

## Parental perceptions and responses to stuttering in their children: A qualitative study from Saudi Arabia

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**Abstract:** This qualitative study explores how Saudi parents understand and respond to stuttering in their children. Focus groups were conducted with 30 parents of children aged 2 to 12 years who stutter. Parents described diverse beliefs about the causes of stuttering, though many of these views did not fully align with current scientific understanding. Most parents reported seeking professional help primarily in response to observable secondary behaviors (e.g., physical movements during speech). While speech-language pathologists (SLPs) were the most trusted source of information, some parents also used digital platforms to better understand and manage stuttering. Some parents had experience managing stuttering using technology such as delayed auditory feedback (DAF) devices or apps; however, these were often discontinued due to technical issues, discomfort, or challenges with classroom usability. The study recommends applied, evidence-based strategies to improve parental support, including targeted educational initiatives, stronger communication between SLPs and families, and user-friendly resources to support home practices. It also highlights the value of interdisciplinary collaboration, where professionals from fields such as speech-language pathology (SLP), psychology, and education work together to address stuttering from integrated perspectives. These findings have practical implications for educators and developers of technology-based tools for the management of stuttering and support broader efforts to strengthen early intervention and caregiver engagement in fluency disorders.

**Keywords:** Fluency disorders, Interdisciplinary, Parental perceptions, Speech-language pathology, Stuttering, Technology.

### 1. Introduction

Stuttering is a fluency disorder characterized by disruptions in the rhythm and flow of speech, often involving repetitions, prolongations, and blocks [1, 2]. It typically emerges in early childhood, with most cases appearing before age four, though some individuals continue to stutter into adulthood [1, 3]. The global prevalence of stuttering is approximately 1%, with a higher occurrence in males, attributed to differences in persistence and recovery rates [2, 4]. Research indicates that stuttering is influenced by genetic, neurological, and motor-linguistic factors, reflecting its complexity as a disorder without a single identifiable cause [2, 5]. Beyond speech disruptions, stuttering has significant social and emotional consequences, such as negative listener reactions, anxiety, avoidance behaviors, and decreased communication confidence [5, 6]. These challenges underscore the importance of early intervention to support individuals who stutter across various life domains [5].

Parents play a crucial role in recognizing and managing stuttering, as their knowledge and attitudes significantly influence a child's communication confidence. Parental responses to stuttering vary widely; some exhibit supportive behaviors that foster resilience, whereas others experience anxiety or hold misconceptions that exacerbate a child's speech-related stress [7]. Cultural and social contexts further influence parental perceptions. For example, studies conducted in Egypt and Sri Lanka indicate that limited public knowledge about stuttering contributes to misunderstandings, leading parents to

attribute stuttering to psychological, environmental, or supernatural factors [8, 9]. Moreover, parental education levels impact their understanding of stuttering; more educated parents generally show greater awareness and a proactive approach toward intervention [7]. Research emphasizes the importance of parental involvement in intervention, highlighting that supportive communication environments enhance children's fluency and confidence [10]. Parents with personal or familial experiences of stuttering may perceive its impact differently, sometimes overestimating its effect on their child's emotional well-being [10]. Speech-language pathologists (SLPs) can leverage these insights to educate parents, correct misconceptions, and encourage early intervention strategies for improved treatment outcomes [8]. A systematic review by Nonis, et al. [9] analyzing parental perceptions of stuttering across nine countries (excluding Saudi Arabia), revealed limited parental knowledge, variable attitudes, and generally positive views toward stuttering therapy, highlighting a clear need for parental education and early intervention. Despite recognizing parental involvement as critical, no existing research has specifically investigated how Saudi parents perceive, understand, and seek support for their child's stuttering.

Research on stuttering in Saudi Arabia remains limited, with studies primarily focusing on public awareness and societal attitudes [11, 12]. Although general awareness of stuttering exists, misconceptions persist, particularly regarding its causes, with psychological and genetic explanations often overshadowing speech-motor and neurological factors [11]. Public attitudes toward individuals who stutter tend to range from neutral to mildly positive; however, notable knowledge gaps exist, especially regarding effective intervention and support strategies [12]. Additionally, research underscores the influential role teachers play in shaping children's communication experiences, highlighting the need for improved training and awareness to foster supportive classroom environments [13]. While teachers typically express positive attitudes, their limited knowledge often leads them to misattribute stuttering primarily to emotional or psychological factors, impacting their interactions and accommodations for students who stutter [13]. Some teachers also report limited confidence in managing stuttering within classroom settings, further emphasizing the need for targeted training to enhance their knowledge and skills [13].

This study aims to address the following research questions:

- How do parents perceive stuttering in their children?
- How do parents respond to stuttering in their children?

## 2. Methodology

### 2.1. Research Design

This study used a qualitative exploratory design, which is appropriate for investigating topics with limited prior research, such as the current study that aimed to generate an in-depth understanding of parents' perceptions of managing stuttering in their children [14].

### 2.2. Participants

Participants were Saudi parents aged 18 years or older who had a child between 2 and 12 years old who stutters. This age range was selected because it represents a critical stage in speech and language development, when parents are likely to notice stuttering and begin forming beliefs about its causes and management. Only parents whose child had been stuttering for at least six months were included, ensuring they had enough experience to reflect on the problem. Parents of children with neurological or developmental disorders, such as autism spectrum disorder, cerebral palsy, or intellectual disabilities, were excluded to keep the study focused on stuttering-related experiences.

### 2.3. Recruitment Process

Recruitment was carried out through flyers and an online Google Form, both of which explained the study procedures and inclusion criteria. Interested parents were asked to provide their contact

information. Recruitment materials were shared on social media platforms, including WhatsApp and X, and were also distributed to eight schools and five speech-language pathology clinics across two cities in the western region of Saudi Arabia.

#### 2.4. Data Collection

Data were collected through remote focus groups conducted by telephone and Zoom [14]. Each session lasted 55 to 90 minutes and was audio-recorded with participants' consent. The interviewer also took notes to capture key points and emerging themes.

#### 2.5. Data Analysis

Thematic analysis followed the six-phase framework of Braun and Clarke [15]. After transcription, each focus group transcript was read multiple times for familiarization. Key statements were highlighted and coded by hand to identify patterns and recurring ideas. Related codes were then organized into broader themes that reflected central topics in parental experiences. These themes were reviewed and refined to ensure clarity and distinctiveness, then named to capture their meaning. The final themes formed the basis for presenting the study's findings on parental perceptions of stuttering.

#### 2.6. Trustworthiness of the Study

Several strategies were used to strengthen the trustworthiness of this qualitative study, addressing credibility, dependability, and confirmability. Credibility was enhanced through researcher triangulation, with multiple researchers independently coding the data and reaching consensus to minimize bias [14, 16]. Member checking was carried out by sharing preliminary themes and direct quotes during a follow-up focus group, allowing participants to confirm that the findings reflected their experiences [17]. Peer debriefing included virtual meetings with external qualitative research experts, who reviewed coding decisions and thematic interpretations to improve analytical accuracy. Dependability was established by maintaining an audit trail that documented methodological decisions, coding processes, and analytical reflections [18]. Confirmability was supported through reflexivity practices, including analytic memos to identify researcher biases, methodological challenges, and evolving interpretations [19, 20].

#### 2.7. Ethics Approval and Informed Consent

This study received ethical approval from the Institutional Review Board (IRB) at University of Jeddah. All participants provided informed consent prior to their participation, and they were fully informed about the purpose of the study, their rights, including the right to withdraw at any time, and the measures taken to protect their confidentiality.

### 3. Results

The results of this study are presented in two sections: participant characteristics and the main findings, which are organized into four themes. These themes include (1) perceived causes of stuttering in children, (2) reasons for consulting SLPs, (3) parental beliefs about stuttering treatments, and (4) sources of knowledge about stuttering.

#### 3.1. Participant Characteristics

Thirty parents participated in this study, including 18 fathers (60.0%) and 12 mothers (40.0%). They took part in focus group discussions, organized into six groups with five participants in each group. Most participants were between 30 and 39 years old ( $n = 12$ , 40.0%), followed by 8 participants (26.7%) aged 40–49 years, 6 (20.0%) aged 20–29 years, and 4 (13.3%) aged 50 years or older. With regard to educational background, 24 participants (80.0%) held a college degree, while 6 (20.0%) had a high school education. Thirteen participants (43.3%) reported prior experience with speech therapy, and 17 (56.7%) had no such experience. In terms of language background, 16 participants (53.3%) were monolingual

Arabic speakers and 14 (46.7%) were bilingual. Additionally, 19 participants (63.3%) reported a family history of stuttering, while 11 (36.7%) did not. The age distribution of participants' children was as follows: 9 participants (30.0%) had children aged 2–6 years, 13 (43.3%) had children aged 7–9 years, and 8 (26.7%) had children aged 10–12 years. A detailed breakdown of participant demographics is provided in Table 1.

**Table 1.**  
Demographic Characteristics of Participants (N = 30).

Variable	Categories	n	%
Parent's Gender	Male (Father)	18	60.0
	Female (Mother)	12	40.0
Parent's Age Group	20–29 years	6	20.0
	30–39 years	12	40.0
	40–49 years	8	26.7
	50+ years	4	13.3
Education Level	High school	6	20.0
	College	24	80.0
Prior Experience with Speech Therapy	Yes	13	43.3
	No	17	56.7
Primary Language Environment	Monolingual (Arabic only)	16	53.3
	Bilingual (Arabic and another language)	14	46.7
Family History of Stuttering	Yes	19	63.3
	No	11	36.7
Child's Age Group	2–6 years	9	30.0
	7–9 years	13	43.3
	10–12 years	8	26.7

### 3.2. Theme 1: Perceived Causes of Stuttering in Children

Parents suggested a range of possible causes for stuttering, with many expressing uncertainty or misconceptions about its origins. Several parents openly acknowledged not knowing why their child stutters:

*"I have no idea, I don't even know why my child stutters. It's just something that started, and we don't know why."* (P17).

Some parents attributed stuttering to emotional factors, such as ongoing stress or anxiety in daily life.:

*"I think it might be because he gets nervous when speaking in front of people."* (P6)

*"Maybe it started when we moved to a new house (.) All that stress... it must have caused it."* (P9)

Several parents believed stuttering could be hereditary or linked to developmental factors:

*"I think it runs in the family. My cousin stuttered when he was a kid."* (P13)

*"It might be something about how his brain develops speech, but I'm not sure."* (P21)

Some parents indicated that parenting style, such as being overprotective or strict, might play a role in stuttering. For example, one parent said:

*"They always say if the parents are too strict or too overprotective, the child might start stuttering. I hear this a lot."* (P12)

These responses reflect the diversity of beliefs held by Saudi parents, with some relying on personal observations or family experiences rather than scientific explanations.

### 3.3. Theme 2: Reasons for Consulting a Speech-Language Pathologist

Parents identified multiple reasons for seeking professional help for their child's stuttering. The most common motivations included concerns about secondary stuttering behaviors, their child's emotional well-being, social participation, and the need for guidance on home support.

Many parents were prompted to consult an SLP after observing noticeable secondary behaviors, such as frequent blinking, neck shifting, or leg movements:

*"We started noticing he blinks a lot, and sometimes he shifts his neck when trying to talk (.). Uh, at first, we didn't think much of it, but it kept happening, and that's when we thought (.) it might be time to get help."* (P4).

*"He moves his legs when he struggles to get words out (.). And we just kept wondering... is that normal? Or is it part of the stuttering?"* (P7).

Parents also expressed concern about their child's emotional responses, including frustration, nervousness, or withdrawal from speaking situations:

*"He gets so nervous when he has to speak that he just stops—completely (.). Like, you can see he wants to say something, but then he just... stays quiet."* (P6).

*"She wanted me to talk for her (.). because she gets frustrated trying to talk (.). with the stuttering."* (P10).

In addition, parents sought help to support their child's social engagement and self-confidence:

*"I want him to feel confident when talking to others and not hold back."* (P8).

*"We hope she can feel comfortable. Not always so nervous about speaking. If she could join in with other kids—talk freely without stopping—it would make her happy."* (P14).

Several parents also wanted professional guidance to support their child's speech development at home:

*"We felt like it was important to get advice on how to help him at home."* (P11).

*"We just—wanted to understand what steps to take... how to actually support him. In a way... that makes a difference, you know? Something that actually helps him feel more confident when he talks."* (P15).

### 3.4. Theme 3: Parental Beliefs About Stuttering Treatments

Most parents believed that speech therapy was the most effective way to help their child's stuttering. This belief was often shaped by recommendations from healthcare professionals, educators, or SLPs. Parents described speech therapy as a structured, evidence-based approach that could provide their child with practical tools for improving communication. Many expressed confidence that professional intervention was the best way to support their child:

*"I really believe that, you know (.), speech therapy is the best way to help him. That's why we're doing it. I feel like... it's what will actually help his speech, and, that's what we were told too."* (P3).

*"We started therapy [speech therapy] right away because I believed— I was sure— that professional help was the best way to support him."* (P7).

Some parents felt that stuttering was a temporary phase and expected their child to outgrow it without intervention. This belief was often based on family history or personal experience:

*"I think he'll grow out of it eventually. I stuttered a bit when I was young too."* (P23).

*"It's probably just a phase. He's still learning how to speak."* (P15).

Several parents expressed uncertainty about which approach would be most effective, feeling overwhelmed by the variety of available options, including therapy and technology-based programs:

*"I honestly don't know what the best treatment is for stuttering. Different treatment options... you hear all kinds of things (.). Some say one works, others say another is better. In the end, I just don't know what to believe."* (P24).

*"There are so many different treatment options—like therapy, technology, and applications (.). I'm not sure which one to try... or even if any of them help."* (P26).

Some parents had tried Delayed Auditory Feedback (DAF) technology to manage stuttering but found it only partially helpful, due to technical problems and discomfort with how it functioned. They described issues such as device malfunctions, sound delays, and difficulty concentrating while using the headset in class:

*"At first, yes—he was talking better when he used the device. But then (.). I do not know... the sound started coming late, and sometimes it just stopped. So, we stopped using it."* (P24)

*"She told me, 'Mama, it makes my voice sound different.' After some time, she said she does not want to continue with the app. It was not helping anymore."* (P9)

*"He wore it in school for a few days, but he did not like it. He said it bothered him in class (.). made it hard to listen or focus on the teacher."* (P12)

A few parents preferred to monitor their child's speech before starting formal therapy, hoping that fluency would improve over time. However, they remained open to seeking help if needed:

*"We thought about waiting a bit to see if fluency improves on its own, but we're monitoring it. Or, yes, we want to be sure. But if it doesn't... we'll decide what to do."* (P10).

*"I would wait and see for now, but if it [stuttering] gets worse, I'll definitely seek help. If that happens, I'll probably go to a speech pathologist."* (P29).

Some parents worried that delaying treatment could negatively affect their child's academic performance or social relationships. They were concerned that untreated stuttering might make it harder for their child to participate in class or connect with peers:

*"I mean, it was really worrying for us because if we didn't start early, it might get worse. There was no improvement, you know, and maybe later it'll affect him in school. And we don't know—maybe it'll stay the same or even get worse."* (P27).

Several parents described using home-based strategies, such as encouraging slower speech or patiently waiting for their child to finish talking. While intended to be supportive, these measures were generally not seen as lasting solutions:

*"We remind him to speak slowly, but I know that's not going to change the stuttering. That's why we're in therapy."* (P16).

*"At home, we try to stay patient and let him finish, but I know he needs more support."* (P26).

A few parents were concerned that starting therapy too soon could make their child feel different from others or anxious about speaking. They worried that drawing too much attention to stuttering might make the issue more difficult for their child:

*"I don't want him to feel different from others because he's going to therapy."* (P22).

*"I'm afraid that focusing too much on his speech will make him feel more anxious about speaking."* (P18).

Some parents hoped for a complete resolution and felt disappointed when therapy did not lead to the level of improvement they expected. For some, adjusting expectations around therapy outcomes was a challenge:

*“I thought therapy would completely improve his speech.” (P19).*

*“I just want a treatment that will help him speak more fluently.” (P12).*

Many parents placed great trust in the recommendations of SLPs, doctors, or teachers when deciding on treatment. They often followed professional advice closely, believing early and consistent therapy would give their child the best chance for improvement:

*“The doctor said speech therapy is important, so we started immediately... because we are afraid for his future—I mean... that his stuttering might become harder to treat.” (P20).*

*“The school speech therapist kept telling us that starting early will help him succeed in school, so... we didn’t delay it. We just hope—inshallah [God willing]—that one day he’ll be able to communicate easily and confidently with other children.” (P7).*

### 3.5. Theme 4: Sources of Knowledge about Stuttering

Most parents relied on and trusted the expertise of SLPs to guide them in understanding and managing their child’s stuttering. They assumed that SLPs had up-to-date knowledge based on professional training, continuing education, and experience with children who stutter. Some parents especially valued SLPs with extensive experience:

*“I trust the speech teacher [speech-language pathologist] because they have worked with so many children who stutter—just like my son. They must know what they’re doing, and that’s why I feel reassured when I listen to their advice.” (P3).*

*“We felt confident with the speech therapist because they have studied stuttering—and from the way they talk, it’s clear they really understand it.” (P7).*

While SLPs were the most trusted source, parents also described three other main sources of information: the internet, family or social contacts, and teachers or other professionals. The internet was often the first place parents turned for general information, though many found it overwhelming or confusing due to conflicting advice:

*“The first time I noticed my child’s stuttering, I went online to look for information... but everywhere I looked, people were saying different things, and in the end, I didn’t know what to believe.” (P19).*

Family members, especially grandparents, sometimes shared advice based on personal or family experiences:

*“My mother told me that my uncle stuttered when he was a child, and with time—it just went away on its own. That gave me some comfort, but I don’t know if it will be the same for my child.” (P29).*

Teachers and school staff were also consulted for practical suggestions, though their advice was generally seen as less detailed or specific than that provided by SLPs:

*“The teacher suggested giving him more time to talk, which helps, but it’s not as detailed as what the therapist explains.” (P1).*

Some parents expressed frustration with the lack of detailed explanations during therapy sessions. While they trusted the SLPs’ recommendations, they felt that more information about the reasons behind certain techniques would help them feel more confident applying strategies at home:



*"They told us to do these exercises, but... I don't really understand why we're doing them or how they're supposed to help." (P3).*

*"Sometimes, I just wish they'd explain things more—so we could feel more confident when helping him at home." (P27).*

Parents also expressed a need for additional resources to improve their understanding of stuttering. They suggested that workshops, online videos, or written guides could help reinforce what they learned during therapy and empower them to support their child more effectively:

*"Videos that show how to do the techniques step by step would help a lot... they make it easier for us to follow and be sure we are doing them correctly." (P18).*

*"If they had workshops for parents to learn more about stuttering, I would definitely attend. I want to make sure I'm doing everything I can to help him." (P5).*

#### 4. Discussion

Parents in this study attributed stuttering to various causes, including emotional stress, hereditary influences, and environmental factors. Causes of stuttering are widely regarded as multifactorial, with genetic and neurophysiological factors playing a significant role in its emergence [2]. While parents frequently mentioned emotional stress and parenting style as potential causes, research indicates that neither emotional problems nor parenting style directly cause stuttering [1]. However, traits such as emotional reactivity, behavioral disinhibition, and sensitivity in temperament may influence how young children respond to and manage their disfluencies [1]. Findings from this study align with earlier research showing that many parents continue to believe stuttering is caused by psychological factors, such as emotional trauma or environmental pressures, reflecting older theories about stuttering [7, 8]. Although emotions and environmental factors do not directly cause stuttering, they significantly influence its persistence and variability. For instance, emotionally charged environments, such as those involving social pressure or high communicative demands, can heighten anxiety and cognitive conflict, increasing the likelihood of stuttering episodes. These factors interact with the underlying neurodevelopmental mechanisms of stuttering, amplifying its severity rather than serving as root causes [3]. Additionally, environmental influences, such as parenting styles—particularly over-controlling or anxious parenting—and adverse life events, including divorce, can increase the vulnerability of children who stutter to developing social anxiety and experiencing worsening communication difficulties [4]. These findings highlight the importance of providing parents with evidence-based education on the multifactorial nature of stuttering, emphasizing the interplay of intrinsic and environmental factors.

Parents seek SLPs due to concerns about secondary stuttering behaviors, emotional well-being, and social challenges. Many are particularly alarmed by physical behaviors like blinking or leg movements, prompting them to seek intervention. While prior research highlights how these behaviors influence social perceptions [21] the present findings suggest parents view them as more problematic than stuttering itself, driving them to seek intervention. This underscores the need for therapy to address both speech and non-speech aspects of stuttering. Emotional and avoidance behaviors, such as frustration, withdrawal from speaking, or relying on others to communicate, add to their distress, often leading to feelings of anxiety, guilt, and helplessness [10]. Research suggests that stuttering affects individuals across different age groups in distinct ways. Those who stutter frequently experience anxiety, uneasiness, and self-directed frustration, particularly after communication [6]. In preschoolers, stronger emotional regulation skills appear to reduce the negative impact of stuttering, though this relationship is less evident in younger school-age children [5]. These findings point to the role of emotional support in early intervention and highlight the need for therapy that extends beyond fluency training. Vanryckeghem and Van Eerdenbrugh [22] emphasize that effective treatment should combine speech techniques with self-confidence building while also addressing difficult communication situations and emotional reactions. A more integrative approach may help not only with fluency but also with broader psychosocial well-being.



The misconception that children will naturally outgrow stuttering is common among both parents and professionals, leading many parents to delay seeking intervention under the assumption that their child's stuttering will resolve on its own. Some SLPs reinforce this belief, as one participant recalled being told by a clinician in elementary school that they would "grow out of it" beyond the expected recovery age [21]. Additionally, research indicates that Saudi adults have limited knowledge of stuttering, with persistent misconceptions about its causes and treatment [12].

This lack of awareness contributes to uncertainty when selecting appropriate treatment options. While some parents prefer to delay treatment and mentor their child's stuttering over time, evidence shows that early intervention results in significantly greater and more sustained improvements. Children who received immediate treatment showed a greater reduction in stuttering severity and better communication-related quality of life after three months, compared to those in a delayed-treatment group [23]. Some parents also viewed DAF technology as a promising tool; however, they encountered practical barriers that limited its continued use. These findings highlight the importance of ensuring that assistive technologies are not only effective but also comfortable, user-friendly, and adaptable to everyday environments such as classrooms.

These findings also underscore the importance of early intervention, as structured therapy not only facilitates faster progress but also contributes to long-term improvements in fluency and confidence. However, many parents in this study expected their child's stuttering to be cured, aligning with previous findings that parental expectations were often centered on a complete cure or quick recovery [9]. A systematic review reported that many parents anticipated that stuttering could be fully resolved rather than managed over time, highlighting a common perception that contrasts with the clinical understanding of stuttering as a condition that often requires long-term management rather than a definitive cure.

Parents identified SLPs as their most trusted source of knowledge, but they also relied on other sources, including the internet, family members, and teachers. While the internet was a widely used source, parents often found it overwhelming due to conflicting advice, a challenge also noted in prior research on information-seeking behaviors [11].

Although parents sought input from teachers and school staff for practical advice, they perceived them as less knowledgeable than SLPs, a finding consistent with previous research indicating that teachers often attribute stuttering to emotional factors, stress, or personality traits rather than neurological or genetic causes [13].

Many teachers also held misconceptions about effective interventions and classroom strategies, which affected their ability to support students who stutter. However, literature suggests that targeted training programs significantly improve teachers' understanding, highlighting the need for educational initiatives to address these gaps [13]. The alignment between these findings and prior research underscores the necessity of improving access to accurate, evidence-based information for both parents and educators to enhance support for individuals who stutter.

## 5. Implications and Future Directions

The findings of this study underscore the need for SLPs to address parental misconceptions about the causes of stuttering, such as attributing it to stress, anxiety, or parenting styles. Providing parents with accurate, evidence-based information can help reduce misunderstandings and support more effective management. The study also found that parents frequently consult various sources for information, such as the internet and advice from family, which can differ in accuracy and detail. To address this, SLPs should proactively offer clear explanations during therapy and provide practical tools—such as workshops, instructional videos, and written guides—to help parents support their child's fluency at home.

Future research should evaluate the effectiveness of these tailored interventions in addressing parental misconceptions about stuttering [1]. Additionally, studies should investigate how improved communication between SLPs and parents—particularly around therapy goals and home strategies—

influences therapy adherence and outcomes. Research on emotional support options, such as counseling or training programs, may further clarify how to help parents build confidence in supporting their child. Finally, quantitative studies are needed to measure the impact of these approaches on parental knowledge, preparedness, and engagement in their child's therapy.

## 6. Strengths and Limitations

To the best of the author's knowledge, this is the first study to explore parents' beliefs and knowledge about managing stuttering in children in Saudi Arabia. This is particularly significant, as a study by Almudhi, et al. [11] reported that 79.5% of the Saudi population surveyed believed that more than 6% of the population stutters. Furthermore, a sufficient number of interviews were conducted to ensure that data saturation was reached [24]. In addition, rigorous measures were taken to ensure trustworthiness. Credibility was enhanced through transcription and translation using rigorous procedures [25], triangulation with multiple reviewers [14], and member checking to confirm accurate representation of participants' experiences [17]. Dependability and confirmability were established through a detailed audit trail and reflexivity practices, ensuring the findings are transparent, reliable, and grounded in the data [26]. These measures strengthen the study's contribution to understanding parental perspectives on stuttering in Saudi Arabia.

This study has several limitations. As is typical in qualitative research, the sample size was small by design. This allowed for an in-depth exploration of parents' perspectives, rather than aiming for statistical generalizability. Furthermore, the study was conducted within a specific cultural and geographic context. As a result, while the findings provide meaningful insight into the experiences of the participants involved, they are not intended to represent all parents of children who stutter, which aligns with the goals of qualitative research that emphasize depth over generalizability.

In addition, all interviews were conducted remotely via Zoom or telephone. Although this approach offered greater flexibility and accessibility, it may have limited the ability to observe nonverbal cues and emotional subtleties that are often more evident in face-to-face settings.

## 7. Conclusion

The study found that parents are often prompted to seek help from professionals in response to involuntary physical behaviors—such as eye blinking or facial tension—that accompany stuttering. Parents utilized various resources to gain information about stuttering, which sometimes led to conflicting messages not grounded in scientific evidence. Despite this, many parents viewed SLPs as their most reliable source of guidance and eventually sought their help. With regard to the use of technology to manage stuttering, parents found DAF to be difficult to use consistently due to discomfort and technical limitations. These findings highlight the importance of SLPs providing clear, evidence-based support and maintaining open communication with families. Interdisciplinary collaboration among professionals in speech-language pathology, education, and psychology can help ensure that families receive consistent guidance and effective support both at home and in school.

### Transparency:

The author confirms that the manuscript is an honest, accurate, and transparent account of the study; that no vital features of the study have been omitted; and that any discrepancies from the study as planned have been explained. This study followed all ethical practices during writing.

### Acknowledgments:

The author extends sincere gratitude to all the participants for their time and valuable contributions, which were essential to the completion of this research.

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## References

- [1] American Speech-Language-Hearing Association, "Fluency disorders (Practice Portal)," 2025. Retrieved: <https://www.asha.org/practice-portal/clinical-topics/fluency-disorders/>. [Accessed June 6, 2025]. 2025.
- [2] A. Smith and C. Weber, "How stuttering develops: The multifactorial dynamic pathways theory," *Journal of Speech, Language, and Hearing Research*, vol. 60, no. 9, pp. 2483–2505, 2017. [https://doi.org/10.1044/2017\\_JSLHR-S-16-0343](https://doi.org/10.1044/2017_JSLHR-S-16-0343)
- [3] E. R. Usler, "Why stuttering occurs: The role of cognitive conflict and control," *Topics in Language Disorders*, vol. 42, no. 1, pp. 24–40, 2022.
- [4] K. R. Bauerly, "Characteristics associated with social anxiety in adults with developmental stuttering: A review," *Medical Research Archives*, vol. 12, no. 10, p. 5876, 2024. <https://doi.org/10.18103/mra.v12i10.5876>
- [5] S. E. Tichenor, B. M. Walsh, K. L. Gerwin, and J. S. Yaruss, "Emotional regulation and its influence on the experience of stuttering across the life span," *Journal of Speech, Language, and Hearing Research*, vol. 65, no. 7, pp. 2412–2430, 2022. [https://doi.org/10.1044/2022\\_JSLHR-21-00467](https://doi.org/10.1044/2022_JSLHR-21-00467)
- [6] A. N. Koçak and M. E. Cangi, "Emotional reactions of people who stutter in difficult communication situations: A preliminary study," *Clinical Archives of Communication Disorders*, vol. 7, no. 3, pp. 112–124, 2022. <https://doi.org/10.21849/cacd.2022.00773>
- [7] R. F. Safwat and A. Sheikhany, "Parental attitudes and knowledge of stuttering," *The Egyptian Journal of Otolaryngology*, vol. 30, pp. 151–156, 2014.
- [8] A. A.-S. Nabieh El-Adawy, K. St. Louis, A. M. Emam, Z. M. Elbarody, and E. Mostafa, "Attitudes towards stuttering of parents and other family members of children who stutter in Egypt," *Speech, Language and Hearing*, vol. 24, no. 1, pp. 9–19, 2021. <https://doi.org/10.1080/2050571X.2020.1724360>
- [9] D. Nonis, R. Unicomb, and S. Hewat, "Parental perceptions of stuttering in children: A systematic review of the literature," *Speech, Language and Hearing*, vol. 25, no. 4, pp. 481–491, 2022. <https://doi.org/10.1080/2050571X.2021.1913299>
- [10] M. Rocha, J. S. Yaruss, and Joana R. Rato, "Stuttering impact: A shared perception for parents and children?," *Folia Phoniatrica et Logopaedica*, vol. 72, no. 6, pp. 478–486, 2019. <https://doi.org/10.1159/000504221>
- [11] A. Almudhi, M. Aldokhi, I. Reshwan, and S. Alshehri, "Societal knowledge of stuttering in Saudi population," *Saudi Journal of Biological Sciences*, vol. 28, no. 1, pp. 664–668, 2021. <https://doi.org/10.1016/j.sjbs.2020.10.057>
- [12] N. N. Al Awaji, R. F. Alfouzan, A. R. Almutairi, and E. M. Mortada, "Predictors of public attitudes in Saudi Arabia toward people who stutter," *Plos One*, vol. 18, no. 12, p. e0295029, 2023. <https://doi.org/10.1371/journal.pone.0295029>
- [13] R. S. Bukhari, "A systematic literature review of teachers' knowledge of stuttering," *Pakistan Journal of Life and Social Sciences*, vol. 22, no. 2, pp. 1553–1561, 2024.
- [14] J. W. Creswell and C. N. Poth, *Qualitative inquiry and research design: Choosing among five approaches*, 5th ed. Thousand Oaks, CA: SAGE Publications, 2024.
- [15] V. Braun and V. Clarke, *Thematic analysis: A practical guide*. London, UK: SAGE Publications, 2021.
- [16] L. S. Nowell, J. M. Norris, D. E. White, and N. J. Moules, "Thematic analysis: Striving to meet the trustworthiness criteria," *International Journal of Qualitative Methods*, vol. 16, no. 1, p. 1609406917733847, 2017. <https://doi.org/10.1177/1609406917733847>
- [17] C. McKim, "Meaningful member-checking: A structured approach to member-checking," *American Journal of Qualitative Research*, vol. 7, no. 2, pp. 41–52, 2023.
- [18] M. Carcary, "The research audit trail: Methodological guidance for application in practice," *Electronic Journal of Business Research Methods*, vol. 18, no. 2, p. 166–177, 2020.
- [19] R. Berger, "Now I see it, now I don't: Researcher's position and reflexivity in qualitative research," *Qualitative Research*, vol. 15, no. 2, pp. 219–234, 2015.
- [20] N. K. Denzin and Y. S. Lincoln, *The SAGE handbook of qualitative research*, 6th ed. Thousand Oaks, CA: SAGE Publications, 2023.
- [21] G. A. Coalson *et al.*, "Microaggression and the adult stuttering experience," *Journal of Communication Disorders*, vol. 95, p. 106180, 2022. <https://doi.org/10.1016/j.jcomdis.2021.106180>
- [22] M. Vanryckeghem and S. Van Eerdenbrugh, "What do adults who stutter think about the nature of stuttering treatment?," *Perspectives of the ASHA Special Interest Groups*, vol. 9, no. 2, pp. 320–330, 2024.
- [23] A. Kohmäscher, A. PrimaBin, S. Heiler, P. Da Costa Avelar, M.-C. Franken, and S. Heim, "Effectiveness of stuttering modification treatment in school-age children who stutter: A randomized clinical trial," *Journal of Speech, Language, and Hearing Research*, vol. 66, no. 11, pp. 4191–4205, 2023. [https://doi.org/10.1044/2023\\_JSLHR-23-00224](https://doi.org/10.1044/2023_JSLHR-23-00224)

- [24] M. Hennink and B. N. Kaiser, "Sample sizes for saturation in qualitative research: A systematic review of empirical tests," *Social Science & Medicine*, vol. 292, p. 114523, 2022.
- [25] H. P. O. Santos, A. M. Black, and M. Sandelowski, "Timing of translation in cross-language qualitative research," *Qualitative Health Research*, vol. 25, no. 1, pp. 134-144, 2015. <https://doi.org/10.1177/1049732314549603>
- [26] I. H. Zainal Abidin, M. O. R. Abd Patah, M. A. Abdul Majid, S. B. Usman, and L. H. Zulkornain, "A practical guide to improve trustworthiness of qualitative research for novices," *Asian Journal of Research in Education and Social Sciences*, vol. 6, no. S1, pp. 8-15, 2024. <https://doi.org/10.55057/ajress.2024.6.S1.2>