Concealing Stuttering at School: "When you can't fix it... the only alternative is to hide it"

Hope Gerlach-Houck¹, Kristel Kubart², and Eilidh Cage³

¹Dept of Speech, Language, & Hearing Sciences, Western Michigan University, MI, USA

²American Institute for Stuttering, NY, USA

³Dept of Psychology, Faculty of Natural Sciences, University of Stirling, Stirling, UK

Author Note

Correspondence concerning this article should be addressed to Hope Gerlach-Houck, Dept. of Speech, Language, and Hearing Sciences, 1903 W Michigan Ave, Kalamazoo, MI 49008. hope.gerlach@wmich.edu.

Declaration of Interest

We have no conflicts of interest to disclose.

Funding Source

This work was supported by an ASHA Advancing Academic Research Careers (AARC) Award.

Manuscript accepted in Language, Speech, and Hearing Services in Schools on 2/8/22

Abstract

Purpose: The purpose of this study was to explore experiences with concealing stuttering in children and young people who stutter, based on recollections from adults. In addition, we explored how school-based speech therapists can be helpful or unhelpful to children who are concealing stuttering from the perspective of adults who stutter.

Methods: Thirty adults who stutter, who previously or currently conceal stuttering, participated in semi-structured interviews exploring their early experiences with hiding stuttering. Purposeful and random sampling were used to diversify experiences and opinions. Reflexive Thematic Analysis was used to develop themes and subthemes to describe participants' experiences.

Results: All participants in the study reported beginning to conceal stuttering at 18 years of age or younger, with more than two-thirds sharing that they began in elementary school. Participants reported that exposure to implicit and explicit ableist messaging about stuttering and traumatic social experiences at school contributed to their inclination to hide disfluencies. Many participants described concealment as a strategy for protecting themselves from stigma. Several participants condemned fluency shaping, calling it harmful and likening it to teaching concealment. Participants believed that speech therapists could be helpful by promoting safe and supportive school environments and by being responsive to the social and emotional challenges that can accompany speaking differently and navigating stigma at school.

Conclusion: Some children who stutter may attempt to protect themselves from stigma by concealing their disfluencies, but doing so can feel isolating and confusing. Speech therapists can play an important role in making the school environment safer and more supportive for children who stutter.

Keywords: Stuttering, stigma, concealment, hiding

Concealing Stuttering at School: "When you can't fix it... the only alternative is to hide it"

Hope Gerlach-Houck, Kristel Kubart, & Eilidh Cage

Introduction

Stuttering is a stigmatized identity that, when perceived by others, is met with social penalties across the lifespan. Stigma can have a considerable impact on health inequalities especially within marginalized communities (Hatzenbuehler et al., 2013) and has corrosive associations with mental health among adults who stutter (Boyle, 2018). Concealing observable moments of stuttering is one way that people who stutter attempt to protect themselves from the stigma associated with speaking differently (Constantino et al., 2017). Yet, concealment itself may be consequential, as efforts to conceal stuttering are associated with reduced quality of life and increased psychological distress among adults who stutter (Gerlach et al., 2021). Although the experience of concealing stuttering has received increasing attention in the literature, little is known about how stuttering concealment begins and manifests in development. The purpose of this study was to explore experiences with concealing stuttering in school-age children who stutter based on recollections from adults. In addition, we explored how school-based speech therapists can be helpful or unhelpful to young people who are concealing stuttering, from the perspective of adults who stutter.

Experiences with Ableism among Youth who Stutter

Children who stutter may experience ableism, or discrimination associated with experiencing disability or being perceived as disabled from a young age: from four-years-old, preschool children show preferences for playing with peers who do not stutter (Ezrati-Vinacour et al., 2001) and have been observed to mock, interrupt, and ignore their stuttering classmates (Langevin et al., 2009). Compared to peers who do not stutter, children who stutter are less likely

to be perceived as popular and more likely to experience peer rejection and bullying (e.g., Blood & Blood, 2004, 2007; Davis et al., 2002). In a British cohort study, McAllister (2016) found that eleven-year-olds who stutter were rated by their parents as having more peer relationship problems than peers who do not stutter, despite having similar ratings of prosocial behavior. In adolescence and adulthood, the social disadvantages associated with stuttering can spread to other areas of life, including higher education (Werle & Byrd, 2021), romantic (Van Borsel et al., 2011), and occupational domains (Gerlach et al., 2018).

Stuttering is often misunderstood at school, with teachers holding negative stereotypes associated with stuttering and often misattributing its etiology to psychological causes (Abdalla & Louis, 2012; Lass et al., 1992; Yeakle & Cooper, 1986). In a survey of more than 200 Arab teachers in Kuwait (Abdalla & Louis, 2012), more than half thought that telling students who stutter to think of what they want to say, take a deep breath, or slow down would be beneficial. People who stutter have described these pieces of advice as oversimplified, unhelpful, and patronizing because these tips are obvious suggestions they have often already explored on their own. Although frequently delivered without ill-intent, these comments are commonly described as unhelpful to stutterers themselves and are more beneficial to listeners because they put them at ease in unexpected social situations (Coalson et al., 2022). Around 65% of the teachers in the Abdalla & Louis (2012) study also opposed the option to excuse students who stutter from class discussion and oral tasks. In a qualitative study, adolescents who stutter reported that teachers would commonly ignore stuttering or misconstrue it as nervousness (Hearne et al., 2008). Supporting this finding, Adriaensens and Struyf (2016) found that Belgian secondary teachers believed paying attention to stuttering might create problems, so they tried not to react to disfluency and did not talk about stuttering.

Concealment as a response to ableism

These experiences of prejudice and discrimination against people who stutter likely contribute to a notion that stuttering is undesirable or 'wrong.' We can think of this as part of ableism, which is rooted in ideologies around a socially constructed view of 'normality,' with those not meeting that ideal needing 'fixed' (Smith, n.d.). If children and young people find that their teachers never talk about stuttering (Adriaensens & Struyf, 2016) or are told that they need to just 'slow down' (Abdalla & Louis, 2012) then they may be learning that stuttering is undesirable and in need of 'fixing.' People who stutter may then find themselves consciously or unconsciously concealing their stuttering to protect themselves from ableism (Constantino et al., 2017; Murphy et al., 2007). Boyle and Gabel (2020) defined concealment as "a way of being among people who stutter, representing a general attempt or desire to not let others know that they stutter, and a predominantly closed off stance which limits discussion or acknowledgment of stuttering" (p. 2). There is variability in the extent that stutterers are able to conceal stuttering. Some people are able to stutter covertly (or "successfully" hide their moments of stuttering from others) in certain situations and others are able to pass as fluent (or not be known as person who stutters to others) almost entirely (Boyle & Gabel, 2020; Constantino et al., 2017).

Concealment may be particularly relevant to children and young people due to developmental pressures to "fit in" socially. For example, Evans et al. (2008) found that middle school students thought that people with higher stuttering frequency would be more likely to be teased and less likely to fit in. Thus, young people who stutter may view it as in their best interest to try to hide or minimize the overt characteristics of stuttering. However, research with adults who stutter suggests that concealment may have paradoxical relationships with mental

health, such that the effort associated with concealment has its own deleterious associations with mental health and quality of life (Gerlach et al., 2021).

Although the adult experience of concealing stuttering has received increased attention in research in recent years, research on stuttering concealment among youth is limited. In a survey study with 48 adolescents who stutter in urban and rural schools in Pennsylvania, Blood et al. (2003) found that 60% of participants indicated they 'rarely' or 'never' talk about stuttering, and 40% endorsed that they 'sometimes' or 'often' keep stuttering a secret. Younger adolescents in the sample (13-15 years) were more likely to keep stuttering a secret than older adolescents (16-18 years). Findings were similar in a replicated survey study with 36 adolescents who stutter in Melbourne, Australia (Erickson & Block, 2013), where 73% indicated that they 'never' or 'rarely' talked about stuttering and 62% endorsed that they 'sometimes' or 'often' kept stuttering a secret.

Purpose of the current study

Although there is evidence that stuttering concealment can begin to take root in childhood (Blood et al., 2003; Erickson & Block, 2013), little is known about when it develops, how it manifests, and what speech therapists can do to support youth who are concealing stuttering. Therefore, the research questions guiding this retrospective qualitative study were:

- 1) When and how does stuttering concealment develop and manifest in the school setting?
- 2) What do adults who stutter view as helpful and unhelpful in supporting kids who are concealing stuttering at school?

Methods

The procedures in this study were approved by the Institutional Review Board at the first author's institution (#21-10-21).

Recruitment and participants

Participants were recruited using purposeful sampling by contacting members of the stuttering community who had previously discussed their experience with concealing stuttering in public forums (i.e., stuttering-related podcasts, blog sites). In addition, we used snowball sampling by asking those we recruited to share information about the study with others in their network. To increase diversity of opinions, we also recruited participants randomly from the first author's email database of more than 400 people who stutter who had previously taken part in research with the first author. To be included, participants were required to self-identify as an adult who stutters who previously or currently has tried to hide stuttering in at least some situations. Participants who completed the study were compensated with a \$20 e-gift card.

Recruitment occurred in November and December 2021.

Thirty participants took part in total, all currently living in the United States. There were 16 males and 14 females, ranging in age from 19 to 75 years old (M = 38.9, SD = 13.9; one participant did not report their age). Nineteen identified as Caucasian, eight as Black or African American, one as Hispanic, Latino or Spanish, one as Asian American, and one as multiracial. 86% of the sample were heterosexual, 10% gay or lesbian, and 3% did not disclose their sexual orientation. 27 of the 30 participants completed primary and secondary education in the United States. Two participants completed schooling in other countries, including China and Australia. One participant completed the majority of their education in England. Per participant report, years of experience with stuttering self-help organizations ranged from zero to 25 years (M = 8.32, SD = 7.43). Two participants (6.7%) reported zero years of experience with self-help. 33.3% reported one to five years of experience, 36.7% reported six to ten years of experience, 10% reported 11 to 19 years, and 13.3% reported more than 20 years of experience with self-

help. Table 1 displays additional information about the participants. Participants selected their own pseudonyms to protect privacy.

[INSERT TABLE 1]

Procedures

After participants expressed interest by replying to the recruitment email, interviews were scheduled and held using the WebEx video conferencing platform. All interviews were conducted by the first author. Participants were sent the consent form in advance and provided verbal consent at the start of the interview. Interviews were recorded and transcribed verbatim using NVivo transcription software (*NVivo Transcription*, 2020). Each transcript was reviewed by a trained undergraduate or graduate research assistant to correct errors and improve readability. Disfluencies were not documented in the transcripts.

A semi-structured interview guide was used to facilitate conversation related to the topic of interest. This study was part of a larger project focused on developing a measure of stuttering concealment. Thus, the interviews included retrospective questions related to school-age experiences, but also questions about concealment beyond the scope of this study. Sample questions related to the current study included "Can you start by telling me about your overall experience as a person who stutters in the school setting?", "Do you have memories of trying to conceal stuttering at school? If so, would you mind sharing some examples?", "What were your reasons for trying to conceal stuttering at school?", "How do you think school speech therapists can support kids who are concealing stuttering?" The interview questions were developed following a review of relevant literature on stuttering concealment and school experiences

among people who stutter. The conversation was semi-structured in that we followed the participants' leads in conversation and asked for more detail as needed. The full interviews ranged from 38 to 108 minutes (M = 81, SD = 19.4). Participants were sent a Qualtrics link after the interview to a survey to collect additional information about demographics and stuttering-related information.

Author Positionality

The study was guided by a constructivist epistemology in that it is our view that truth and meaning can be constructed in different ways, and researchers cannot be independent of the results they report. Thus, it is vital for researchers to acknowledge their positionality. The first author is a researcher with training in psychology and speech-language pathology, as well as a speech therapist who does not stutter. She is a proponent of social and relational models of disability. She is committed to increasing understanding of how stigma contributes to disablement of people who stutter and exploring speech therapists' roles in promoting meaningful personal and environmental change for people who stutter. The second author is a speech therapist who stutters who has personal experience with concealing stuttering. She works primarily in the school setting, but also works at a stuttering specialty clinic. She is a disability advocate and developed a disability pride club for students at her school. The third author is an autism researcher who researches concealment (or "masking") for autistic people, particularly examining the relationship between stigma, concealment and wellbeing, and is a supporter of neurodiversity and the social model of disability. As a research team, we embrace stuttering as a form of neurodiversity and share the view that much of the hardship associated with living with stuttering stems from ableism in society. This orientation informed our research methodology, which prioritized the perspectives of people who stutter, as well as our research questions and the development of the interview guide questions. Importantly, we did not expect participants to share our views because we recognize that the stuttering community has divergent understandings of what stuttering is. We sought to elicit honest perspectives about early concealment and school experiences from a diverse group of people who stutter.

Data Analysis and Credibility

We used Reflexive Thematic Analysis (Braun & Clarke, 2021) to analyze the data because it is consistent with constructivism, allows for inductive analysis, and can capture both latent and semantic meaning. Following procedures from Braun and Clarke (2021), the authors familiarized themselves with the transcripts and noted initial reactions. During this familiarization process, the first author extracted meaningful units from each transcript, or distinct utterances related to the overall topic of the study (i.e., school experiences and concealing stuttering). Extraneous utterances unrelated to the research questions or overall topic of the study were not included as meaningful units (e.g., small talk at the start of the interview process, conversation about pets in Zoom window). We then used the constant comparative method (Glaser & Strauss, 1967) to code meaningful units within the data. This systematic process involved assigning one or more codes to each meaningful unit. As we worked through meaningful units one by one, we continuously compared if each new meaningful unit was best described by an existing code or if a new code was needed. Consistent with best practice in Reflexive Thematic Analysis (Braun & Clarke, 2021), code labels evolved throughout the analysis process as nuance in the data became apparent and to best capture repeated sentiments across participants. Table 2 contains examples of meaningful units and associated codes.

[INSERT TABLE 2 HERE]

Using data visualization features in NVivo, we created thematic maps to cluster codes using patterns in meaning into coherent and meaningful candidate themes that were relevant to the research questions. Table 3 contains examples of code clusters that contributed to the development of sub-themes.

[INSERT TABLE 3 HERE]

The authors then met to review and refine the candidate themes based on quality criteria defined by Braun & Clarke (2021) and finalized names of themes. Specifically, we evaluated and adjusted the themes as needed to ensure they had clear boundaries, enough supporting meaningful units, and that each theme was coherent and conveyed something important. This recursive process involved re-comparing the themes to their associated meaningful units as well as the dataset as whole. Finally, results were written up for the current report.

We incorporated two strategies to promote credibility and trustworthiness of findings. First, the three authors routinely reflected upon, discussed, and analyzed how their biases about topics relevant to the study could inform the results. Second, we incorporated member checking to further enhance credibility. Approximately two to three months after participating in the interviews, participants were emailed a list of themes and sub-themes with descriptions and were asked to provide feedback. Specifically, participants were asked to rate the extent that they agreed with the themes collectively using a one to ten scale (1 = Strongly disagree, 10 = Strongly agree) and were invited to provide additional comments. Of the 16 participants who responded, all but two participants provided a rating of a 9 or 10 (M = 9.4, SD = 0.99, range = 6.5-10). 8/11 participants provided no further comments, 3/11 expressed excitement about the findings, and

5/11 provided additional comments reflecting on their personal experience and the themes. All comments are available in Appendix 1.

Results

Figure 1 contains a visual display of the research questions, themes, and sub-themes.

[INSERT FIGURE 1]

When and how does stuttering concealment develop and manifest in the school setting?

Three themes were identified which answered this research question. In Theme 1, we discuss how concealment begins early and not always knowingly. In Theme 2, we explore how children learn about being different and digest ableist messages about stuttering. In Theme 3, we describe how participants experienced and navigated stigma at school during a vulnerable time in development.

Theme 1: Concealment can begin early, not always knowingly

Participants shared how old they were when they first started concealing stuttering, as well as factors they think may have contributed to concealment. Although the study was qualitative, the sample size allowed for some descriptive analyses. All participants reported beginning concealment at 18 years of age or younger, with more than two-thirds hiding stuttering in elementary school (Figure 2).

[INSERT FIGURE 2 HERE]

Multiple participants shared that they began concealing stuttering before they understood what stuttering was or were conscious of the fact that they were trying to hide it: "I have

concealed stuttering for as long as I remember talking ... from the get-go (Matthew)." Huckleberry stated that wanting to get out of speaking situations riddled his "entire memory of talking." When he first started concealing, Auggie described being largely unaware of what he was doing and why, stating "I just I knew I didn't want to be on the phone. I didn't understand exactly what was happening, but there was just this really strong aversion to everything related to the phone." Matthew felt that as an adult, his choices to conceal were often conscious, but that he didn't "[think] about it in those terms" when he was in school. Others were more aware of concealment earlier on. Polly noted that concealment was her "default from very early."

Theme 2: Message received: "Stuttering is not OK"

For more than half of the participants, feeling different from others combined with implicit and explicit messaging that stuttering was not okay was enough to trigger the start of concealment. Huckleberry described it as "After so much hard wiring of 'stuttering is bad,' I think there's an inherent wiring of – 'Yeah, let's try not to stutter." Within this theme, we identified subthemes of realizing difference, implicit messaging, and explicit messaging that stuttering was not okay.

Subtheme 2a: Realizing difference.

For many, the timing of beginning to conceal coincided with realizing they were different from other people. Polly recalled realizing she was different when she noticed her sister did not speak the same way that she did. Louise shared "I just felt sort of like the odd one out because I was the only one who spoke that way." Daisy Duke described having "profound shame about [stuttering] already at four years old." Owen believed that concealment stems "from the shame associated with feeling like there was something fundamentally wrong that [he] couldn't fix."

Amanda said that, as a child, she thought stuttering was something that was "weird," "wrong," and "strange," and believed that it was something that she "wasn't supposed to be doing."

Subtheme 2b: Implicit Messaging.

Amongst most participants, the realization of being different was paired with implicit or explicit messaging that stuttering was not okay and not preferred. Examples of implicit messaging included feeling that stuttering was an "unspoken" (Olivia) or "hush-hush" (Taiko) topic within their families. Izzy said that "there was never a word for [stuttering]" in her family. Hilton Silver noticed his parents talked about stuttering "behind closed doors," which led him to believe "there was something not okay about this." Claire internalized the silence, stating the lack of acknowledgement "stuck with me in the sense of like it's so shameful, this thing, that people can't even talk about it." As a child, Sean recalled thinking "My dad's a successful guy [who stutters]. He's gotten through life hiding [stuttering]. Why can't I do the same thing?" Freddie, Taiko, and Daisy Duke reported similar dynamics with their adult family members who stuttered.

Other participants reported that they started to feel like it was not okay to stutter when they perceived that their stuttering was something that embarrassed important people in their lives: "[I] thought [my parents] were looking away because they were embarrassed or it was bad" (Amanda). Polly recalled a time when she went out to eat with her family and noticed that her sister "would get embarrassed... So [I] didn't want that. That felt really bad."

Participants also reported receiving implicit messaging through feedback from adults to control stuttering or modify speech, including being told to "slow down," "try again," or "try harder." Margaret said she "didn't want to deal with that, so then [she] would try and conceal it." Izzy remembered noticing "no one else was being told to slow down." For Rosalinda, this

feedback led to a lot of pain. She cried as she recalled thinking the following as a child, "In my head, [my mom] would rather I say less and have it be fluent than to say what I wanted to say [and stutter]." Auggie thought the advice his parents gave him came from a place of "concern" and that "there wasn't any hostility at all." Even Rosalinda, who received intense feedback that stuttering should be controlled as a child, said, "I don't think [my mom] was trying to hurt me. I think it was she really thought – your life will improve if you can get over this...It wasn't a bad intention, but it had a bad result."

Subtheme 2c: Explicit Messaging.

Participants also received explicit feedback that stuttering was a less preferred way of speaking. For many, listener reactions to stuttering, even when seemingly neutral, led to wanting to hide stuttering. After seeing listener reactions, Sean said "I was aware that… what I was doing was bad or that there was a negative perception of the way that I was talking." Casper said:

I definitely think the environment played a part in [hiding]. Just peoples' reactions to it. They would look concerned or like, they'll have like that like, inquisitive face, like what is he saying? Or people flat out laughing sometimes, so I felt definitely that those reactions kind of made me want to try and hide it.

Participants recalled times when people would directly comment on stuttering, for example Claire recalled how:

This classmate asked my friend, 'What is wrong with [her]? Why does [she] pause when [she] talks?' And so I think that led to like, [thoughts like] 'Oh my gosh, he heard this... I don't want anyone else to hear it.'

For many, listener reactions escalated to bullying at some point in their school experience. Bill described bullying as "the worst ... from then on I think I just became so ultracareful. And I just did not want to experience that again." Carson described hiding stuttering as "better" than being bullied. Multiple participants experienced chronic bullying, stated it happened "repeatedly... almost like a public shaming thing" (J.) and this bullying prompted participants to try to hide stuttering more to fit in. For some, teachers also contributed to bullying at school. After a struggled attempt to read aloud, Polly recalled that her teacher said: "Why don't you try that again, in English please?"

Outside of school, some people experienced teasing or bullying at home. Jason Betterman recalled a painful experience with his father:

I remember my father mocked me for stuttering when I was about 10ish years old...He went 'Can't you talk right, boy?' or something like that and... I just didn't feel comfortable talking to him, so I didn't talk to him for like years, really.

Daisy's son was stuttering, "she slapped his little legs and said things like that, 'stop that, stop that, stop that."

Theme 3: Navigating stigma

For the majority of participants, the timing of early experiences with concealment coincided with learning to navigate stigma at school and other social settings. This period was described as particularly overwhelming given that children and adolescents have limited resources and supports to cope with ableism. Participants reported concealing stuttering in a variety of ways and more than one person described their school experiences as traumatic. There were three subthemes within this theme.

Subtheme 3a: Limited resources to cope with ableism.

The implicit and explicit messages outlined previously, which can be considered forms of ableism, were exceptionally difficult for participants to cope with at a young age: "When you're a kid, all you know is that you're getting laughed at and you don't want to be laughed at, you know?" (Jason Jenya). Several participants struggled to process why they spoke differently and were being penalized for it by others. Jessie said that negative social experiences "made it feel like I had to conceal because if I'm being made fun of, there's probably something wrong with me." At least two participants coped by waiting and wishing for stuttering to go away. Polly remembered thinking stuttering was "just one of those annoying childhood things that I have to deal with, and then one day I'll be an adult." Jason Jenya emphasized that social devaluation is particularly difficult for children to deal with because they have "less control and outlets" for dealing with it. Participants described feeling powerless at school and some felt as though concealment was their only option. Hilton Silver described his "whole aspiration" at school as "don't let me get made fun of, and I'm just going to stay low." Amanda, who routinely made phone calls to a family member throughout childhood, described a two-year time period of being "so frustrated" when she would stutter on the phone that she would "slap [herself]" across the face repeatedly.

Subtheme 3b: Concealing takes many forms

Participants described numerous ways of concealing stuttering at school that could be considered as situational avoidance, linguistic concealment, and cognitive strategies. Auggie described situational avoidance as choosing to "opt out" of specific situations, such as choosing not to verbally participate in classes, electing not to take classes that required public speaking, and requesting not to do certain assignments. Sometimes the pressure at school was so high that participants chose to not go to school at all or arrive late. Approximately one-third of participants reported leaving the room during class to go to the bathroom, nurse's office, or go home as a concealment strategy: "I'd be like, 'Hey, can I go to the bathroom?' and wander the halls for ten minutes and hope that no one is reading anymore when I get back" (Sean). Linguistic concealment strategies included switching words, saying "I don't know" when called on, and generally keeping responses short. Cognitive strategies included rehearsal and pretending. At least two participants shared that they would choose the topic of their school presentations based on what they thought they would be able to say fluently: "You know, people would pick their topic based off interest. I would pick mine based off of – is that topic or that person's name easy for me to say?" (Claire). Participants also described concealing stuttering through various types of pretending. For example, Claire shared that she pretended she could not speak after she got her braces.

Subtheme 3c: School experiences can be traumatic

Several participants recalled experiences at school they described as traumatic: "a real physical sense of panic comes in... Like periods of time that are just completely dominated by me thinking about basically just getting out with the [sic] dignity" (Cedric). Participants shared examples of situations at school that were particularly difficult or where pressure to conceal felt

high. Participants frequently described reading aloud as "terrible (Freddie Brooks)" and "terrifying" (Izzy, Felix Felipe). Felix Felipe said:

If I knew that we were going to be going around the room and having to like read passages, like my mind would be in a panic... Like I would be thinking, 'Oh, my gosh. I have to speak. I stutter. Oh my.' I would just be freaking out.

Other high pressure, high concealment situations included presentations, first day introductions, roll call, and being called on without warning. Sophie recalled how difficult it was to say "here" each morning: "The word 'here' may seem like an easy thing for a fluent person to say... [but for me] it was like reading a whole speech."

More than one-fourth of participants shared that traumatic experiences at school contributed to physical symptoms of anxiety including "trembling" in class (Matthew) or walking to school with "knees shaking" (Daisy Duke). Other symptoms included sweaty palms, stomach aches, trouble sleeping, headaches, panic attacks, feeling generally sick, and anxiety and depression. Polly recalled that, as a child, she thought communication was highly stressful for everyone. She assumed everyone had stomach aches and stress at the thought of getting called on because she "didn't have a lot of clarity around that being abnormal."

Jason Jenya emphasized that these traumatic experiences were not one-off, stating children "have to go back into [discriminatory school environments]. It's not even like [hostile social experiences] happened. No, it's happening. It's happening over and over again, and they have to go back [to school]." Six people described that the trauma they experienced interfered

with their education: "[my stress levels were] through the roof, so I can't pay attention to what we're actually doing" (Cedric).

What do adults who stutter view as unhelpful in supporting kids who are concealing stuttering at school?

Theme 4: Therapy approaches rooted in conforming

When asked what would be unhelpful for children and young people who are concealing stuttering, more than one-third of participants mentioned the potential harms of speech therapy approaches rooted in conformity, which was developed into a theme with three associated subthemes:

Subtheme 4a: Valuing fluency reinforces concealment

Some participants expressed that they "learned" to conceal stuttering through fluency shaping techniques or other recommendations in speech therapy. Multiple participants condemned fluency shaping, describing it as "extremely damaging" (Sean) and "harmful" (Daisy Duke). Polly said her experience with fluency shaping "led [her] down a really dark path." Daisy Duke equated fluency shaping to "teaching kids to avoid stuttering moments." Participants also expressed that fluency shaping techniques increased "effort" of speaking (Rosalinda) and felt "unnatural" (Sean). Bill recalled thinking "I'm not going to do that soft contact thing because it sounds stranger than stuttering." Neville, however, shared that he liked learning strategies, but wished "there hadn't been so much pressure to use them." Multiple participants shared that their speech therapists explicitly taught them other ways to conceal stuttering, including being told to "sing" words (Freddie Brooks), run their fingers along the table (Jason Betterman), or "take a deep breath and reset" (Felix Felipe). Felix Felipe also shared that his speech therapist gave him

a pen to click in a rhythmic way to promote fluency. He said that eventually this trick "became an even bigger problem than [his] stuttering was."

Some participants also viewed praising fluency as encouraging concealment. Huckleberry said:

It's not uncommon to hear things like, "Oh, you sounded so well, good job. Which is to say, "Gee, thank you for not stuttering. We like you so much better when you don't stutter." And we just get told this all the time, day and night, and we believe it.

For Felix Felipe, the "constant praise" for fluency reinforced that "stuttering was something [he] shouldn't be doing." He shared that the effort of hiding was burdensome, stating "I don't think people understood just how heavy that was." Participants were rewarded for fluency with tangible items as well, including prizes and sweets. Polly shared that this type of reinforcement "dovetailed with [her] instinct" to conceal. Margaret, Polly, and Felix Felipe shared that they concealed, in part, to "please" their speech therapists. Polly recalled thinking "it's like I'm failing both of us" when she stuttered and likened her relationship with her speech therapist to having "Stockholm Syndrome."

At least three participants also expressed disdain for experiences in which their speech therapists counted or measured moments of stuttering in front of them: "clicking away on little counters or something while the kid is speaking – that's not going to be super helpful to being open about their stuttering" (Hilton Silver). Sophie described how her school speech therapist used an app to count moments of stuttering in front of her. She recalled that it was "so discouraging" and said it gave off impression that "[she] should hide [her] stuttering." Jason Betterman recalled that, at the end of the school year, his speech therapist praised him for

decreasing his percentage of syllables stuttered. He elaborated, "But then later I would kind of think, 'I don't understand why it's not helping in the classroom...' And it made me frustrated that either I was doing something wrong, or it wasn't really helping."

Subtheme 4b: Pathologizing clinical environments

Participants discussed how clinical environments contributed to them conceptualizing stuttering as pathology, rather than a neutral pillar of identity. Cedric, who only participated in private speech therapy at a local hospital as a child, discussed that the "scientific and pathological" environment perpetuated his inclination to hide stuttering. Polly recalled feeling "under a microscope" at her initial evaluation and thinking, "I really don't want to come back here." Notably, none of the participants reported having a hostile speech therapist, but instead speech therapists were often described as kind and warm. Yet, as children, participants were still sensitive to what they felt was the purpose of the interaction – to "fix" stuttering. Auggie remembered thinking "I got put into speech therapy... that means they thought there was a problem." Hilton shared that he cried at his first session in first grade and never went back. For Jason Jenya, the clinical setting was intensified by the lack of connection between him and his speech therapist, in part because of his status as a Black male:

"I wish I had had, you know, an SLP who just looked more like me. To be honest, sounded more like me. I didn't have any that stuttered, you know. I didn't have any that even spoke with my particular dialect."

Several participants voiced that they wished they were more included in decision making about their speech therapy and in how they were pulled out of class for speech therapy: "It was [like] 'You have to go with me right now' and that I did not have a say" (Sophie). There was not

a consensus on how to invite children to the therapy room. Some participants found it "strange" (Rudy) or "embarrassing" (Polly, Margaret, Sophie) for the speech therapist to interrupt the class and pull children out in front of their peers. Sophie elaborated that pulling children out of class in front of their peers may "trigger" negative feelings, especially for those who are "already ashamed of their stutter." Jessie, on the other hand, thought that her experience with being "secretly pulled out" of class may have contributed to concealment. Sophie recommended that speech therapists promote autonomy by asking children about their preference for how they arrive to speech therapy.

Subtheme 4c: Pressuring kids can backfire.

Participants expressed a feeling of helplessness at school due to a lack of participation options, describing that they had no choice but to do things that made them uncomfortable, and adults did not understand what they were and were not ready to do: "Not everyone is ready to face the music quite yet. And you can traumatize someone trying to force them to swim by throwing them into the pool" (Jason Betterman). Huckleberry emphasized that therapists should consider both stress and safety when encouraging children to face fears in communication:

We don't actually build resilience through just repeated exposure. We actually just take on more damage... The helpful ways to grow are when we're in a safe enough space and we're moderately stressed and can deal with it, with a little bit of stress and a little bit of discomfort, but then have a safe space to return to and recharge in.

Bill believed that being forced to verbally participate and stutter in front of the class as a child "gave [him] PTSD" and reinforced that he would "never" put himself in a similar situation again. Auggie had a contrasting view, stating, "there needs to be a more hard line approach" to

helping children "learn to be okay with themselves in public" early on.

What do adults who stutter view as helpful in supporting kids who are concealing stuttering at school?

Two themes, each with three underlying subthemes, were developed to capture what participants perceived would be helpful for children and young people who are concealing stuttering. These themes focused on creating supportive therapy environments and creating safe school environments.

Theme 5: Create supportive therapy environments

Subtheme 5a: Help kids wade through confusion

Participants emphasized that stuttering has to be a "discussable topic" (Daisy Duke) in speech therapy and that it is important for children to explore their experience with stuttering in a supportive environment. J. said, "We would rather talk about it and then deal with the consequences that come with it than just put it under the rug." Participants shared that they did not have the opportunity to talk openly about stuttering as a child, and, thus, had to deal with confusion about stuttering on their own. Around a third of participants shared that, in at least some point of their childhood, they did not understand what they were experiencing in their communication as stuttering: "I had no concept of what stuttering was. I had no idea why I stuttered. I just know that people told me to not do it or to slow down. And the more I tried, the harder it became" (Matthew). Olivia, a Black woman, shared that, as a child, she did not think she "fit what is seen as someone who would typically stutter," as she thought stuttering was something that only "white boys" did. Other participants remembered being confused and frustrated by the variability of stuttering:

I think that's where a lot of the shame comes in. It's like what is wrong with me?... I can talk perfectly fine on my own or to a dog. And as soon as it's someone or in a situation where I'm worried about being judged then I can't get the words out. (Bill)

Many participants expressed that, as a child, they did not understand that there were options for coping with stuttering beyond trying to "get rid of it" (Sean). Polly shared that she wished her speech therapist was not one that "had a list of things to practice, but more of just an ally to explore what could be." Rosalinda suggested that conversations with speech therapists could be guided with questions like "What would help you?" or "When the teacher calls on you in class, what is that like?" Jason Jenya said, "Kids will find their own solutions to problems if they just start talking about it."

Subtheme 5b: Develop advocacy skills.

The importance of developing advocacy skills was a recurring point for participants. Polly wished she had a school therapist who helped her "navigate how awkward it is [and] figure out how to be okay with stuttering." Participants expressed it would have been helpful to problem solve and practice difficult situations with their speech therapist. Sophie concealed stuttering because she "just didn't know how to bring it up" to people. Jason Jenya shared that when someone asked him why he stuttered he would "make up a story" because he didn't know what to say. Participants felt that it would have been helpful to practice or role-play how to explain what stuttering is to others, tell teachers why presentations are hard, help others understand that stuttering varies, rebuke stereotypes that stuttering is caused by nervousness, and practice self-disclosure. Casper felt that this practice would be important because if people asked him questions about stuttering, he "[could] at least answer them."

Another important part of advocacy skills pertained to helping children understand and respond to listener reactions. Several participants shared that having conversations to reframe why listeners react negatively to stuttering would be helpful. Casper described the importance of realizing "if people didn't like me for my stuttering, then that's mainly their problem and not mine." Jason Betterman felt that understanding "another person's reaction to my stutter is a reflection of them and not of me" helped him to "compartmentalize" negative social experiences. In addition, Jason Jenya emphasized that it also important for children to realize they "don't have to tolerate it." He shared that most people respond positively to a "gentle correction," and children can practice saying things like "Oh, please don't do that. I appreciate that you're trying to help me, but please don't do that."

Subtheme 5c: Validate feelings: it's okay to stutter

Several participants shared that it is critical for speech therapists to be responsive to the social and emotional components of stuttering. Rosalinda felt "if you don't know how to help people with [the emotional] part... you're going to hurt them." Daisy Duke said: "the way to help kids is to let them know that stuttering is okay... to encourage them to speak freely and easily." Neville, who shared that he cherished his relationship with his school speech therapist, said that his therapist's understanding of "the concept of shame" made her extremely helpful.

Participants expressed that validating feelings and experiences would be an important part of emotional support. Hilton Silver wished there had been "open, honest, and supportive help" for him as a child. Some expressed frustration with others "glossing over" (Jason Jenya) their struggles and wished they had been acknowledged with a phrase such as, "Wow, this is really tough, and this is valid" (Hilton Silver). Through tears, Jason Jenya emphasized the importance of recognizing the pain of being socially devalued as a child: "We have to let them

know - 'You're upset for a reason, and it is okay because anybody else going through that would be upset, too. You're right. That is messed up...It is okay that you are upset.'"

Finally, several participants reported that they wished they had explicitly heard "it's okay to stutter" as a child: "It's so easy, I think, for people or kids to get in their head that idea [that] there's something fundamentally wrong with them that needs to be fixed" (Owen). Polly expressed that children need repeated reassurance since they get inundated with the message that it's not okay to stutter in day-to-day life. Taiko said that, as a child, he needed to hear "that I had value; that I had something valuable to say." Jason Betterman discussed the importance of reassuring kids that they can meet their goals and stutter: "[tell them] they can still be the captain of the tennis team and still stutter. You can still get a girlfriend and stutter, whatever you want." Rosalinda wished speech therapists would acknowledge that kids are "doing the best they can" and reassure them by saying "however you talk is okay."

Theme 6: Create safe school environments

Subtheme 6a: Increasing belonging

Participants reported that finding places in school where they felt they belonged was critical in promoting their safety and comfort. For many, these places were classes or activities that emphasized nonverbal skills. Jason Betterman shared that joining sports gave him a "sense of community and belonging." Taiko remembered thriving in art class and feeling "valued" by his teacher. Others found solace in music classes like choir and dance where they "didn't have to worry about stuttering" (Margaret), and Sophie started coming "out of her shell" when she joined color guard.

Another suggestion for increasing belongingness pertained to helping children establish allies at school. Izzy said that being around supportive friends gave her the opportunity to "let

[her] brain rest a little bit." In middle school, Matthew struggled with a teacher who was demeaning to him when he stuttered while reading. He recalled that, after class one day, two friends told him: "the next time he does that, we're going to stand up and tell him how wrong that is." For Matthew, this act of allyship was extremely meaningful: "I can't tell you how much safer I felt – so much so that I found [one of the students] years later and...I told her what that meant to me."

Subtheme 6b: Explore accommodations.

Participants expressed complex views about the role of accommodations in supporting children who stutter at school:

There is such a fine line between – you don't want kids not to face their fears and to avoid things, but you also don't want to push them into things that are completely uncomfortable and [are] just going to do more harm than good" (Amanda)

Bill emphasized that there will be variability in terms of what children need to feel safe and comfortable at school, and that their needs will change over time, likening it to a "journey." Participants offered many suggestions for accommodations including alternative arrangements for presentations (e.g., with the teacher only), alternative modalities for earning participation points, more time for presentations, the option to pass during oral reading, and only calling on the child when they volunteer. Sophie also suggested the option for breaks: "my speech is overstimulating because it's a lot and sometimes I just need a break."

Participants had conflicting feelings about the opportunity to opt out of school activities entirely. Although some described times when they did not have to participate as "lifting a huge

weight off [them]" (Izzy) or a "huge relief" (Jason Betterman), there were cons to not participating as well. For example, Carson shared that not participating perpetuated her fear of stuttering and made her speech more tense when she had to talk in a similar situation later. Huckleberry emphasized the shades of grey between not participating at all and participating with fair expectations: "We've gotta figure out some like healthy, supportive, therapeutic ways to digest the stress in a safe enough space."

Subtheme 6c: Educate others

Participants expressed a need for adults in the school environment to understand stuttering and how to be supportive. Sean described teachers as "an extremely important part of the equation," and Daisy thought that all adult staff at school should be educated on the topic. Participants expressed that it would be helpful for school staff to understand that stuttering is variable and involves a loss of control, that advice to slow down or take a breath is unhelpful, and ultimately to appreciate that it's okay to stutter: "[showing] there are other people who know and who get it, who [they] can find support in. I think that would be really big" (Felix Felipe). Participants suggested that speech therapists could educate others about stuttering in staff meetings, one-on-one conversations, or Individualized Education Program (IEP) meetings. At least five people emphasized that it is critical to share the same sentiments with parents.

Participants also discussed the importance of peers having a basic understanding of stuttering, with knowledge delivered via classroom presentations. However, if there were presentations to peers about stuttering, participants emphasized that whether this occurs and how it occurs should be child-driven. Sophie recommended that the speech therapist, teacher, and child could have an "open discussion" about if it would be helpful to educate classmates and how the child is comfortable going about it (e.g., child and speech therapist co-present, child or

speech therapist present alone). Participants suggested that the presentation include information about how to be an ally and what is and is not preferred by their classmate who stutters. Neville felt that presentations are "probably helpful if done right, but also you need that culture of... trusting the teacher." Cedric agreed that if the child's autonomy is not promoted in the process a classroom presentation could "make things worse."

Discussion

The purposes of this study were to explore experiences with concealing stuttering in school-age children who stutter based on recollections from adults and to investigate their perceptions of how school-based speech therapy can be helpful and unhelpful for children who are hiding stuttering. We found that concealment can begin in early childhood shortly after the onset of stuttering with varying levels of awareness. Participants reported that exposure to implicit and explicit ableist messaging about stuttering contributed to their inclination to hide it, and that fluency-focused speech therapy reinforced their belief that it was not okay to stutter. Participants described that speech therapists could be helpful by promoting safe and supportive school environments and by being responsive to the social and emotional challenges that can accompany speaking differently at school.

Concealment is a Learned Social Response to Ableism with Roots in Childhood

Stuttering concealment is an inherently social phenomenon that is shaped by speakers, listeners, and the environment. Ableist social interactions build shame and teach children that stuttering is something they should hide. Consistent with reports from Constantino et al. (2017), participants shared that they explored different ways of concealing stuttering in order to fit in and protect themselves from social devaluation. Several participants recalled difficult social experiences at school and described them as traumatic. These experiences were not only

emotionally taxing, but also associated with physical symptoms of stress and panic. Although the majority of participants reported that they began to conceal stuttering during the elementary school years, three participants shared that all of their speaking memories were riddled with a conscious or unconscious inclination to hide or minimize stuttering. For these participants, first experiences with self-expression were enmeshed with feeling confused and unlike those around them.

Ableism is Not a Matter of Intention

Although stuttering is commonly understood as a multidimensional condition with cognitive and affective components, the role of ableism is often left out of conversations about how and why negative thoughts and feelings about communication develop. Readers may find that parts of the participants' stories were uncomfortable or even painful to read. Participants discussed complicated experiences with ableism in many contexts, including at home and in speech therapy. Speech therapists and parents were commonly described as warm, kind, and well-intentioned, but sometimes their actions did not align with what participants felt would be helpful in supporting them as a young person who stutters. It can be intimidating and disheartening to realize that the outcomes of our actions do not always align with our intentions, especially when we care about the person who is affected. Ableist acts are not always carried out by people who want to do harm; well-intentioned, caring people learn that fluent speech is preferred to stuttering because we live in a society that is not free of ableism. Stuttering-related ableism is a systemic social justice issue (Gerlach-Houck & Constantino, 2022). It would be inaccurate and oversimplified to label ableism as the "fault" of parents or speech therapists, who often care deeply and desperately want to help. Parents and speech therapists can, however, play a critical role in combatting stuttering ableism. To understand how stutterers are affected by

ableism, we must start by listening to what they have to say even if what is shared invokes feelings of discomfort, anger, or insecurity.

Resisting Ableism with Youth who Stutter in the School Therapy Setting: Practical suggestions

Many of the adults who stutter in this study described feeling isolated, unseen, and confused about stuttering at school. They described wishing that adults at school would have somehow acknowledged or validated the difficulties they were experiencing. This lack of acknowledgement is consistent with previous research indicating that teachers misunderstand how to support children who stutter in that they believe ignoring or not paying attention to it is helpful (Adriaensens & Struyf, 2016; Hearne et al., 2008). Facilitating open, supportive discussions about stuttering and how children who stutter deserve to be treated is one way that speech therapists can be helpful to children who stutter. Additionally, speech therapists could play an important role in educating teachers about how to be an ally to children who stutter in the classroom.

As discussed by our participants, speech therapists can support children who stutter by helping them unpack and unlearn the ableist messaging they get from society that stuttering is not okay or something they should not be doing. There is a need for speech therapists to understand stuttering from a social model of disability perspective, or to consider and be responsive to how environmental factors contribute to disablement. Fortunately, there is work in this area (mostly driven by people who stutter) that speech therapists can draw from to support their learning (e.g., Bailey et al., 2015; Campbell et al., 2019; St. Pierre, 2012). For example, speech therapists can assist in creating school environments that welcome and appreciate numerous variations in communication, including variations in fluency, communication

modality, and dialect. We can help children who stutter learn to advocate for how they deserve to be treated and understand that they are not responsible for how others respond to their speech.

We can involve students in developing their therapy goals and promote accessibility by securing accommodations. Speech therapists can also assist students in creating positive meaning around stuttering and building community with other children who stutter.

Another consideration for speech therapists is to learn more about the concept of neurodiversity – viewing and appreciating diversity in thinking, behavior and, for particularly people who stutter, communication itself (Constantino, 2018). The neurodiversity movement rejects ideologies focused on 'fixing' or 'curing' disabilities and encourages people to unlearn the pathologizing approach of the medical model (Pellicano & den Houting, 2021). The medical model focuses on the individual and perceived issues within that individual, and many of our participants talked about how they believed that stuttering was 'bad' and the clinical setting endorsed the view of stuttering as a medical condition needing treatment. In line with a neurodiversity approach, our participants particularly talked about how environments could be changed to adapt for people who stutter, rather than requiring the individual to change. The experiences shared by our participants support calls elsewhere to move away from the medical model towards greater appreciation of neurodiversity (Pellicano & den Houting, 2021), and critically, to listen to people who stutter themselves (Prabhat et al., 2022).

Considerations about Fluency Shaping Therapies

The results of this study suggest that there is a need to critically evaluate the ethics and implications of fluency shaping therapies, or approaches centered on promoting stutter free speech. Some participants in this study expressed views that fluency shaping therapies were not just unhelpful to them, but harmful. Consistent with previous research, many participants in the

current study described fluency shaping techniques as unpleasant (Corcoran & Stewart, 1998; Cream et al., 2003; Cream et al., 2004) and difficult to use outside of controlled therapeutic situations (Cream et al., 2003; Irani et al., 2012; Stewart & Richardson, 2004). Some participants reported that they learned concealment strategies in speech therapy, which is troublesome given that concealment has poor associations with distress and quality of life among adults who stutter (Gerlach et al., 2021). This finding is consistent with previous research that showed more than 20% of speech therapists in an Australian survey study reported that they sometimes, often, or always encourage their clients who stutter to avoid difficult words, topics, and syllables or keep answers short when feeling anxious about stuttering (Cuming et al., 2009).

Changing speech motor patterns is not inherently problematic, but the implicit or explicit rationale of *sounding fluent* or *conforming* to ableist standards for communication certainly could be. The desire for spontaneous, enjoyable, and meaningful communication is not unreasonable, and for many people, may require learning to reduce physical tension during moments of stuttering to promote easier communication. Shifting the rationale for behavioral change away from fluency and toward ease and spontaneity could help children realize that successful communication is about how speech *feels* rather than how it *sounds*. Instead of modifying speech to sound fluent, children can learn to modify moments of stuttering (to the extent they want to) so that speech feels easier and less struggled (Rodgers & Gerlach-Houck, 2022).

Account for Concealment in Assessment Procedures

The findings from this study are consistent with previous research indicating that children and adolescents who stutter perceive a need to keep stuttering a secret (Blood et al., 2003; Erickson & Block, 2013). It is notable that one-third of the sample reported that they did not participate in school-based speech therapy as a child. For some, the lack of support could be

attributed to attending non-public schools (e.g., homeschool, private school) or schools outside of the United States. However, it is also possible that concealment of stuttering contributes to children who stutter being under-identified for speech therapy in school settings. This highlights a need for assessment procedures that do not rely solely on the overt characteristics of stuttering, but also account for the internal experience of anticipation and loss of control. Administering assessments such as the Stuttering Anticipation Scale (a free resource; Jackson et al., 2018) and the Overall Assessment of the Speaker's Experience with Stuttering (Yaruss & Quesal, 2006) could be helpful starting points for understanding a child's inner experience with stuttering in the school setting.

Limitations and Future Directions

Our sample is limited in that it represents only a small group of people, but qualitative research does not claim to be generalizable to all people in terms of traditional quantitative views of generalizability (Smith, 2018). However, what qualitative research *does* do is enable us to highlight rich and deep detail about people's experiences and to enhance appreciation of particular phenomenon (in this case, concealment; Lewis et al., 2014). Although three participants completed schooling outside of the United States, our sample is primarily bound within the socio-cultural context of the United States. Thus, findings may not be applicable in other countries, particularly where access to speech language therapy, and even education, may be more challenging. As we also deliberately sought out people who conceal stuttering, we will be missing the perspectives of people who do not conceal or conceal only a little (although it is unclear how prevalent concealment is). Additionally, the majority of participants in this study reported having experience with stuttering self-help or support communities, which may have influenced their experiences with and views about concealment. For example, prior research has

shown that people who stutter with self-help experience place less value on the ability to produce fluent speech compared to those without (Boyle, 2013). Our study also relies on retrospective data. Our participants' memories may be biased or viewed differently within hindsight, as some participants were recalling events that happened decades ago. Additionally, current childhood experiences of both school and speech therapy could be different for children today compared to ten, twenty or even longer ago, as our participants were diverse in age. A qualitative study with children and young people who stutter would be beneficial to understand whether our findings do apply to experiences in the current time. Despite these limitations, our findings highlight important topics for discussion particularly within speech therapy and education.

There are several future research directions relevant to concealment among young people who stutter and how speech therapists can be supportive. First, it would be helpful to further explore the topic of concealment in depth with children and adolescents who are currently concealing stuttering. Ideally this work would be longitudinal given that tendencies to conceal stuttering can change over time (Boyle & Gabel, 2020). Second, the current study suggests a need for research on trauma-informed therapy approaches for stuttering. Several participants described having experiences in school that felt traumatic. Speech therapists could play an important role in reducing the likelihood that students who stutter encounter traumatic social experiences or providing them with a safe place to discuss these experiences if they do occur. Finally, there is a need for research examining intersectional experiences with stuttering and concealment. In our study, both women and Black people reported not understanding that what they were experiencing was stuttering until adolescence or early adulthood. One of the participants shared that it did not occur to her that it could be stuttering because she thought stuttering was only experienced by young white boys. People with multiple marginalized

identities may have unique experiences with stuttering and concealment and resources should be devoted for further exploration.

Conclusion

Our study, to the best of our knowledge, is the first qualitative investigation of the experience of stuttering concealment within a developmental perspective. By reflecting on their childhood experiences, our participants show how from a young age, people who stutter learn potentially harmful messages around stuttering, which contribute to a feeling that stuttering is something that should be hidden. Notions of fluent speech being the ideal perpetuated stigma and was inadvertently endorsed at times by speech therapy. We believe it is vital that speech therapists and educators actively engage with tackling ableism and seek to make environments more accessible and supportive for children and young people who stutter. By doing so, future generations will perhaps learn that they do not have to conceal to be accepted.

References

- Abdalla, F. A., & Louis, K. O. S. (2012). Arab school teachers' knowledge, beliefs and reactions regarding stuttering. *Journal of Fluency Disorders*, *37*(1), 54-69.
- Adriaensens, S., & Struyf, E. (2016). Secondary school teachers' beliefs, attitudes, and reactions to stuttering. *Language, Speech, and Hearing Services in Schools*, 47(2), 135-147. https://doi.org/https://doi.org/10.1044/2016_LSHSS-15-0019
- Bailey, K., Harris, S. J., & Simpson, S. (2015). Stammering and the social model of disability: Challenge and opportunity. *Procedia-Social and Behavioral Sciences*, *193*, 13-24. https://doi.org/https://doi.org/10.1016/j.sbspro.2015.03.240
- Blood, G. W., & Blood, I. M. (2004). Bullying in adolescents who stutter: Communicative competence and self-esteem. *Contemporary Issues in Communication Science and Disorders*, *31*(31), 69-79. https://doi.org/https://doi.org/10.1044/cicsd_31_S_69
- Blood, G. W., & Blood, I. M. (2007). Preliminary Study of Self-reported Experience of Physical Aggression and Bullying of Boys Who Stutter: Relation to Increased Anxiety *104*(3c), 1060-1066. https://doi.org/10.2466/pms.104.4.1060-1066
- Blood, G. W., Blood, I. M., Tellis, G. M., & Gabel, R. M. (2003). A preliminary study of self-esteem, stigma, and disclosure in adolescents who stutter. 28(2), 143-159. https://doi.org/10.1016/s0094-730x(03)00010-x
- Boyle, M. P. (2013). Psychological characteristics and perceptions of stuttering of adults who stutter with and without support group experience. *Journal of Fluency Disorders*, *38*(4), 368-381. https://doi.org/10.1016/j.jfludis.2013.09.001
- Boyle, M. P. (2018). Enacted stigma and felt stigma experienced by adults who stutter. *Journal of Communication Disorders*, 73, 50-61. https://doi.org/10.1016/j.jcomdis.2018.03.004
- Boyle, M. P., & Gabel, R. M. (2020). "Openness and progress with communication and confidence have all gone hand in hand": Reflections on the experience of transitioning between concealment and openness among adults who stutter. *Journal of Fluency Disorders*, 65, 105781. https://doi.org/10.1016/j.jfludis.2020.105781
- Braun, V., & Clarke, V. (2021). Thematic Analysis: A practical guide. Sage Publications.
- Campbell, P., Constantino, C. D., & Simpson, S. (2019). *Stammering pride and prejudice: Difference not deficit.* J&R Press.
- Coalson, G. A., Crawford, A., Treleaven, S., Byrd, C. T., Davis, L., Dang, L., Edgerly, J., & Turk, A. (2022). Microaggression and the adult stuttering experience. *Journal of Communication Disorders*, 95, 106180.
- Constantino, C. D. (2018). What can stutterers learn from the neurodiversity movement? *Seminars in Speech and Language*, *39*(4), 382-396. https://doi.org/10.1055/s-0038-1667166
- Constantino, C. D., Manning, W. H., & Nordstrom, S. N. (2017). Rethinking covert stuttering. *Journal of Fluency Disorders*, *53*, 26-40. https://doi.org/10.1016/j.jfludis.2017.06.001
- Corcoran, J. A., & Stewart, M. (1998). Stories of stuttering: A qualitative analysis of interview narratives. *Journal of Fluency Disorders*, 23(4), 247-264. https://doi.org/https://doi.org/10.1016/S0094-730X(98)00020-5
- Cream, A., Onslow, M., Packman, A., & Llewellyn, G. (2003). Protection from harm: the experience of adults after therapy with prolonged-speech. *International Journal of Language & Communication Disorders*, 38(4), 379-395. https://doi.org/https://doi.org/10.1080/13682820310001598166
- Cream, A., Packman, A., & Llewellyn, G. (2004). The playground rocker: a metaphor for communication after treatment for adults who stutter. *Advances in Speech Language Pathology*, 6(3), 182-187. https://doi.org/https://doi.org/10.1080/14417040412331283048
- Cuming, S., Rapee, R. M., Kemp, N., Abbott, M. J., Peters, L., & Gaston, J. E. (2009). A self-report measure of subtle avoidance and safety behaviors relevant to social anxiety: Development and

- psychometric properties. *Journal of Anxiety Disorders*, 23(7), 879-883. https://doi.org/10.1016/j.janxdis.2009.05.002
- Davis, S., Howell, P., & Cooke, F. (2002). Sociodynamic relationships between children who stutter and their non-stuttering classmates. *Journal of Child Psychology and Psychiatry*, 43(7), 939-947. https://doi.org/10.1111/1469-7610.00093
- Erickson, S., & Block, S. (2013). The social and communication impact of stuttering on adolescents and their families. *Journal of Fluency Disorders*, *38*(4), 311-324. https://doi.org/10.1016/j.jfludis.2013.09.003
- Evans, D., Healey, E. C., Kawai, N., & Rowland, S. (2008). Middle school students' perceptions of a peer who stutters. *Journal of Fluency Disorders*, 33(3), 203-219.
- Ezrati-Vinacour, R., Platzky, R., & Yairi, E. (2001). The Young Child's Awareness of Stuttering-Like Disfluency. *Journal of Speech, Language, and Hearing Research*, 44(2), 368-380. https://doi.org/10.1044/1092-4388(2001/030)
- Gerlach-Houck, H., & Constantino, C. D. (2022). Interrupting Ableism in Stuttering Therapy and Research: Practical Suggestions. *Perspectives of the ASHA Special Interest Groups*, 7(2), 357-374.
- Gerlach, H., Chaudoir, S. R., & Zebrowski, P. M. (2021). Relationships between stigma-identity constructs and psychological health outcomes among adults who stutter. *Journal of Fluency Disorders*, 105842. https://doi.org/http://dx.doi.org/10.1016/j.jfludis.2021.105842
- Gerlach, H., Totty, E., Subramanian, A., & Zebrowski, P. M. (2018). Stuttering and labor market outcomes in the United States. *Journal of Speech, Language, and Hearing Research*, *61*(7), 1649-1663. https://www.ncbi.nlm.nih.gov/pmc/articles/PMC6195060/pdf/JSLHR-61-1649.pdf
- Glaser, B., & Strauss, A. (1967). *The Discovery of Grounded Theory: Strategies for Qualitative Research*. Sociology Press.
- Hatzenbuehler, M. L., Phelan, J. C., & Link, B. G. (2013). Stigma as a fundamental cause of population health inequalities. *Am J Public Health*, *103*(5), 813-821. https://doi.org/10.2105/AJPH.2012.301069
- Hearne, A., Packman, A., Onslow, M., & Quine, S. (2008). Stuttering and its treatment in adolescence: The perceptions of people who stutter. *Journal of Fluency Disorders*, *33*(2), 81-98.
- Irani, F., Gabel, R. M., Daniels, D., & Hughes, S. (2012). The long term effectiveness of intensive stuttering therapy: A mixed methods study. *Journal of Fluency Disorders*, *37*(3), 164-178. https://doi.org/https://doi.org/10.1016/j.jfludis.2012.04.002
- Jackson, E. S., Gerlach, H., Rodgers, N., & Zebrowski, P. M. (2018). My client knows that he's about to stutter: How can we address stuttering anticipation during therapy with young people who stutter? Seminars in Speech and Language,
- Langevin, M., Packman, A., & Onslow, M. (2009). Peer responses to stuttering in the preschool setting. *American Journal of Speech-Language Pathology*, 18(3), 264-276.
- Lass, N. J., Ruscello, D. M., Schmitt, J. F., Pannbacker, M. D., Orlando, M. B., Dean, K. A., Ruziska, J. C., & Bradshaw, K. H. (1992). Teachers' perceptions of stutterers. *Language, Speech, and Hearing Services in Schools*, 23(1), 78-81.
- Lewis, J., Ritchie, J., Ormston, R., & Morrell, G. (2014). Qualitative Research Practice. In J. Ritchie, J. Lewis, C. McNaughton Nicholls, & R. Ormston (Eds.), *Qualitative Research Practice* (2nd ed., pp. 347-366). Sage.
- McAllister, J. (2016). Behavioural, emotional and social development of children who stutter. *Journal of Fluency Disorders*, *50*, 23-32. https://doi.org/https://doi.org/10.1016/j.jfludis.2016.09.003
- Murphy, B., Quesal, R. W., & Gulker, H. (2007). Covert stuttering. *Perspectives on Fluency and Fluency Disorders*, 17(2), 4-9. https://doi.org/https://doi.org/10.1044/ffd17.2.4
- NVivo Transcription. In. (2020). QSR International Pty Ltd. https://portal.mynvivo.com/account/transcription

- Pellicano, E., & den Houting, J. (2021). Annual Research Review: Shifting from 'normal science' to neurodiversity in autism science. *Journal of Child Psychology and Psychiatry*. https://doi.org/https://doi.org/10.1111/jcpp.13534
- Prabhat, P., Rombouts, E., & Borry, P. (2022). The Disabling Nature of Hope in Discovering a Biological Explanation of Stuttering. *Journal of Fluency Disorders*, 105906.
- Rodgers, N., & Gerlach-Houck, H. (2022). "Knowledge Without Action Means Nothing": Stakeholder Insights on the Behaviors That Constitute Positive Change for Adults Who Stutter. *American Journal of Speech-Language Pathology*, 1-16.
- Smith, B. (2018). Generalizability in qualitative research: Misunderstandings, opportunities and recommendations for the sport and exercise sciences. *Qualitative Research in Sport, Exercise and Health*, 10(1), 137-149. https://doi.org/https://doi.org/10.1080/2159676X.2017.1393221
- Smith, L. #Ableism. Center for Disability Rights. https://cdrnys.org/blog/uncategorized/ableism
- St. Pierre, J. (2012). The construction of the disabled speaker: Locating stuttering in disability studies. *Canadian Journal of Disability Studies*, *1*(3), 1-21. https://doi.org/https://doi.org/10.15353/cjds.v1i3.54
- Stewart, T., & Richardson, G. (2004). A qualitative study of therapeutic effect from a user's perspective. *Journal of Fluency Disorders*, 29(2), 95-108. https://doi.org/https://psycnet.apa.org/doi/10.1016/j.jfludis.2003.11.001
- Van Borsel, J., Brepoels, M., & De Coene, J. (2011). Stuttering, attractiveness and romantic relationships: The perception of adolescents and young adults. *Journal of Fluency Disorders*, *36*(1), 41-50. https://doi.org/http://dx.doi.org/10.1016/j.jfludis.2011.01.002
- Werle, D., & Byrd, C. T. (2021). College professors' perceptions of students who stutter and the impact on comfort approaching professors. *Journal of Fluency Disorders*, 67, 105826. https://doi.org/https://doi.org/10.1016/j.jfludis.2020.105826
- Yaruss, J. S., & Quesal, R. W. (2006). Overall Assessment of the Speaker's Experience of Stuttering (OASES): Documenting multiple outcomes in stuttering treatment. *Journal of Fluency Disorders*, 31(2), 90-115. https://doi.org/https://doi.org/10.1016/j.jfludis.2006.02.002
- Yeakle, M. K., & Cooper, E. B. (1986). Teacher perceptions of stuttering. *Journal of Fluency Disorders*, 11(4), 345-359.

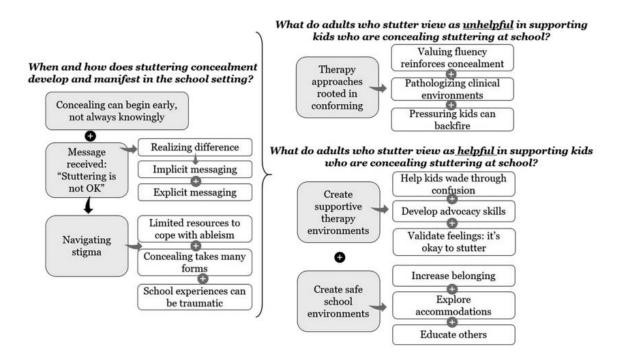


Figure 1
Research questions, themes, subthemes

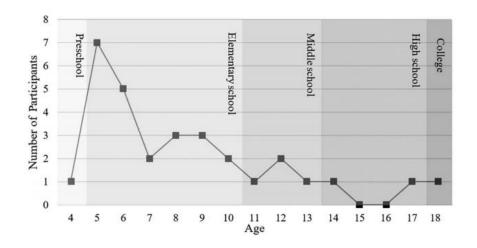


Figure 2

Age concealment started according to participant self-report (*N*=30)

Table 1
Participant information

Pseudonym	Age	Gender	Occupation	Years of experience with self- help	Estimated years of school speech therapy	Other relevant information about school experience, if available
Jason			Physical	7	13	
Betterman	31	Male	therapist			
			Speech-	3	One	
Hilton			language		session	
Silver	63	Male	pathologist			
Daisy Duke	66	Female	Speech- language pathologist	23	0	Parochial school
Rosalinda	46	Female	Scientist	3	6	Taroemar Senoor
Felix Felipe	32	Male	Consultant	8	11	Public school
T CHA T CHIPC		TVILLIC	Post-	8	3	Tuone sensor
Freddie			doctoral	_	_	
Brooks	33	Female	associate			Mix of public and private school
			Software	6		
Neville	28	Male	developer		3	
			Medical	6	7	
Rudy	28	Male	technologist			Catholic, all male high school
Cedric	23	Male	Law clerk	1	0	Catholic school
Jessie	38	Female	Accountant	5	5	Moved schools several times
Huckleberry	40	Male	Engineer	13	4-5	Homeschooled for approximately 7 years
J.	40	Female	Graduate student	5	0	Attended school outside of the United States
Polly	41	Female	Non-profit director	20	0	
Sean	30	Male	Government consultant	2	0	
Bill	52	Male	Banker	1	0	Attended school outside of the United States
Izzy	42	Female	Proofreader	6	0	Private school
Olivia	30	Female	Sourcing recruiter	0	0	
Matthew	45	Male	Professor	19	0	
Taiko	56	Male	Entrepreneur	25	6	
	•		Speech- language	10	0	
Claire	30	Female	pathologist			
Margaret		Female	Graduate student	6	6	Completed majority of schooling outside of the United States
Casper	25	Male	Barista	1.5	1	
Sophie	19	Female	College student	7	13	
Louise	19	Female	College student	2	0	Homeschooled
George	75	Male	Retired	25	10	
Owen	39	Male	Engineer	5	7	
Carson	24	Female	Personal trainer	0	13	-

Auggie	36	Male	Writer	10	13
			Principal	6	3
			technical		
Jason Jenya	47	Male	trainer		
			Speech-	16	8
			language		
Amanda	49	Female	pathologist		

Table 2 Examples of meaningful units and code labels

Participant	Meaningful unit	Code(s)
Claire	"And it was very traumatic for me because I could only say about three words and the whole class was laughing. And why would you want to purposely put yourself through another traumatic event."	Trauma at school Stuttering can be traumatic
Bill	"And I think that's where a lot of the shame comes in. It's like what is wrong with me when I can talk perfectly fine on my own or to a dog. And as soon as it's somewhere [or] with someone or in a situation where I'm worried about being judged, then I can't get the words out."	Shame Need to wade through confusion
Polly	"[I would] lay on the bus because my stomach hurts so badly. And I know it's stress. And I sit through every class, and I think about the next class and that teacher is going to call on me. But like, I didn't have a lot of clarity around that being abnormal."	Physical symptoms of anxiety Feeling powerless Need to wade through confusion
Rosalinda	"If you can teach a kid from the time that they're young [that they] speak differently from other people [and] that's just true. The other part is and it's OK. And if they can feel comfortable about it, if they can go out into the world and when somebody gives them a look, realize it's not a critical look, it's a confused look, I think that would help the community and children as a whole."	Change relationship to listener reactions

Table 3 Examples of code clusters in theme development

Theme	Contributing cluster of codes		
Subtheme 4c: Pressuring kids can backfire	Forcing of any kind can be hurtful		
	Aiming to please		
	Feeling like a failure		
	Need for safe sign with teacher		
	Accommodations are complex		
Subtheme 6c: Educate others	Educate school personnel		
	General school culture of accepting differences		
	Help parents understand		
	Team-based approach to education about concealment		