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Organizing Life Around Stuttering: A Qualitative Examination of Stuttering Through the Lens of Complex Trauma

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ABSTRACT

Purpose: We examined the cognitive, emotional, and physiological experiences of adults who stutter (AWS) through a trauma lens. Specifically, we explored the cumulative effects of repeated exposures to stressful stuttering moments and the ensuing environmental reactions, hypothesizing that some AWS internalize these formative interpersonal experiences and develop complex trauma symptoms during childhood that they carry into adulthood.
Method: We conducted semistructured interviews with a purposeful sample of 20 AWS to understand their experiences from childhood into adulthood, across home, school, speech/language therapy, work, and social environments. The interviews were transcribed and analyzed via applied and reflexive thematic analyses to establish multilevel themes within a thematic network.
Results: Many AWS experienced singular and repetitive stressful moments from stuttering, which they reported as overwhelming experiences typically within close relationships. They often faced these experiences through their formative development, causing them to develop survival responses, negative self-beliefs, and meager social connections. These maladaptive responses reinforced a complex system of defenses over time to protect themselves as they came of age. A bias toward self-preservation prevented many of the AWS from building rich social lives. Over half of the participants described dissociative sensations from stuttering or others' negative reactions to it.
Conclusions: The themes align with established conceptualizations of complex trauma, lending credence to the limited evidence base that stuttering can yield trauma-related symptoms stemming from repeated overwhelming experiences within interpersonal contexts. These findings motivate future efforts to establish trauma-informed prevention and care for stutterers.
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"It's good to talk about this because it is real trauma, you know, and I'm still dealing with that stuff now … I think a lot the self-hate I still deal with is from all of this. And you know what, I may have this for the rest of my life," expressed Paul, a 45-year-old participant in this study, as he reflected on his through-life experience of stuttering. The "stuff" is what adults who stutter (AWS) regularly describe—feeling strong somatic reactions and profound psychological toll (e.g., Engelen et al., 2024; Lei et al., 2024; Tichenor & Yaruss, 2018). Stuttering has a lifelong impact, but why is it often so all-consuming? We hypothesize that some stutterers experience trauma-related symptoms from the repetitive, cumulative effects of overwhelming formative interpersonal experiences with stuttering starting in childhood and continuing through adulthood—a form of traumatic stress known as "complex trauma." Complex trauma refers to the aggregate effects of recurring interpersonal traumatic experiences, typically arising in early life, that disrupt core developmental processes and contribute to enduring difficulties in regulation, identity, and relational functioning (Cook et al., 2003).

We are not the first to explore stuttering through the lens of trauma. Its origins are found in the early works

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of pioneering therapists who stuttered, such as Freund, Sheehan, and Van Riper. While Freund (1966) sought to highlight "internal stuttering," Sheehan (1970) laid the groundwork with the approach–avoidance conflict theory, and Van Riper (1982) put language to what it felt like to stutter on the inside, such as the term "little deaths" to capture dissociative states of consciousness in stuttering, which is a notable symptom of trauma. Later, Starkweather and Givens (2003) explored the commonalities between the experience of stuttering and post-traumatic stress disorder (PTSD) and the implications for stuttering therapy. They conceived that the pattern of PTSD development with its preoccupation with the traumatic event, replaying of memories, and habituated safety behaviors was often mirrored in stuttering. They observed that AWS often "organized their lives around their stuttering"—a key indicator of traumatic stress.

Where stuttering differs from PTSD, and how we sought to build upon these initial connections, is the *daily* exposure to overwhelming experiences, which makes the trauma from stuttering a contemporary experience instead of a singular event in the past. This was reflected in recent work by Gerlach-Houck et al. (2023), who reported that one third of their participants referred to the physical symptoms of stuttering at school as traumatic, happening "over and over again" (p. 104). One critical component of sustained trauma, likely stemming from adverse childhood experiences (van der Hart et al., 2006), is dissociation—a discontinuity in the normal integration of mental processes including memory, consciousness, emotion, perception, body representation, and motor control (*Diagnostic and Statistical Manual of Mental Disorders, Fifth Edition* [*DSM-5*]). In lay terms, people describe it as "blacking out" or feeling "out of body," which was reported in majority of AWS in a thesis by Heite (2001; a graduate student of Starkweather's) and Tichenor and Yaruss's (2018) recent study. As we bridge the gap between the growing literature base in psychology on complex trauma and evidence of the multifaceted adverse impact of stuttering, our goal is to inform our understanding of how AWS organize their lives around traumatic elements of stuttering to protect themselves from repeated harm—a byproduct of living under overwhelming distress.

Contemporary Conceptualization of Trauma

The *DSM-5* defines PTSD as a condition that can develop after exposure to a singular traumatic event such as violent crime or horrific accidents. As a result, four main symptoms develop: reexperiencing the traumatic event in the here and now (e.g., flashbacks), avoidance (e.g., staying away from situations that remind them of the traumatic event), negative changes in thinking and mood (e.g., feeling shame, numb), and hyperarousal (e.g., being on guard for threat). For diagnosis, symptoms must last more than a month and cause functional impairment, including social and occupational distress (*DSM-5*).

For many years, PTSD was the only traumatic stress disorder that was recognized by scientific and clinical communities. In 2018, the *International Classification of Diseases, 11th Revision* (*ICD-11*), introduced a new type of traumatic stress disorder called "complex PTSD" (CPTSD) that develops from repetitive harm within interpersonal relationships, such as childhood abuse or domestic violence. Often, behavioral response patterns in CPTSD align with the four Fs: fight (aggression), flight (avoidance), freeze (surrender), or fawn (appease). Over time, the person develops a system of internal defenses to survive, which can yield (a) emotional dysregulation, (b) negative self-image, and (c) difficulty forming and maintaining relationships (Courtois, 2004). To diagnose CPTSD, the person must meet the diagnostic criteria for PTSD and also experience these three additional symptoms. Many people experience persistent difficulties in these areas, but their symptoms may not reach the threshold for a formal PTSD or CPTSD diagnosis, which would indicate subclinical PTSD or CPTSD. Even without diagnosis, subclinical trauma can still have significant effects on functioning, development, and health—often at comparable levels to those with full diagnoses (Mylle & Maes, 2004)—which closely aligns with the World Health Organization's biopsychosocial model of disability (World Health Organization, 2001).

Traumatic stress adversely impacts an individual's ability to perceive, represent, integrate, and act on internal and external stimuli because of disruptions to attention, working memory, and the processing of affective stimuli (van der Kolk, 2014). Similarly, stutterers can become overwhelmed by the information demands left behind by daily, overwhelming speaking experiences, resulting in what can be regarded as an information-processing, dissociative disorder (van der Kolk, 2014). Those with traumatic stress disorders struggle with integrating past inner conflicts with their daily demands, overloading the capacity to live in the present (van der Kolk et al., 1996). Just as traumatic stress fragments a person's ability to remain grounded in the present, the daily burden of stuttering can fracture one's capacity to process, connect, and respond—making the trauma framework a powerful tool for understanding its impact.

Understanding Adverse Impact of Stuttering Through the Lens of Trauma

There has been substantial advancement in our understanding of the manifold ways that stuttering negatively affects individuals. Core symptoms of complex trauma—

disruptions in self-concept shaped by stigma, heightened anxiety, and persistent avoidance—emerge across many different traumatic experiences (van der Kolk, 2005). These overlapping features provide a framework for understanding how stigma, anxiety, and avoidance so commonly associated with stuttering may be understood through a trauma lens.

Stigma

Stigma is an "attribute that is deeply discrediting" (Goffman, 1963, p. 3) as those without a certain stigma may denigrate, overcompensate for, or ignore the stigmatized individual. When a person with the stigmatized attribute encounters public stigma such as stereotypes and discrimination, they may internalize it, yielding shame, embarrassment, and self-blame (Corrigan & Rao, 2012; Link et al., 2002). This can be particularly damaging during childhood because people largely form their self-concepts and social bonds within their parental relationships and the supposed safety of their home environments (Walker, 2013). As a result, many may come to fear negative evaluations from their caregivers to whom they turn for safety and healthy models during early development, as implicated in attachment theory (Bowlby, 1988).

Much of what our field understands about public and internalized stigma about stuttering is based on the work of Boyle and colleagues. Based on a decade of research (Boyle, 2013, 2015; Boyle & Fearon, 2018), Boyle et al. (2023) proposed a theoretical model of how stuttering leads to adverse outcomes through the lens of stigma: When a person who stutters experiences public stigma, they become "aware" of stigma against stuttering, "anticipate" future exposure, "feel" negative emotions (e.g., fear, shame) from real or potential social devaluation, "believe" such judgments, and "self-discriminate." Through this mechanism, the compounding effects of public and internalized stigma not only shape how stutterers view themselves but also contribute to heightened emotional distress as they anticipate and fear stigmatizing experiences.

Anxiety

The most investigated psychological factor associated with stuttering is anxiety, specifically social anxiety, because stuttering occurs within social contexts. Social anxiety is a chronic condition characterized by fear of humiliation, embarrassment, and negative evaluation in social or performance-based situations (American Psychiatric Association, 2013). Most studies on social anxiety in stuttering suggest that negative social experiences—likely linked to public stigma—begin in childhood and persist into adulthood, fueling the fear of negative evaluation across the life span (Bricker-Katz et al., 2009; Menzies et al., 2009; Mulcahy et al., 2008).

The key assumptions of social anxiety (Clark & Wells, 1995; Rapee & Heimberg, 1997) are that socially anxious individuals: (a) assume others will negatively evaluate them and overestimate the consequences of those negative evaluations (Boyle et al., 2023), (b) develop a negative mental representation of the self seen by the audience (Tudor et al., 2013), (c) engage in negative self-focused attention and attentional biases toward social threat (Bauerly, 2022; Rodgers et al., 2020), (d) employ cognitive-behavioral strategies to temporarily reduce anxiety (Jackson et al., 2015; Lowe et al., 2021), and (e) engage in anticipatory and post-event processing (Croft & Byrd, 2023; Tichenor et al., 2025). In addition, socially anxious individuals often underestimate their ability to cope with negative evaluation, which further amplifies anticipatory fear (Clark & Wells, 1995). Heightened self-focused attention can also distort social exchanges, limiting opportunities to disconfirm feared outcomes and thereby reinforce anxiety (Rapee & Heimberg, 1997). These processes reflect broader disruptions in information processing, which align with the ways traumatic stress can interfere with attention, working memory, and integration of social–emotional cues (van der Kolk, 2014). Altogether, research has shown that social anxiety is rooted in social cognition. This is supported by Alm (2014), who highlighted three main social cognitions that influence interactional behavior among stutterers: (a) the significance of possible consequences, (b) the risk of stuttering, and (c) the uncertainty about the best way to act. Thus, stutterers' thoughts and perceptions about how they talk and how they are perceived are what gives rise to social anxiety. These evaluative cognitions are similarly found in those who repeatedly experience trauma or endure its long-term symptoms (van der Kolk et al., 1996).

Avoidance

A central way to minimize state anxiety is to avoid the very thing that the person thinks is threatening. When an anxious person avoids a feared situation, they may feel temporary relief because the threat was successfully circumvented. However, over time, as avoidances compound, they often become maladaptive habits that stop the person from experiencing neutral or positive situations that can weaken the perceived threat (Wong & Rapee, 2016). The topic of avoidance has long been of interest to SLPs and researchers as it is such a pervasive component of the experience. As stutterers anticipate upcoming stuttering, rapid decision-making processes unfold, and many speakers lean on avoidance by substituting words, changing topics, or letting someone else speak for them, to name a few (Jackson et al., 2015). Safety behaviors of stuttering extend beyond avoiding anticipated words and situations (Lowe et al., 2017); stutterers also show avoidance of stuttering-related emotions and identifying as a person who stutters (Gerlach-Houck & Rodgers, 2022). These

avoidance behaviors are self-protective in the short term, but typically counterproductive in the long term.

Purpose

Coming of age with stuttering shapes one's identity and influences mental, emotional, physiological, and social development. To understand why and how, we sought to bridge established literature on contemporary conceptualizations of trauma and the sustained adverse impact of stuttering by examining stuttering through the lens of complex trauma. As a preliminary step toward addressing this gap in the literature, we qualitatively report on themes from the through-life narratives of a purposeful sample of 20 AWS. Our findings lay critical groundwork for expanding efforts to understand the consuming effects of stuttering and propel the development and evaluation of trauma-informed approaches for stuttering therapy.

Applying the framework of trauma to stuttering involves important interpretive boundaries. While in the current study, we explore how the lived experiences of AWS may mirror the symptom profile of complex trauma, these findings do not imply that participants could meet the diagnostic criteria for CPTSD. Qualitative data allow for understanding meaning, context, and subjective experience; they do not determine clinical status. Thus, there is a conceptual risk in applying diagnostic language too literally, as doing so could blur the distinction between interpreting experiences through a trauma lens and asserting that those experiences constitute a trauma diagnosis. Our intention is not to pathologize stuttering, but to use existing trauma frameworks to help us understand the pervasive emotional, relational, and physiological impact reported by participants.

Method

The study procedures were approved by The University of Iowa Institutional Review Board (#202308315).

Participants

We recruited AWS through purposeful sampling from the researchers' professional and community networks, with the aim of including participants across diverse racial/ethnic and gender backgrounds. To be eligible, participants were required to (a) be at least 21 years of age; (b) be proficient in English; (c) self-identify as a person who stutters; (d) live in the United States; (e) have past or current involvement in holistic speech therapy and/or stuttering self-help; and (f) have publicly shared details of their stuttering journey (e.g., through stuttering community events, social media, podcasts) regarding how they have worked toward stuttering acceptance, congruence as a person who stutters, and willingness to understand their stuttering experience. Inclusionary criteria (e) and (f) were included to ensure participants had already engaged in reflective processing of their stuttering experiences, reducing the risk of retraumatization during the interview process. Importantly, the study was not designed to imply that all stutterers have had traumatic experiences or that stuttering itself should be equated with trauma. Rather, we sought to learn from individuals who had already articulated psychological, emotional, and somatic dimensions of living with stuttering, as these participants were especially positioned to speak to the possibility of trauma-like responses within their lived experiences.

A total of 20 AWS participated in one-on-one interviews. This included nine adults who identified as men, eight as women, and three as nonbinary, ranging in age from 21 to 77 years (M = 37.65, SD = 14.63). The racial makeup of the sample include 13 adults who identified as White, three as Black or African American, two as Asian, one as Latino, and one as multiracial. All participants had at least some speech therapy, ranging in cumulative duration between 0.5 and 25 years. At the time of the study, half of the participants were not in speech therapy, seven were currently enrolled, and three were thinking about starting soon. Additional demographic details and pseudonyms that the participants chose for themselves are provided in Table 1.

Procedure

In a recruitment e-mail to prospective participants, the study was described as an exploration of the lived experience of stuttering through a trauma-informed lens. We noted the sensitive nature of the topic and emphasized that the participants' prior involvement in therapeutic and community contexts were indicators of potential fit for the study. The e-mail included a link to the consent form. We then e-mailed consented AWS to schedule their virtual interview along with the interview guide so they could review the questions before their scheduled interview.

The interview guide was composed of 29 questions targeting their experiences with stuttering from childhood through adulthood, including home, school, and speech therapy environments (see Supplemental Material S1). These questions were modeled after the International Trauma Questionnaire (ITQ; Cloitre et al., 2018)—a self-report measure used to assess the core elements of CPTSD: difficulties in affect regulation, self-concept, and relationship functioning. We did not use the ITQ questions verbatim; rather, we adapted the underlying constructs to the context of stuttering, using the ITQ as a framework to explore how AWS might describe experiences

Table 1. Participant demographics.

Pseudonym	Age (years)	Gender	Race/ ethnicity	Education	Occupation	Therapy	Interview duration (hr)
Aidan	26	Male	Black	Bachelor's degree	Personal trainer	18 years in and outside of school	2.15
Alberto	41	Male	Latino	Some college	Photographer	4 years outside of school	2.55
Aminot	32	Female	Black	Graduate degree	Physician	2 years in and outside of school	1.22
Anne	24	Female	White	Bachelor's degree	Graduate student	< 1 year outside of school	1.98
Ashley	21	Male	White	Some college	Student	10 years in and outside of school	1.30
Blair	28	Female	White	Bachelor's degree	Marketing specialist	15 years in and outside of school	2.12
Bryce	24	Male	White	Bachelor's degree	Special education teacher	0.5 years outside of school	1.58
Colin	48	Male	White	Graduate degree	Attorney	As a child; unsure about duration	3.23
Courtney	43	Female	White	Graduate degree	Nonprofit	10 years outside of school	1.77
Crystal	29	Female	Asian	Graduate degree	Social worker	20+ years in and outside of school	1.70
Fox	28	Nonbinary	White	Bachelor's degree	Assistant teacher	13 years in school	1.52
Garnet	21	Nonbinary	Mixed	Some college	Student	12 years outside of school	2.32
Gillian	32	Nonbinary	White	Bachelor's degree	Human resource analyst	14 years in and outside of school	2.43
Grace	42	Female	White	Graduate degree	Speech-language pathologist	20 years in and outside of school	2.52
Hopper	63	Male	White	Bachelor's degree	Journalist	20 years outside of school	2.02
J	42	Female	Asian	Graduate degree	Graduate student	2 years outside of school	2.33
Paul	50	Male	White	Bachelor's degree	Small business owner	5 years outside of school	1.57
Sir Phil Letterman	33	Male	White	Graduate degree	Physical therapist	22 years in and outside of school	1.83
T.V.	49	Female	Black	Associate's degree	Manager	25 years outside of school	1.50
Victor	77	Male	White	Some college	Writer	2 years outside of school	1.52

that align with trauma-related processes. The ITQ was selected because it is one of the most thoroughly investigated, reliable, and validated tools for both research and clinical assessment of PTSD and CPTSD.

The interviews were conducted by the second and third authors (split evenly), each of whom are certified speech-language pathologists (SLPs) with over a decade of experience conducting clinical and research interviews with AWS. Both have invested in trauma-informed skills and applied these throughout the study. At the outset of each interview, participants were reminded that some questions might be difficult to answer; that they could skip any questions they preferred not to answer; and that the goal was to create a safe, nonjudgmental space. During the interviews, the researchers monitored participants' nonverbal cues to ensure emotional safety, offered supportive and reflective responses when participants shared challenging experiences, and made space to honor emotions as they arose. Offering interviews online enabled us to reach a more diverse sample and also provided participants with the comfort and safety of their chosen environment and allowed them to take breaks as needed. Furthermore, research supports the validity of telepractice for stuttering evaluation, showing that online assessments can be comparable to in-person approaches in duration, clinical outcomes, and participant experience (McGill et al., 2021).

Interviews ranged from 1.22 to 3.23 hr (M = 1.97, SD = 0.49) and were recorded with Zoom's built-in record

function. Recordings were transcribed verbatim by trained research assistants. Upon completion, participants received $40 compensation.

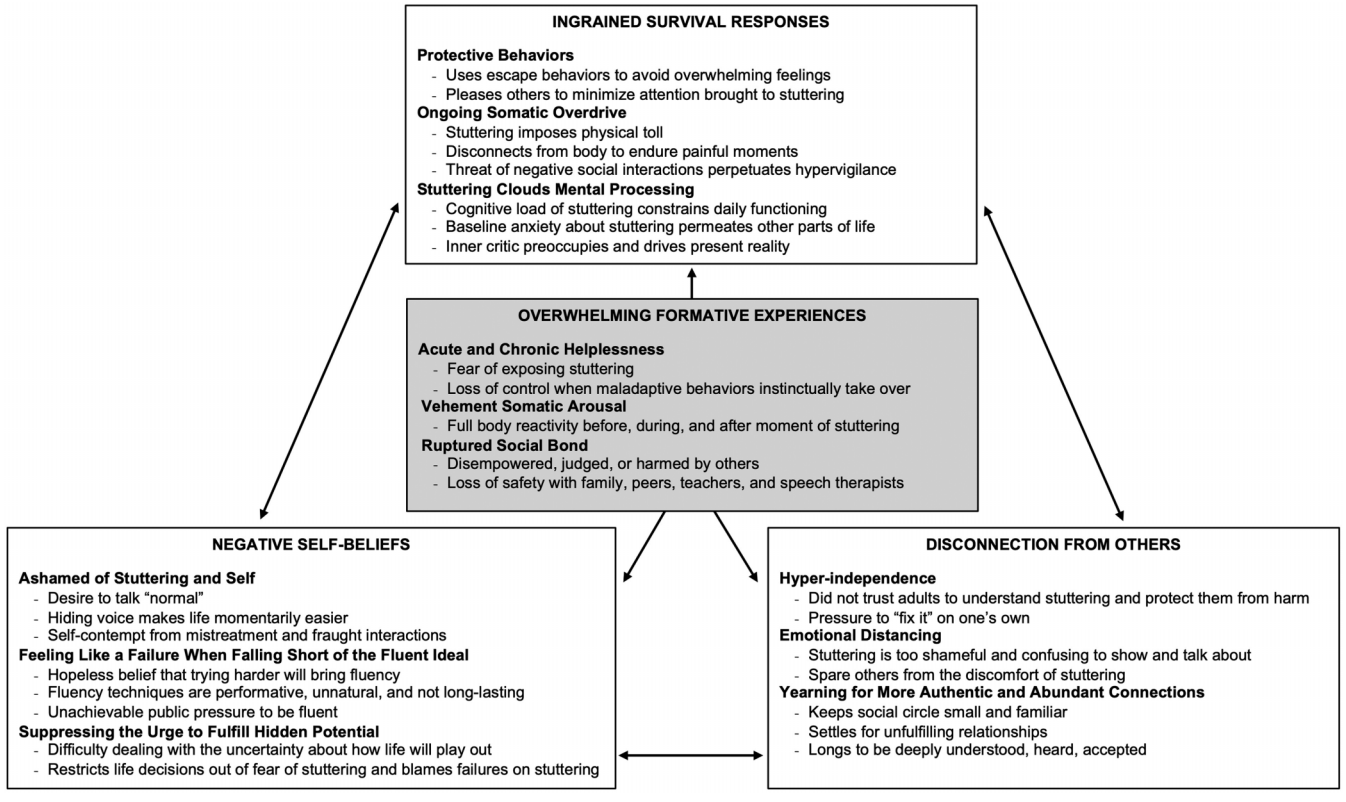
Data Analysis and Credibility

We used reflexive thematic analysis (Braun & Clarke, 2006, 2022), with additional procedures from applied thematic analysis (Attride-Stirling, 2001), to develop multilevel themes including basic, organizing, and global themes. "Basic themes" are low-level, fundamental patterns found in the data that take on meaning when considered within the context of other similar basic themes. Related basic themes are grouped to form "organizing themes," which are mid-level trends that start to form broader concepts. Clusters of related organizing themes form "global themes," which encompass the overarching ideas of the data set and summarize key findings at the highest, most comprehensive level. Due to the interconnection among the resulting themes, we visually present our three-tiered themes as a thematic network (see Figure 1).

Our analysis was composed of iterative steps using both inductive and deductive processes. We began with inductive analysis—a bottom-up approach—where we coded meaningful units within each transcript that answered our primary research question, which was to understand how stuttering can be experienced as complex trauma that perpetuates into adulthood. To do so, we uploaded the transcripts to Taguette (Rampin & Rampin, 2021), which is a free, open-source qualitative research tool. We assigned each transcript to one of the authors to code by highlighting each meaningful unit within the transcript and assigning a brief descriptive tag to each using the constant comparative methods (Glaser & Strauss, 1967).

After we completed inductive coding, we applied a top-down deductive process to organize the codes. We used the four domains of Courtois' (2004) framework for complex trauma—formative traumatic events, difficulties with emotional regulation, negative self-beliefs, and relational challenges—as an orienting structure to explore how participants' stuttering experiences aligned with or diverged from established trauma constructs. Importantly, we did not force codes into these categories; the four categories served as a heuristic lens rather than a prescriptive framework. When data did not fit, we retained them as independent codes and considered them in our iterative

Figure 1. Thematic network documenting the overwhelming formative experiences in the center gray box and the resulting system of defenses that is reinforced over time in the surrounding white boxes.



theme development. Such contrary cases were explicitly noted and discussed at research team meetings to ensure that the final themes reflected the breadth and diversity of participants' accounts. Once the codes were grouped into the four categories (which eventually became our global themes, although we reworded them to more closely reflect the experiences that participants shared in their interviews), we combined similar codes into basic themes and further grouped those into organizing themes. Through numerous meetings, we collaboratively decided on the final wording of all themes.

We incorporated several methods to establish the credibility, depth, and applicability of the findings. First, all authors worked to calibrate their coding process. To do this, we each independently coded the same first transcript, identifying examples of what constituted meaningful units and creating tags to collectively understand the analytic process. After we each coded the same transcript, we met to discuss our processes and resolve discrepancies. Second, we met periodically as the analysis evolved to review, identify, combine, and revise the codes. Third, once the data set was fully analyzed and all themes were drafted, we solicited feedback from all participants on the clarity, breadth, and relevance of the themes. For this member-checking process, we e-mailed each participant Figure 1 (which contains some adjustments in its current form, reflecting a few minor wording changes we made following member-checking feedback), along with a glossary of some terms within the figure that we expected to be unfamiliar to lay people. Specifically, participants were asked to rate the extent to which they agreed with the themes collectively using a 1–10 scale (1 = *strongly disagree*, 10 = *strongly agree*) and invited to provide additional comments to clarify wording or capture something that was missing. Of the 20 participants, 15 responded and provided a mean rating of 9.5 (*Mdn* = 10, mode = 10, range: 8–10, *SD* = 0.80). Eleven participants had no suggested edits, two provided feedback that was very specific to their own experience that did not align with general experiences of the AWS we interviewed, and two participants suggested wording changes for two basic themes, which we incorporated into the final thematic network (reflected in Figure 1).

Results

We developed four overarching global themes that addressed the primary research question, each composed of three mid-level organizing themes and several low-level basic themes. These are outlined in Figure 1 and described in detail in the following sections. In the first global theme, we deconstruct how repetitive traumatic experiences related to stuttering shaped their formative development, perceptions, and connections. In the second global theme, we report how participants developed maladaptive responses to cope in social contexts. In the third global theme, we describe how participants developed negative self-beliefs as they came of age with stuttering. In the final global theme, we depict how stuttering constrained participants' efforts to build rich social lives. All quotes are presented verbatim from participants with personally chosen pseudonyms, with minor redactions (e.g., obscured profanity) to maintain appropriateness for publication while preserving the speaker's intended tone.

Global Theme 1: Overwhelming Formative Experiences

All participants shared singular and repetitive overpowering moments within their closest relationships that shaped their experiences of stuttering during their formative development—that is, during childhood and adolescence when they developed their core sense of self, relationships, and coping style. This theme is presented in the centermost shaded box in Figure 1.

Organizing Theme 1: Acute and Chronic Helplessness

Participants described how stuttering made them feel helpless during stuttering experiences—within their mind and body and in relationship with important others. These feelings of helplessness were "acute" in that they were sudden, overwhelming feelings of fear or loss of control in specific moments of communication. They were also "chronic" as they spurred long-term maladaptive patterns that repeatedly undermined participants' agency over time.

Basic Theme 1a: Fear of exposing stuttering. Participants frequently noted that their earliest memories of being afraid to stutter stemmed from speaking aloud in school, particularly "popcorn reading" where students were called on haphazardly to read aloud. Their fear of talking and exposing what they came to know as stuttering followed shortly thereafter. Aidan's monthly class presentations gave him nightmares. As vulnerable targets of both direct and indirect harm, there was little most participants could do to defend themselves besides guard against exposing their stuttering. Blair explained about being self-conscious: "I'm just thinking all these thoughts that are about their impression of me and start to feel exposed, like I'm caught." The fear of exposure began in most childhood homes because the participants usually only discussed stuttering with family if it was about its frequency, resultant bullying, or speech therapy, rather than how they felt. Ashley admitted, "We always talked about how worse or better my stutter was at times, but

never how it made me feel or the effect it had on my daily functioning."

Basic Theme 1b: Loss of control when maladaptive behaviors instinctually take over. Many participants felt unable to do anything about the subconscious behavioral adaptations that occurred once stuttering began. J noted how anxiety flowed without feeling its onset. Crystal captured the out-of-control feeling as being physically unable to get out of it once she starts. "Usually I feel quite helpless," Alberto said about grinding his teeth while stuttering.

Organizing Theme 2: Vehement Somatic Arousal

Participants shared that the embodied experience of stuttering was a spectrum of physical sensations that differed depending on whether it was before, during, or after a stuttering moment.

Basic Theme 2a: Full body reactivity before, during, and after stuttering.

Before: For a few participants, the somatic anticipation of stuttering woke them up in the middle of the night. Then, they started their days by anticipating a particular moment of struggle, or they were already on guard, scanning their daily schedules. Certain situations that made many participants highly reactive were the first days of school, new classes, presentations, and class participation more generally, which frequently led to hypervigilance in these environments. Colin said his anticipation disrupted his appetite and sleep. Courtney was consumed by the anxiety even if class participation was only once a month. For some, knowing they would inevitably stutter triggered rushes of adrenaline. Sir Phil Letterman explained, "There's a freak out moment initially and sometimes there's a spidey sense of when it's going to come up. But when it sneaks up on you, there's panic and inside, my brain is searching for a way out." Crystal said that her heart rate would immediately rise and blood would "pump everywhere." Bryce and Fox had anxiety rise from their chests into their throats. J tensed her chest, jaw, and articulators as her body tried to control the upcoming moment in a way that said, "We're going to talk now, get ready!" Most participants shared the experience of labored or constricted breathing.

During: As the moment of stuttering begins, some participants conveyed how they panicked. Anne said her panic attacks would "rise, rise, rise," whereas Gillian described a white-knuckling panic mode: "all I could think was *get out, get out, get out.*" Five participants felt warming sensations from the rush of blood and adrenaline, and a few would sweat or get flushed cheeks. J pushed hard to get out of the "stuckness." Hopper and T.V. squeezed the air out of their chests and felt like they would pass out. This tension typically led to involuntary behaviors, such as head jerks, neck spasms, and jaw tremors that disrupted communication, linking back to Basic Theme 1b. Victor recounted how once he strained a neck muscle during a block on his name.

After: Once the release occurs, several participants noted an initial adrenaline release as their minds and bodies would come down from the intensity. Aidan referred to it as a deactivation of his entire body. Aminot described feeling on edge and taking a long time to calm down. Many shared that they felt utterly exhausted and a sense of relief because they survived the moment. Fox described the effort it took to recover as "audible expiration," whereas Grace would sweat and get headaches. A handful of others felt momentary relief, but their anxiety, fear, and tension remained activated because they had to prepare for the next moment of stuttering. Aidan described that he could sense the next block coming as the last one ended.

Organizing Theme 3: Ruptured Social Bond

Most participants reported feeling emotionally mistreated by those with whom they were expected to develop trusting relationships. Their social bonds were broken and rebroken without repair, often yielding guilt, shame, and grief.

Basic Theme 3a: Disempowered, judged, or harmed by others. Every participant shared moments of being singled out and belittled by others for their stuttering, leaving them feeling judged and fearful of how others would perceive them. Aidan's friend told him his classmates looked forward to watching him struggle in class. Hopper was overlooked for his valedictorian speech. For Anne and Garnet, their friends openly questioned them about what was wrong with them when they stuttered. For Paul, however, not saying anything about stuttering was equally difficult: "I would stutter in front of them, and I would just feel like they would just feel bad for me and just give me some space and kind of act like it wasn't happening." There were also targeted, personal insults. The instances ranged from a classmate handwriting a representation of stuttered speech in Aminot's yearbook, Fox's family laughing at her as she struggled, and nicknames given to Alberto and Hopper for how they talked. Eight participants recalled at least one bully in their lives who repeatedly latched on to their stuttering, some who carried on for years.

Most participants recalled how others made stuttering seem shameful and wrong. Blair recounted, "I felt like I didn't know [stuttering] was a big thing until [my family] kind of made it a big thing." For Garnet, it was their SLP who made them believe they should be ashamed of their stuttering. Still other participants were made to feel that they could simply stop stuttering, and if they did not, it

was because they were not trying hard enough to fix it. Aidan had a prospective prom date turn him down with an ultimatum: only if he stopped stuttering.

Basic Theme 3b: Loss of safety with family, peers, teachers, and SLPs. Every participant shared at least one instance in which they felt unsafe with a regular conversational partner, including a parent, relative, friend, classmate, teacher, or SLP. For more than half of the participants, there was a distinction between how their father and mother approached their stuttering that led to a "bad cop–better cop" dynamic—the father reacted harshly or without emotional compassion, and the mother followed with a loving-yet-negative reinforcing tone—both unaccepting of stuttering.

Father: Many participants conveyed a range of reactions from their fathers that made them fear or avoid stuttering in their presence. Some noted outright rejection and invalidation to apathy and, in several instances, repeated aggressive responses. "I remember the hand signal," said Hopper, as he modeled an upside-down peace sign that his father gestured to him to use his fluency techniques. He continued, "It felt like an assault … as if [the signals] could control [my blocks]." Less discreetly, at 10 years old, Sir Phil Letterman remembered having a part-word repetition at home and his father mocking it, saying, "Can't you speak right?" J's dad got mad when she stuttered, "How hard is it to talk; you think and you speak!" In Grace's experience, her father—a covert stutterer himself—used to yell at her, that she was not trying hard enough to "cure" herself like he had.

Mother: There was greater variability in the reactions of the participants' mothers, with some gently promoting the "fix it" approach and showing pity, while others directly invalidated their children's experience. The most egregious was J's mother who physically abused her at times largely because of how frequently she stuttered. When Anne confided, "Hey, I kind of had a panic attack today," her mom laughed and responded, "You didn't have a panic attack today, those are for people who have actual anxiety." Furthermore, Anne's mom would burst into laughter publicly when Anne struggled to say her name. Even when their moms stuttered themselves, Garnet and Hopper were given false hope that stuttering could go away. However, for several others, they felt the pity behind the gentle prodding to relax, slow down, and work more on their fluency techniques. Aidan's mom held a harder line saying there was nothing anyone could do about the bullying at school unless he put in the effort to stop stuttering.

Other immediate family members: Five participants mentioned denigrating experiences that involved their sibling or grandparent. Gillian's grandmother—who hid that she, herself, stuttered as a child—pressured Gillian through a childhood-long effort to find and finance a "fix" for Gillian's stuttering. During a speech therapy consultation, Gillian's grandmother explained that she felt bad for Gillian's friends who had to listen to Gillian stutter, thereby pushing Gillian to use a delayed auditory feedback (DAF) device against Gillian's will.

Peers and teachers: In addition to bullying and mocking, several participants described instances in school when they were overwhelmed with humiliation in front of their entire classroom for either stuttering or comments made by their peers and teachers. Bryce felt pressured to "just spit it out," Anne's college professor questioned whether she knew her name in a front of a large lecture hall, and Paul was told to calm down when talking in front of the class because he was causing a problem with his classmates. A few noted these instances were particularly harmful because the teachers did nothing to help end the laughter.

SLPs: Beyond the directives for fluent speech, participants shared examples of moments in which their SLPs made them feel unsafe. There were several participants who described a self-imposed guilt dynamic; because stuttering was not acceptable by their SLP, participants felt pressured into fluency and perfecting the techniques in the therapy rooms to appease their SLP. Paul remembered as a child, his therapist recording his stuttering, playing it back for him, and him crying and leaving the therapy room, never returning because he did not feel safe there. Courtney experienced years of verbal and physical mistreatment from her SLP: "She had this program … " Courtney described, that had a microphone synchronized with a chest strap to monitor her breathing and continuous phonation. Her SLP raised her voice if Courtney stuttered, and Courtney admitted, "I was just praying I wouldn't stutter in front of this woman."

Global Theme 2: Ingrained Survival Responses

The participants detailed an inner toll of stuttering that felt like survival—moment-to-moment, day-to-day, and across their lives. The effort recruited to stutter or conceal it motivated escape tactics and long-term cognitive and physical strain, which, in time, disconnected the mind–body synchrony during stuttering moments. This theme is presented in the center-top white box in Figure 1, feeding from the overwhelming formative experiences.

Organizing Theme 4: Protective Behaviors

To defend themselves from moments of stuttering, participants did a variety of things to blunt the impact of overwhelming feelings.

Basic Theme 4a: Uses escape behaviors to avoid overwhelming feelings. Escape behaviors helped participants get out of dealing with or processing overwhelming feelings that came with stuttering. Most participants described behaviors that physically separated them from having to endure the overwhelming feelings. Some would physically leave their classrooms to avoid being exposed. Anne recalled, "I remember English classes, where I would avoid and just go to the bathroom every time they pulled out a book." Several feigned being sick, either at home or at the school nurse's office. Several participants turned to self-inflicted physical pain to ground themselves, in part, to get relief from flashbacks, momentary pain, or loneliness. Victor admitted, "If I had to read aloud in class … I kept a thumbtack in my pocket and I would jam the thumbtack into my palm, thinking that the pain of that would take away the pain of stuttering." To deal with loneliness, T.V. sought sexual attention from boys and became a mom at 14 years old. A handful of participants shared behaviors that turned into addiction to numb the pain from stuttering. Paul divulged that he was an alcoholic and a drug addict in his 20s, which he directly attributed to his lonely and isolated lifestyle resulting from stuttering. For Sir Phil Letterman, video gaming was a distraction that led him to become both addicted and a top-ranked gamer.

At times, self-isolation shielded them from harm but had broader negative social consequences. Paul, upon entering adulthood, reflected how he "started to isolate a lot more, date less as I grew older just because the- it was- it was feeling insurmountable of how to present myself to, like, a partner, to the opposite sex." Similarly, Sir Phil Letterman described an experience in college when he turned down an opportunity to have lunch with a classmate because "that was my comfort zone—self-isolating." Uniquely, a few participants described how they adopted safe public personas to evade teasing in school, such as Aidan being the quiet, smart kid because he was afraid to talk. Others kept the overwhelm to themselves as a form of protection because they thought no one could understand how stuttering made them feel. "I was like 'no-no one gets any of this … I'm-I'm internalizing all of this,'" Fox said about not sharing their emotions or feelings.

Basic Theme 4b: Pleases others to minimize attention brought to stuttering. Because some of the participants were made to feel that stuttering was wrong, they felt the need to compensate for it by putting others' needs above their own. Courtney explained, "And so day-to-day struggles … I just stuffed them down because I would just picture my mom crying at night and I was like, 'Nope!'" J also kept silent, swallowing her pride: "I will probably open my mouth and stutter more to defend myself, and that just proves their point even more, 'See you are doing it right now, and that's something very wrong.'" Grace felt obligated to rise to every demand to overcompensate for the way she talked: "It-it taught me that you're here to please others, like you-you have to do better because you're not enough and this isn't okay, and you need to work harder."

Organizing Theme 5: Ongoing Somatic Overdrive

In describing the physiological experience of stuttering, participants noted the physical toll as an impediment to their daily lives and frequently unbearable. The mere threat of negative interactions—notwithstanding those that actually occurred—was enough to keep them locked in somatic overdrive, effortfully revved up and on alert, expending a constant draw of energy. Over half of the participants described some form of dissociation during and after the moment of stuttering and, to a lesser degree, before the stutter.

Basic Theme 5a: Stuttering imposes physical toll. As described previously in Basic Theme 2a, the physical arousal before, during, and after moments of stuttering, as well as after a long day, was physically draining. More than half of the participants discussed needing a decompression period after a long day of stuttering or avoiding. Anne expressed, "When I get home to my partner, I'm like 'I can't talk' and 'I have to lay on the floor.'" Gillian wanted to curl up and not do anything. After school, Garnet prioritized getting home to lay in bed because their body felt physically and emotionally heavy. Courtney detailed, "For years in middle school, I laid down on the bus on the way home because my stomach was so f***ed up from my anxiety."

Basic Theme 5b: Disconnects from body to endure painful moments. Participants described how it felt when they disconnected from their bodies to endure painful moments, commonly in the classroom or when they had to say their name, or during long blocks, unexpected or inescapable interactions, or when none of their avoidance or escape behaviors "worked." Fourteen (70%) of the participants who experienced dissociation used specific words and phrases to describe the overall feeling of being out-of-body. To some participants, like Anne, there was an immediate fight or flight response before she felt "way out of my body" and blacked out. Others described having tunnel vision and feeling trapped in a sense of distorted time and space. Aminot described how it felt like she was no longer present in her body because her anxiety reached a level of panic, recounting, "I feel like I lose track of, like, time, like, space … I'm in like a tunnel vision kind of thing where it's, like, I don't really know what's happening … a little bit of distance from how intense the emotion is." Crystal detailed a similar feeling as a "deep mind–body fracture." There was detachment and a loss of

presence in these moments, an inability to choose adaptive coping behaviors, linking back to Basic Theme 1b. Ashley described, "I could basically feel my entire body just kind of freezing and really trying to work hard to do something, but I just couldn't … I was kind of trapped there." Courtney remembered a time in school when she had to memorize a Shakespeare soliloquy and could not recall what she said or how long she talked but that, "I had not been in that room, essentially, during it." Dissociation typically occurred during moments of stuttering, but Grace recalled dissociating "after" stuttering to minimize processing the hurtful listener comments that followed moments of stuttering.

Basic Theme 5c: Threat of negative social interactions perpetuates hypervigilance. Participants described living under constant threat of negative social interactions. To some, this felt like survival mode, and to others, it felt like they were always planning their avoidance or escape. Colin experienced this for many years, reflecting, "Sometimes you don't see it coming and sometimes you do … but there's always a threat there that someone's going to want you to say your name on the spot or read something, and it's kind of terrifying." Courtney described it as "every waking moment … it was so all-consuming … I would get to school and each class, you know, and if they weren't popcorning, if they were going in order, it's getting out of the room … just avoiding, escaping, escaping, escaping everywhere and-and anticipatory anxiety and planning all day long."

Organizing Theme 6: Stuttering Clouds Mental Processing

Most participants explicitly recounted how most of their cognitive and emotional bandwidth was allocated to navigating what felt like a stuttering minefield.

Basic Theme 6a: Cognitive load of stuttering constrains daily functioning. Stuttering preoccupied participants' minds, as they fixated on how much they might or did stutter. At least five participants noted their anticipation of stuttering specifically burdened their mental functioning. Paul reflected, "Just [going] through the whole day of, like, negotiating and hiding and trying to pull all my tricks and maybe I could get through a whole day and no one ever saw me stutter. So that should be a success, but it's so exhausting." Even as adults, Crystal described how stuttering took over her mind, and T.V. said, "I'm a-a-always thinking about it."

Basic Theme 6b: Baseline anxiety about stuttering permeates other parts of life. The side effects of stuttering caused participants to develop specific fears, anticipation, and somatic responses that overgeneralized as anxiety they carried throughout their days. For some, it was constant with periods of intense panic; for others, it was specific to certain social situations. Colin conceded, "I kind of worry now as an adult, honestly, because I feel like I've led a very high stress, high anxiety life for a long time." For at least half of the participants, it led them to psychotherapy or to use anti-anxiety medication. Some participants, like Anne, sought help for anxiety from a psychotherapist before an SLP. Ashley said he tried anti-anxiety medication to help with "the bodily anxiety symptoms that I dealt with as a result of my stutter."

Basic Theme 6c: Inner critic preoccupies and drives present reality. About half of the participants described how they took their anger, frustration, and shame from stuttering out on themselves, typically with an inner voice that monopolized their daily life. Some outright said they were their own worst critics, not even needing negative listener reactions to occupy a negative headspace. Courtney reflected, "I had enough self-stigma for myself to punish, to cause a lot of pain." Anne's inner monologue formed the critical stories she told herself: "I do definitely notice a theme of me, like, t-t-telling myself stories, like, I'm creating this narrative, I am perceiving something as negative about the way I'm speaking that maybe not was that way at all, especially if I'm just having a bad day." Grace's inner critic said, "I just remember student leadership … I know I could've done it, but I flaked out or I just- or I just kind of convinced myself to not go for those things because 'you're not X, Y, Z.'" As recently as a year before their interview, Garnet felt, "It was very, um, taxing for me to feel-feel good about talking to someone without me beating myself up about it and thinking about it over and over and over and over again … I had problems with, like, rumination."

Global Theme 3: Negative Self-Beliefs

Participants described defeatist self-beliefs so entrenched that most thoughts and perceptions were inseparable from stuttering. They went to great lengths to achieve fluency, be accepted by others, and make decisions—small and life-changing—through the lens of what they thought stuttering could and could not allow them to do.

Organizing Theme 7: Ashamed of Stuttering and Self

Participants commonly viewed themselves as less than fluent speakers and developed shameful perceptions of their speech and, in turn, themselves.

Basic Theme 7a: Desire to talk "normal." Anne admitted, "I think as soon as I recognized something was wrong with me, I felt not normal any-any time. Any-anything I did was not perfect … I would internalize that as *I need to be normal*." Paul pressed, "Why am I such a

piece of s**t? Why can't I just be normal?" Five participants said they were jealous of others who spoke without thinking about what they were going to say. Crystal questioned, "Why did it not come easy to me?" Participants voiced, in many ways, both a desire to not stutter and how life would be better if they did not stutter. Sir Phil Letterman conceded, "I wished every day that I would wake up and not have a stutter, thinking this might be the night."

Basic Theme 7b: Hiding voice makes life momentarily easier. Many participants recounted how over time, avoidance became instinctual and made many of them covert stutterers. At least eight participants described that they concealed stuttering from others, like Crystal, who shared, "I pretty much did everything I could to pass as fluent." Grace's covert identity made her go by a name she could say easily. T.V.'s covert behaviors made her life temporarily easier but became harder to deal with than stuttering itself. Others admitted they could not hide stuttering because of associated behaviors or the frequency of their stuttering.

Basic Theme 7c: Self-contempt from mistreatment and fraught interactions. Most participants internalized feedback and missed opportunities as fodder for negative views of themselves, blaming themselves for situations and outcomes. As a child, Aidan believed that he deserved to feel bad about stuttering. Grace developed a self-belief of fundamental inadequacy and insecurity, leading her to believe she was less successful, smart, capable, or valued than others. For Garnet, it was small, daily social interactions that impacted their self-worth: "I'm not good enough of a friend … partner … colleague … peer, and I'm not friendly enough because I don't say 'hi.'" Anne revealed that the narrative she often told herself was: "They think I'm a freak." Ashley reflected, "I am the source of my own hurt … I never blamed the stutter itself, I just blamed myself."

Organizing Theme 8: Feeling Like a Failure When Falling Short of the Fluent Ideal

Most participants had attended fluency focused therapy earlier in their life and felt like they failed themselves and others when they could not make the fluency techniques "work" outside the therapy room.

Basic Theme 8a: Hopeless belief that trying harder will bring fluency. Many participants believed that they were not doing enough to achieve fluency. "I've been given all these tools and now it's up to me," Ashley said as he described the shame he felt for not being able to control his speech. "I'll have this locked up … I'll come into fourth grade … I'll come into sixth grade … ," Courtney said about trying harder in speech therapy over her summer vacations, though by sixth grade she had given up hope of fluency. This same hopelessness was evident in the handful of participants who attended intensive fluency shaping clinics—that an immersive, residential program would be what they needed to "get on top" of stuttering. Ashley continued, "I retain a sense of self-blame for the knowledge that I have a little bit of control over stuttering based on how much work I put in at home to be fluent, [now] eight years after the intensive." Nearly half of the participants also attempted to use a DAF device to achieve fluency. "I wanted it to be, like, a miracle tool to pull me out of this," Colin admitted. All users who briefly tried it quickly discarded it despite the financial loss.

Basic Theme 8b: Fluency techniques are performative, unnatural, and not long lasting. Most participants tried traditional fluency shaping techniques in speech therapy or during intensive fluency programs. Victor admitted, "I was kidding myself … it wasn't me talking, it was somebody else, you know, doing all these tricks." Hopper felt like he was being scammed when the techniques did not transfer to the real world, as did Colin and Crystal, who both eventually stopped using the techniques and became covert. Sir Phil Letterman became frustrated with the mixed experience of stuttering less in the therapy room, "but how come in the classroom, I'm still stuttering severely or having huge blocks?" Gillian believed that fluency shaping therapy was a place where they performed as a fluent speaker and that the attention given to every sound made them hyperfixated on how others perceived them.

Basic Theme 8c: Unachievable public pressure to be fluent. "I had to trust that they [fluency techniques] were helping me get better," Grace revealed. This pursuit of the fluent ideal was a shared experience among several other participants, albeit an unachievable goal. Some, like Crystal, thrived on comments from her SLP on how fluent she sounded. Hopper recalled feeling reduced to a mere training tool for student clinicians who were learning how to deliver fluency shaping therapy. As a result, "I carried a lot of bitterness about SLPs for years … my resentment for SLPs was intense." When participants held themselves to an unachievable standard and stuttered, others' reactions and judgments about their intelligence and social worth hit harder. Paul explained how the pained looks in response to his stuttering made others think he was stupid, while Crystal said that she preferred to sound stupid rather than show stuttering.

Organizing Theme 9: Suppressing Urge to Fulfill Hidden Potential

A shared experience among the participants was concern about who they could become if they continued to stutter. Stuttering became the barometer for their decisions,

mostly in opposition to who they were inside. When things did not go how they wanted, stuttering was to blame, even if the situation was not linked to how they talked.

Basic Theme 9a: Difficulty dealing with the uncertainty about how life will play out. Several participants could not imagine their future or thought they would be limited in life if they continued to stutter. Anne said, "I generally just did not think that I could have a happy future when I was carrying around this huge burden and there was no world in my mind where I could relieve it." Paul lamented, "It was an obsession I had, always thinking like, 'Okay, this Tuesday in fifth grade is bad. What's it going to be like when I'm older? Like, how is this ever going to get better?'" Then, there were participants who pondered some variation of: "What if I didn't stutter?" Like Blair, who expressed, "I thought if I don't stutter, I would have so much more potential." Many participants reported that they missed out on normal social developmental opportunities because of how stuttering held them back, largely socially, alluding to the underlying shared belief that many of them were proverbial giants in chains. Some wished that they were more assertive with self-advocacy and other social skills. As an adult, Grace—the only SLP in this study—recounted a moment when a student who stuttered asked her to introduce him before he recited the pledge of allegiance over the school loudspeaker. She told the student no, explaining that because she stuttered, "I couldn't bring myself to do it."

There were three participants who said they were suicidal at one point in their lives because of stuttering. One said they almost took their own life in sophomore year of high school and preferred to discuss "that" with their friends over disclosing their stuttering in fear that no one would want to be friends because they stutter. Another shared their suicidal ideation was tied to their level of fluency, which was a deep-seated belief that, "If I'm never going to be [fluent], and I have to live like this, [then] I don't want to live."

Basic Theme 9b: Restricts life decisions out of fear of stuttering and blames failures on stuttering. All participants said stuttering negatively influenced their day-to-day and future life decisions. A common phrase was: "Stuttering impacted everything." Anne admitted, "I would let stuttering dictate what I did and kind of used it as a self-handicap … it was spiraling logic for big life decisions. Everything came back to my insecurity that I'm not good enough because of my stutter." Victor thought that the only road out of stuttering was if he became a professional baseball player, a belief reinforced after he dropped out of four colleges when stuttering became too much.

More than half of the participants described self-resignation due to doubts from themselves and others about their ability to do certain jobs that required public speaking. Hopper was repeatedly told by professors that he should not be a journalist because he stuttered. Alberto went into graphic design because he could excel without having to say anything. Gillian picked their career in accounting because it was less talking, saying, "I was resigned to believing I wouldn't be able to do what I wanted to do to make a living because of my stutter."

All participants either blamed specific failures on stuttering or overgeneralized seemingly unrelated instances. "Any criticism or [negative] feedback was chased with self-hate … telling myself that it's because of stuttering that I couldn't do this or that," T.V. said. She continued, "In many cases, the stuttering was not the reason that-that things were not going a particular way in my life, but I just always wanted to put that blame on stuttering."

Global Theme 4: Disconnection From Others

The participants expressed various ways stuttering isolated and disconnected them from others in their lives. They felt alone in their struggles, taking it on themselves to figure out how to make it in life. They often felt unfulfilled in their relationships with others.

Organizing Theme 10: Hyper-Independence

Participants discussed how they faced stuttering on their own because it was either what others told them to do—"This is *your* problem"—or they had no other choice.

Basic Theme 10a: Did not trust adults to understand stuttering and protect them from harm. From a young age, many participants felt they had to navigate the challenges of stuttering alone because they could not trust adults to understand stuttering and/or protect them from harm. T.V. shared, "I developed covert behaviors early on because it seemed to me that no one wanted to talk to me one-on-one about it, to understand how it made me feel, wwwhat was causing it, wwwhat they were going to try to help me do to change it." Aidan recounted, "I would go through experiences that involved me struggling through [middle school] presenta-ta-tations and kids openly mocking me and having, like, a ball of a time. I would have so much struggle, and the teachers never really defended me or anything."

Basic Theme 10b: Pressure to "fix it" on one's own. Many participants frequently felt pressure to "fix" stuttering on their own. Aminot explained, "It-It often wasn't talked about directly as something that, like, I could potentially get help with. It felt like something I very much had to deal with on my own." Grace also had childhood memories of her parents and SLPs putting all the responsibility for change on her. She recalled the message she received:

"'There's something wrong with you, you need to do this to be fixed … and if you don't, I don't know what to tell you.'" Paul described, "Because I had such negative experiences with speech therapy as a child … I closed off the idea that therapy would ever help me … I was into college, like, 'this is it, this is my life, you know, I've got to deal with this on my own.' And I wish I hadn't done that."

Organizing Theme 11: Emotional Distancing

Many participants felt they could not share their true experience of stuttering, largely because its complexity was unexplainable, shameful, or discomforting to others. This prevented most of the participants from establishing relational and emotional closeness that they desired.

Basic Theme 11a: Stuttering is too shameful and confusing to show and talk about. The participants expressed that the way they talked often felt shameful, created confusion with their listeners, and was hard to talk about with others. J shared that this feeling probably started in early childhood: "I learned this at a very young age, stuttering is something really very shameful … so I would do aaaaanything to-to just not do it or try to hide it." Colin reflected how his desire to keep stuttering hidden spanned most of his life. He disclosed, "I didn't want to acknowledge it in any way … I felt like it was my greatest weakness, and I didn't want anybody to know about it … I was hiding it at all costs." Crystal expressed, "I think I really felt super isolated and very lonely growing up because … I was always trying to smooth out m-m-my speech with friends and even, like, I had best friends or like, close friends, but-but there-there was always a d-d-distance … there was always a feeling that, like, I'm not as close or, like, they don't kn-kn-know the real me." Anne detailed awkward interactions with her friends, saying, "I had some painful encounters with [some friends], like-like them pointing it out or being like, 'What? What just happened? Like, what was that?' And I would just shut down and be like, 'I don't know. Like, it just happens sometimes … I don't talk about it.'"

Basic Theme 11b: Spare others from the discomfort of stuttering. Some participants shared that they did not talk about stuttering because they wanted to spare others from the discomfort and to shield their own fear of vulnerability. When a family was uncomfortable with stuttering, participants shared how they often self-selected out of emotional closeness with them. Early on, Courtney felt responsible for her mother's distress about stuttering: "I remember being in my room late at night and hearing my mom cry to my dad and being like, 'I just wish we could hhhelp her … I feel like it's my fault because my grandma stuttered—it's my fault, it's my fault.' And this was two adults thinking they were having a private conversation, but it really affected me as an empath and it was like, 'I can't have my mom feel this way' … I just worked really hard to not show emotion about it because it was like, I made my mom sad."

Other participants also described emotional distancing within intimate relationships. Victor reminisced about one of his first dating experiences, recalling how his date said, "'Oh, please order me a banana milkshake' … and I actually stopped dating that girl because she made me order banana milkshakes … I liked her and I think she liked me, but I couldn't say banana, and so she had to go." Colin also shared that he would disclose his stuttering when he was dating but only to explain what the other person was going to see, thereby constricting the emotional depth of his relationships.

Organizing Theme 12: Yearning for More Authentic and Abundant Connections

The participants shared that they felt like stuttering limited the quality and quantity of their relationships and, as a result, often yearned for more authentic and abundant connections.

Basic Theme 12a: Keeps social circle small and familiar. Many participants reflected that they limited the number of people they were close with and kept small social circles. For example, T.V. shared, "I didn't have, um, any other friends other than those two- those two friends, and I did not seek out friendships as a normal child would because of the shame associated with my speech." Similarly, Ashley had few close friendships because it was such a struggle to initiate new connections, introduce himself, and make small talk. Bryce shared, "I made friends with the same type of people throughout e-e-elementary and middle school, um, just because they kn-kn-knew how I spoke and they were o-o-okay with it … but that kind of stopped me from branching out and meeting other people."

Basic Theme 12b: Settles for unfulfilling relationships. Relatedly, participants shared how they often resigned for unsatisfying relationships. Sir Phil Letterman disclosed about his girlfriend from high school that he kept into college, "I definitely wasn't happy, but it was something, you know, and so I really clung to it." Similarly, Ashley expressed, "I did not really try to pursue anyone who-who-who I found to be attractive or who I wanted to be involved with, but I just tended to grab on to [whoever] was available." Garnet settled for a relationship with a boy who called them Porky Pig. Garnet gave into his pleas to date, but "it never, like, quite escaped my mind that like that-that-that our first interaction together was, like, he made fun of me because of my stutter." This settling for unfulfilling relationships sometimes happened

because they felt unworthy of being desired. Crystal admitted, "I wasn't ready to, like, l-l-let anyone in. Like, if I couldn't let my friends in, there was, like, no way I would feel comfortable adding in a romantic relationship." Some participants felt their stuttering would be a deal breaker in romantic relationships. Grace recalled thinking, "How can he like you, you know, like, you stutter." Alberto had a similar experience of yearning for a relationship in college yet feeling undesirable: "My whole- my whole- my whole c-c-college ex-ex-experience, I-I can only think of two-two girls I had [dated] ... like I really wwwanted to, but if-if-if I wanted to, I'd talk- I talked myself out of it."

Basic Theme 12d: Longs to be deeply understood, heard, accepted. Participants longed for deeper connections, for their voices to be heard, and for others to accept them. Sir Phil Letterman described how his attempts to make friends were largely unsuccessful because he felt like he did not have any social influence: "People just kind of didn't initiate conversations with me, I wasn't ever sought out, and if I was, after I spoke, they would never seek out speaking to me again." In college, Gillian struggled to build meaningful connections with others away from home, sharing that the hardest time was when, "I was like 18–19, because it was the first time I was out on my own ... I really, really struggled to mmmeet people and t-talk to people even when I was in classes and in g-groups and in the dorms." Simply put, Hopper shared, "I was desperate for a connection outside of the suffocating world that I lived in."

Discussion

The purpose of this study was to conceptualize how the pervasive cognitive, emotional, and physiological experiences of stuttering through the lens of complex trauma. Through inductive and deductive thematic analysis of these rich through-life narratives, we categorized the themes and subthemes into four overarching global themes that aligned with established definitions and literature on complex trauma (Courtois, 2004). In doing so, we documented the overwhelming formative experiences that they experienced and the ingrained survival responses, negative self-beliefs, and social disconnection that spawned from those formative experiences. Participants readily described singular and repetitive moments that occurred decades ago, those that shaped their lives, and the coping behaviors that they acknowledged likely made the experience of stuttering more challenging. Participants relayed both "Big T" and "little t" traumas, which triggered biological threat responses—fight (aggression), flight (avoidance), freeze (surrender), and fawn (appease). They reported symptoms of PTSD, including re-experiencing, avoidance, and persistent sense of threat, as well as relational wounds, which yielded symptoms of CPTSD, including negative self-concepts, difficulty managing emotions, and relationship challenges.

Stuttering Through the Lens of Complex Trauma

Our results indicate that for participants in the current study, overwhelming stuttering experiences in childhood and adolescence prompted mind–body reactions that formed the basis for how they adapted to living with stuttering. Singular inciting interpersonal experiences that typically lead to PTSD blended with repetitive negative interactions, which is central to CPTSD. Together, these shaped maladaptive safety behaviors, negative self-beliefs, and avoidant social profiles. The participants pointed to developmentally significant moments that shaped not only who they had become but also their self-deprecating views of stuttering. None described only one moment; all recounted several, from minor slights to those that permanently altered the rest of their lives. The repetitive nature of these moments perpetuated the overwhelming experiences, well beyond the month required for a CPTSD diagnosis, resulting in a higher likelihood of functional, social, and occupational challenges as they came of age with stuttering. Although we are not in a position to make formal diagnoses, as this would require assessment by a licensed mental health professional, the narratives of most participants reflected experiences consistent with the diagnostic criteria for CPTSD as outlined in the *DSM-5* and *ICD-11*—particularly difficulties in affect regulation, self-concept, and relational functioning. While we cannot confirm the presence of clinical or subclinical CPTSD, the alignment between participants' lived experiences and these core symptom domains underscores the potential value of viewing stuttering-related distress through a trauma-informed lens.

Family and Home Life Shaped Early Experiences of Communication and Emotional Safety ...

In most instances, participants noted how the ways that their family did (or did not) address their stuttering strongly influenced how the stutterers themselves attempted to adapt to overwhelming communication experiences. Most parents never talked about stuttering with their child outside the context of fixing it and/or how it sounded in a particular moment, impeding the development of warm, supportive relationship between parent and child. At home during their most formative years, AWS learned to conceal their stuttering, self-isolate, and process burdensome thoughts and feelings alone. These findings align with the work of Hughes et al. (2011) on AWS' experiences of stuttering

within their families, who reported that they felt pressure to be fluent around their family, they hardly talked about stuttering with their family, and how they would have benefitted from better emotional support from their family.

. . . School and Fluency Expectations Reinforced Helplessness, Shame, and Disconnection . . .

Participants identified general yet specific moments in school when they became increasingly aware of their struggle to speak. Awareness gave way to helplessness, fear of common classroom teaching methods (e.g., presentations, popcorn reading), and other school-related activities (e.g., introductions, recess) because others negatively reacted to their stuttering in those situations. The threads of overwhelming stuttering experiences in school among our participants align closely with those of Gerlach-Houck et al. (2023), who reported that many AWS were compelled to conceal stuttering at school to protect themselves from stigmatizing reactions from others. As they moved into adolescence, many struggled with using fluency techniques, beliefs that they had to "fix" their speech on their own, and envisioning their future selves beyond the paralyzing symptoms of stuttering. As van der Kolk (2006) and Matte-Landry et al. (2023) described, traumatic stress, particularly when repetitive, can adversely affect an individual's ability to process internal and external stimuli. The participants in the current study told of their attention, thoughts, and behavioral reactions from past stuttering experiences interrupting and influencing their daily interactions especially in school, representing a significant marker of complex trauma.

. . . Leading to an Inescapable Reality in Adulthood

Often socially disconnected, participants reached the critical transition to adulthood with their lives and future determined by stuttering. Decisions, self-beliefs, and relationships were calibrated by both years of negative experiences with stuttering and contemporary perceptions. Many yearned for deeper social connections, but the barriers they put in place to protect themselves as children developmentally stunted their ability to be vulnerable, process interpersonal interactions, and communicate their needs. Many of the participants constricted their lives to avoid discomfort and resigned themselves to the belief that stuttering would prevent them from becoming who they longed to be. In other words, they organized their lives around stuttering to avoid having to deal with the cognitive, emotional, and physiological distress that the experience evoked—a key characteristic of traumatized individuals (van der Kolk et al., 1996).

Intersectionality and Contextual Factors

All participants mentioned other identities they held and contextual factors that intersected with their experience of stuttering. Gender was one of the most mentioned intersections, with almost all female participants expressing how common stereotypes about women made their experience of stuttering more challenging. Three were called "cute" because they stuttered, which confused or upset them. Some participants explicitly emphasized that other social intersections, at times, consumed more of their identities than stuttering: Aminot as a Black female medical student, Crystal and J as Chinese women, Hopper as a gay man, and Paul as an addict. One participant claimed that coming out as a stutterer was harder than coming out as gay, which aligns with independent reports within Daniels et al.'s (2023) study of the intersection of stuttering and LGBTQ+ identities.

Seven participants had a parent, sibling, or grandparent who stuttered, five of whom set a negative model for living with it. Five participants were raised within the context of intergenerational trauma in which their parents experienced trauma themselves—some of which may have been linked to the parents' own stuttering—and the participants recognized some aspect of it in the way their parents dealt with stuttering or their upbringing. Recent research has revealed the possibility of genetic- and epigenetic-mediated neurobiological changes that contribute to the transmission of trauma across generations (Howell et al., 2021). As such, parental trauma infiltrates how they "show up" in relationship with their child and, in turn, how the child learns to cope with their own challenges (Cacace & Summers, 2025).

At least four participants described periods of deep depression that began in college, which they reasoned stemmed from stuttering. This aligns with prior research showing greater depression symptoms among stutterers than the general population (Briley et al., 2021). Importantly, complex trauma often co-occurs with depression (Lin et al., 2025).

Implications for Clinical Practice

For SLPs, understanding the impact of stuttering-related trauma is essential for effectively supporting clients' unique needs. It is important to recognize both the immediate, visceral stress experienced during stuttering moments and the ongoing relational trauma that can affect children throughout critical developmental years. When adults—especially parents, educators, and SLPs—expect fluency from a child who stutters, they overlook the neurobiological basis of stuttering and the emotional burden those expectations create. These expectations

can compromise a child's emotional safety within key relationships, leading to lower self-confidence and a weakened sense of identity. Critically, such dynamics can increase the risk of attachment injuries—disruptions in forming secure emotional bonds—which are central to complex trauma. The issue of potential attachment difficulties arises in other neurodivergent populations like children who are autistic (Rutgers et al., 2004) and those who are Deaf/hard of hearing (Thomson et al., 2011).

When it comes to children who stutter, prevention is key. SLPs can support parents and educators by helping them foster an environment where stuttering is accepted and where effective communication, rather than fluency, is the focus, such as in Palin Parent–Child Interaction Therapy (Kelman & Nicholas, 2020). This can be a protective factor against complex trauma and later communication challenges. Achieving this is not always easy; adults often have their own emotional concerns that arise when watching a child stutter, and they may worry that they are failing their child. Societal narratives often discourage acceptance as well. However, when adults shift their perspective, positive outcomes for their children are possible. Perspectives can be shifted by educating adults about stuttering, understanding it as a form of neurodivergence—a difference, not a defect (Campbell et al., 2019). Adults can be encouraged to reflect on their own emotional responses to stuttering and, if needed, seek support to foster co-regulation during communication. With increased understanding, adults are better equipped to educate others and advocate for the needs of children who stutter. This includes helping to create stutter-friendly environments where differences are embraced and teasing and bullying are not tolerated. Ultimately, adults can model open communication and support children in discussing stuttering and advocating for their own needs.

For AWS, different therapeutic approaches can be effective depending on individual clinical profiles. However, many SLPs lack training in addressing the trauma-related symptoms—whether visceral or relational. This can result in therapy that is minimally effective or even potentially harmful (Gerlach-Houck et al., 2023). Recognizing that some AWS may experience trauma-related symptoms from stuttering and adopting trauma-informed frameworks is not just beneficial but can be crucial for providing meaningful therapy and supporting personal healing.

To address this need, SLPs can integrate six trauma-informed principles (Substance Abuse and Mental Health Services Administration [SAMHSA], 2014), which foster relational safety and healing in the therapeutic relationship and beyond: (a) "safety," fostering physical and emotional environments where clients feel secure and protected from harm; (b) "trust and transparency," ensuring honesty, clarity, and consistency in interactions and decision making to build reliable therapeutic relationships; (c) "peer support," emphasizing the healing value of connection with others who share lived experiences; (d) "mutuality and collaboration," recognizing that healing occurs within relationships by shared power, respect, and partnership between clinician and client; (e) "empowerment, voice, and choice," prioritizing clients' autonomy, strengths, and self-determination in the therapeutic process; and (f) "historical, cultural, and gender considerations," acknowledging the influence of systemic inequities and social contexts on individuals' experiences and integrating cultural humility.

When paired with a structured, phased approach, like that of Herman (2015), this method is effective in psychotherapy and has clear extensions to stuttering therapy. SLPs select the appropriate phase based on client readiness, retraumatization risk, and ability to heal through integrating trauma.

I. *Safety and stabilization*: Educating clients about stuttering and its impact has long been central to stuttering therapy (Van Riper, 1973). From a trauma-informed approach, in addition to stuttering education, clients could receive psychoeducation about trauma and the nervous system's response to it. They learn to identify emotions and sensations, as well as self-regulation strategies, to manage their emotions. Clients build both internal and external supports, beginning with reducing self-stigma (Boyle et al., 2023) by recognizing their inner critic and practicing self-compassion (Croft & Byrd, 2020) to strengthen sense of self. They develop supportive social networks, including family, friends, peers, mentors, and members of the stuttering community (Craig et al., 2011). These relationships foster relational healing, which is foundational for ongoing recovery.

II. *Processing and mourning*: In this phase, clinicians implement evidence-based therapies, including cognitive behavioral therapy (CBT; Menzies et al., 2009), with an emphasis on trauma-focused CBT, acceptance and commitment therapy (Beilby et al., 2012), and solution-focused brief therapy (Berquez & Jeffery, 2024). Behavioral approach–based therapies, such as stuttering modification (Van Riper, 1973) and Avoidance Reduction Therapy for Stuttering (Sisskin, 2018; Sisskin & Goldstein, 2022), can also be used. Clients are encouraged to explore stuttering from new perspectives, which helps reduce avoidance behaviors and physical struggle. Once clients establish a sense of safety and support, they can learn to stutter with greater comfort and openness. Safety is monitored through shared language, such as the concept of the "window of tolerance" (Siegel, 1999), which describes the zone in which a client can talk about experiences while remaining

emotionally regulated and able to learn. Therapeutic visuals (e.g., visual rating scales, body outlines) and somatic tracking by helping clients notice changes in breathing, muscle tension, or other bodily cues allow SLPs to pace sessions responsively when signs of dysregulation emerge, thereby reducing the risk of retraumatization. During this phase, clients address grief and trauma reactions specifically related to their stuttering experiences. Clinicians may observe intense emotional responses as clients progress through the grieving process (Kubler-Ross & Kessler, 2005); these emotions are met with empathetic listening and validation, which facilitate emotional processing and resolution.

III. *Integration and reconnection*: In the final phase, the client redefines their sense of self. They rebuild social trust and take ownership of their story. This work demonstrates the integration of trauma into daily life. Trauma no longer overwhelms daily functioning but becomes an integral part of one's life story.

Taken together, both models (Herman, 2015; SAMHSA, 2014) highlight the importance of a gradual, supportive, and individualized approach to healing from complex trauma. For some clients, trauma-informed stuttering therapy may address their needs in a way that more traditional stuttering therapy cannot. SLPs may want to critically assess and integrate these frameworks into their practice to best support their clients who stutter, particularly those who present with trauma-related symptoms from stuttering and consider ongoing education and reflection on trauma-informed care for this population. Our current understanding is based on practice-based evidence, which provides a foundation for further investigation.

Limitations and Future Directions

An important eligibility criterion for participation in this study was that the AWS had previously reflected on their through-life experiences with stuttering and had taken steps to heal with speech therapy, psychotherapy, or self-help. In fact, 18 of the 20 AWS reported experiences with stuttering self-help and/or support organizations. As a result, we did not capture the perspectives of AWS who have not received therapy and support from the stuttering community, though that was deliberate to minimize the likelihood of retraumatization. Even with these limitations, our findings spotlight territory minimally charted within speech-language pathology, psychology, and, most importantly, the homes of families raising children who stutter. We do not recommend further research with AWS who disclose being in states of overwhelm or distress without transprofessional collaboration with a psychologist who specializes in trauma.

There are several future research directions that could help shape the healing and prevention of trauma derived from how people who stutter experience stuttering. First, it would be beneficial to explore the quality and quantity of specific trauma symptoms stemming from stuttering, as this would help us understand how they are impacted by overwhelming experiences across the lifespan. Developing a valid, reliable scale to measure these symptoms would grant researchers and practitioners a useful tool to understanding a person's deep personal history with stuttering. This research would need to explore trauma and stuttering across a greater cross-section of the stuttering community, including but not limited to age, culture, developmental stage, and the above-reported aspects of intersectionality. This could also involve identifying other diagnostic connections, such as the overlap with other psychological and behavioral disorders. For instance, in the current study, some narrative descriptions from the participants would likely satisfy diagnostic criteria for chronic stress disorder, like Colin, who described how he worried about his long-term health because he has led a very high-stress, high-anxiety life due to his struggles with stuttering.

Second, because dissociation was widely described by the AWS in this study, additional quantitative and qualitative research on its onset, nature, and persistence—particularly longitudinally—would help therapists identify its presence and tailor care that directly addresses the circumstances that cause it. Third, evidence-based, trauma-informed prevention and intervention approaches specific to stuttering are needed. This research could begin with documenting lived experiences of AWS who have taken steps to heal or process their symptoms and then integrating with established literature on interventions for complex trauma. Prevention strategies would be tailored to working with families of young children who stutter. A concerted and concurrent effort to educate parents, caretakers, and teachers is critical upon onset of stuttering in early childhood so that children who stutter grow up in more supportive and accepting developmental environments. Childhood interventions must focus on the positive development of their social identity as a person who stutters—as we found—by, with, and through their closest relationships while coming of age. Clinical education and training for such trauma-informed approaches should be developed as most clinicians do not receive such specialized training in their graduate programs. We recognize SLPs are not psychotherapists, and psychotherapists do not specialize in stuttering-related trauma. However, building counseling skills, forming therapeutic alliances, and establishing compassionate parent–therapist partnerships are critical to implementing a well-rounded approach for preventing or minimizing trauma in children who stutter.

Because most participants in our sample described intense somatic arousal before, during, and after moments of stuttering, body-based approaches rooted in somatic

therapy would be an important avenue for future stuttering treatment research. These approaches are valuable for regulating the nervous system and building interoceptive awareness, fostering emotional presence and mental clarity during stuttering moments (Kuhfuß et al., 2021). Clients learn to safely reconnect with bodily sensations and gradually face the fear associated with stuttering, which has long been part of comprehensive stuttering therapy (Van Riper, 1973). They are supported in tolerating difficult emotions and sensations as they arise, all within a safe and regulated environment. Facilitating emotional processing and mourning creates space for identity integration as a stutterer and encourages learning to stutter with less reactivity, more comfort, and ongoing relational healing.

Conceptualizing stuttering through the lens of complex trauma offers both valuable insights and potential limitations. On one hand, a trauma-informed perspective can validate the depth of distress experienced by some people who stutter, highlighting how chronic exposure to stigma, shame, and loss of control can shape emotional, cognitive, and physiological adaptations across development. This framing can guide clinicians toward more compassionate, safety-oriented, and holistic care. However, it also carries risks. Broadly characterizing stuttering as trauma may inadvertently pathologize the stuttering experience or overlook the resilience, pride, and empowerment many individuals develop through stuttering acceptance and community connection. Additionally, framing stuttering in terms of trauma may unintentionally heighten worry among parents and apprehension among SLPs, a group already known to experience low confidence in treating clients who stutter (Bridgman & Erickson, 2025), potentially discouraging engagement with this population. Thus, while trauma-informed frameworks can deepen our understanding of stuttering's adverse impact for some, they should be applied flexibly and critically—attuned to the diversity of lived experiences and the importance of not reducing stuttering solely to its potential for harm.

Conclusions

This study is the first comprehensive qualitative exploration of stuttering through a trauma framework. The experiences from childhood, adolescence, and adulthood shared by the participants yielded themes that align with the core concepts of complex trauma, lending credence to the limited evidence base that stuttering can yield trauma-related symptoms that occurs from repeated overwhelming experiences within interpersonal contexts. We believe that trauma-informed stuttering therapy calibrated to the individual's lived experience can break the cycle of stigma, anxiety, and avoidance shared by the adults in this study. We aim to motivate future collaborative efforts by parents, SLPs, researchers and allied psychologists to establish evidence-based, trauma-informed prevention and care for people who stutter.

Data Availability Statement

Due to privacy and ethical concerns, the original source of the data cannot be made available. De-identified data are available from the authors upon reasonable request.

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