. An illustrative instance is the contrasting perspectives exhibited by the youngster within the family on bilingualism and the utilization of two languages. The offspring of the household residing in Germany have encountered numerous challenges in acquiring proficiency in English due to its status as a minority language and its lesser prevalence in the German-speaking community. An additional influential element is the daily usage of the Urdu language by the grandparents, lasting for approximately 2 to 3 h in the presence of the kid. At the age of three, she was exposed to two fundamental languages and a third language for specific periods and situations. Upon close observation by therapists and kindergarten teachers, it was noted that she initially engaged in frequent code-switching without fully comprehending the context and environment she was in.

The parents and instructors recommended seeking the assistance of a therapist. In accordance with the prescribed language modifications, parents were instructed to communicate with the child using two different languages. The mother was instructed to communicate in English with the child, while the father was instructed to communicate in German with the youngster. This practice persisted for one year, yielding substantial outcomes. The child now possesses a strong command of both the English and German languages. Furthermore, she possesses a high level of proficiency in code-switching. It was noted that during her regular conversations, she consistently responds to her father’s questions in German and her mother’s questions in English.
The second research question was, “What are the primary considerations for parents when choosing to raise their child as bilingual with language therapist support?” The answer is heavily contingent upon the parents and their children, as inferred from the interviews and background literature examined. Parents often desire to raise their children to be multilingual due to their bilingualism, as is the case in this family, or because the parents speak different native languages, as is common in many other families in their community. Another possible factor could be that the family resides in a country where the prevailing language differs from their home language. Baker (2000) asserted that it is conceivable for monolingual parents who share the same original language to desire their children to be raised as bilingual individuals. In such instances, children acquire a second language from sources other than their family, such as attending a school where the official language differs from that spoken by their parents. The presence of language therapists and professionals can provide valuable help to parents, hence enhancing the advantages of this skill.

The response to the third research question, “Do the benefits of bilingualism outweigh the drawbacks, as perceived by parents?” According to the present research, the answer is yes. However, there are some drawbacks, such as the difficulty of teaching a child a second language if they are unwilling, as children cannot be compelled to become bilingual. Another drawback may arise when a youngster finds it tiresome to acquire proficiency in a second language, especially if that language is a minority language and is not frequently used in their own country. The list of benefits is considerably more extensive. Currently, those who are multilingual have higher chances of securing lucrative employment opportunities due to the increasing globalization of the world. Additional benefits include the relatively effortless acquisition of languages by multilingual youngsters and their enhanced receptiveness to many cultures. The interview questions were condensed, yielding the consistent finding that parents support bilingualism and desire their children to reap the advantages of this dual proficiency. Nevertheless, it is now incumbent upon language therapists and experts to provide guidance and assistance to parents and teachers in order to optimize the benefits.

6. Conclusion

The primary aim of the research was to examine the advantages and disadvantages of bilingualism, particularly in terms of language acquisition and the developmental impact on young children. Additionally, the study has explored the function of language therapists in this context. This case study examined specific parental concerns regarding the upbringing of bilingual children. The case study encountered minimal obstacles or challenges. Nevertheless, the drawbacks of bilingualism are fewer in number compared to the benefits. To further investigate this, it is necessary to conduct additional interviews and gather more data. However, it is worth noting that language therapists can play a crucial role in maximizing the benefits of this talent. Further investigation of my research issue could involve a more specific examination of the disparities between bilingual children proficient in two widely spoken languages and children who are proficient in either two less often spoken languages or a less commonly spoken language and a widely spoken language. During
this case study, variations were observed in children’s views towards bilingualism and the strategies employed by parents to raise their children as multilingual individuals.

6.1. Future recommendations

The present study has brought forth some significant aspects of bilingual and multilingual scenarios; however, some recommendations for future research may benefit the existing literature. Longitudinal studies can be conducted to track the language development and proficiency of bilingual and multilingual children over an extended period. This would provide a deeper understanding of the sustained impact of language therapy interventions. They are implementing cultural sensitivity training for language therapists, parents, and teachers to enhance their ability to navigate the diverse linguistic and cultural backgrounds of children. This can contribute to more effective collaboration in fostering language development. Some educational programs for parents that focus on the importance of maintaining a balanced language environment at home would contribute to lessening the challenges of language switching. These programs can equip parents with the knowledge and skills needed to support their children’s dual-language proficiency. Parents may collaborate with language therapists to implement strategies for balanced language use and ensure consistent exposure to both languages in diverse contexts. They can monitor and support children’s language development regularly. Early school teachers can integrate bilingual support into the curriculum with guidance from language therapists and encourage the use of both languages in classroom activities. They can also provide a culturally responsive learning environment. On the other hand, language therapists can develop accessible resources and training programs for parents and educators, offer continuous support, and adjust strategies as children progress. Therapists may promote cultural sensitivity training to better understand and support diverse linguistic backgrounds.

6.2. Limitations

Future research should aim for larger, more diverse samples to enhance the external validity of the study’s conclusions. Understanding that language development is a dynamic process influenced by various factors. Future research could investigate the evolving nature of language proficiency in response to changing socio-cultural and educational environments. By addressing these recommendations and limitations, future research can contribute to a deeper understanding of the role of language therapists in promoting dual-language proficiency in young children and inform the development of effective interventions on a broader scale.

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Consent: The participants (parents) provided their consent and were assured that all
their information would be kept confidential.

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**References**


