

STUTTERING PATTERNS IN ADULT PUBLIC SPEECH: A PSYCHOLINGUISTIC ANALYSIS OF SHARON'S TEDX TALKS

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Abstract

This study aims to analyze the types of stuttering speech disorders in an English speaker. The data source of this study is a *YouTube* video titled “*The Power of a Stutter*” by Sharon Steed, a person who experiences stuttering, published on the TEDx Talks channel. This research employed a qualitative descriptive method using listening and note-taking techniques to identify instances of stuttering in the speaker's presentation. The results show that 124 instances of stuttering occurred within the 17 minutes and 33 seconds duration of the video. The analysis reveals that prolongation was the most dominant type of stuttering, occurring 40 times (32.3%). Repetition occurred 34 times (27.4%), while blocking occurred 33 times (26.6%). Mixed patterns were identified 17 times (13.7%). These findings indicate a relatively balanced distribution among the three primary types of stuttering observed in the speaker's speech. This suggests that the stuttering disorder experienced by the speaker is complex and involves multiple forms of disfluency rather than a single dominant type, which is commonly associated with persistent stuttering in adults.

Keywords: stuttering, adult speech, psycholinguistics, youtube video.

Introduction

Language is the primary tool used by humans to communicate, requiring complex cognitive, neurological, and motor coordination. Many language disorders are encountered and hinder a person's fluency in speaking. Stuttering is a widely recognized speech disorder. Stuttering is a speech disorder characterized by the repetition of sounds, syllables, or prolongation of words. In addition, people who stutter often prolong certain sounds and pause unexpectedly when speaking (Guitar & Peters, 2017). This disorder is not only about physical or motor aspects but also about deep psychological dimensions. It is related to anxiety when speaking, embarrassment, and social avoidance (Nathania, 2016)

Studies on stuttering are included in psycholinguistics which as the branch of studies the relationship between language and human mental processes (Sari & Arifin, 2020). It not only studies how language is produced and understood, but also the disorders that occur in that system Riper 1982 (in Brocklehurst, 2023) defines stuttering as a speech flow disorder characterized by a condition in which the speaker knows what he or she wants to say but is unable to say it at a particular moment. Guitar (2006) expanded on this definition by classifying stuttering as a multidimensional speech fluency disorder that encompasses physical, psychological, and social aspects simultaneously. Levelt (1989) explains that the

process of speaking consists of several stages, namely conceptualization, grammatical formulation, phonetic encoding, and articulation. It is during these stages that the coordination between the nervous system and the speech organs experiences disruption.

Guitar & Peters (2017) classifies stuttering into three main types based on observable acoustic and visual phenomena. The first type is repetition which is the unintentional repetition of a specific linguistic unit. The repeated unit can be a phoneme, syllable, word or phrase. Repetition occurs because the speaker is unable to continue speaking to the next unit, so the same unit is repeated to maintain the flow of speech. The second type is prolongation which is the extension of a consonant or vowel sound beyond its normal duration. Elongation is more common in continuous consonants such as /s/, /f/, /h/, and /m/ because these sounds can be prolonged without interruption, unlike plosive sounds. The third type is blocking which is the complete cessation of airflow or sound when the speaker attempts to pronounce a sound or word. He distinguishes between silent block which is a condition where the mouth moves but no sound comes out at all and tense block which is a condition where there is clear muscle tension in the speech organs.

This study analyzes YouTube videos of an English speaker named Sharon. She speaks openly in public about her experience of living with stuttering. From a genetic perspective, stuttering has been proven to have a hereditary component. Speech impediments in people who stutter can interfere with communication and elicit negative emotional reactions to their speech (Alwis & As, 2021). Kang et al., (2010) found mutations in genes related to the lysosomal enzyme targeting pathway in people with persistent stuttering, indicating that biological factors play an important role in the etiology of stuttering. From a psychological perspective, speech anxiety does not directly cause stuttering, but it has been proven to significantly exacerbate the frequency and severity of stuttering (Lowe et al., 2021). It is the interaction between neurological, genetic, and psychological factors that makes stuttering a complex and individual disorder. When someone who stutters experiences a condition such as pausing while speaking, feeling unable to control their speech, or being unable to say the words they want to say, they will usually show various reactions to the situation (Tichenor et al., 2023).

Previous studies reflect that stuttering in adults often takes various forms or types. This differs from stuttering in children. This is influenced by the process of compensation and psychological adaptation over time (Bloodstein & Brundage, 2021). The causes of stuttering are multifactorial and have been studied from various scientific perspectives. From a neurological perspective, neuroimaging studies show that people who stutter have structural and functional differences in the neural networks that control speech production, particularly in the connections between the motor cortex and Broca's area (Chang et al., 2023). These differences cause delays in the coordination of speech organs, resulting in speech flow disorders. However, most previous studies on stuttering focus on clinical observations or controlled speech tasks. Limited studies analyze stuttering patterns in natural public speaking

contexts such as public talks or presentations. Therefore, this study aims to analyze the types of stuttering that occur in an adult speaker's public speech using a psycholinguistic perspective. Based on this background, the research question is: what types of stuttering disorders appear in Sharon's speech in the TEDx Talks s YouTube video? The purpose of this study is to describe the types of stuttering in Sharon speech at TEDx Talks based on the Guitar (2006) and Van Riper (1982) theory. This study contributes to psycholinguistic research by providing empirical evidence of stuttering patterns in natural public speech data obtained from online media.

Research Method

This study uses a qualitative descriptive approach. This approach was chosen because the purpose of the study is to describe linguistic phenomena in depth and systematically without manipulating variables or testing statistical hypotheses (Creswell, 2009). The qualitative descriptive approach allows researchers to understand the meaning, patterns, and characteristics of data contextually, which is very suitable for analyzing natural speech data such as the utterances of stutterers. The data source for this study is a YouTube video uploaded by Sharon titled *The Power of a Stutter*, which can be accessed via the link https://www.youtube.com/watch?v=SlxJkiD_kXI.

In addition, the video is approximately 17 minutes and 33 seconds long and is a recording of a public lecture in which Sharon talks about her experience of living with stuttering and her journey towards self-empowerment. This video was selected based on three considerations, namely (1) audio clarity that allows for accurate identification of stuttering types, (2) sufficient duration to produce an adequate data corpus, and (3) the relevance of the context of public speaking as a situation that is consistently known to exacerbate stuttering in adult speakers.

Data collection was conducted using the observation method, which involved repeatedly watching video recordings to capture every instance of stuttering. Each segment of speech was listened to at least three times to ensure the accuracy of the recording. Next, the data was systematically recorded in a transcription format that included timestamps, the original utterances along with descriptions of the observed disruptions, the type of stuttering, and the subtype of stuttering. The transcription was carried out by the researcher with reference to the notes accompanying the source recording.

Data analysis follows the qualitative analysis procedure proposed by Miles and Huberman (1994), which consists of three stages. The first stage is data reduction, which involves sorting and focusing the data on relevant stuttering events. The second stage is data presentation, which involves organizing the data into systematic classification tables. The third stage is drawing conclusions based on the patterns found.

The classification of stuttering types refers to Guitar's (2006) taxonomy, which distinguishes three main types, namely repetition, prolongation, and block. For stuttering

patterns that display more than one type simultaneously in a single event, an additional category of ‘Mixed Pattern’ is used, as suggested by Bloodstein and Ratner (2008). Data validity is maintained through repeated checks of the source recordings and matching between the transcription notes and the observed audio-visual descriptions.

Findings And Discussions

Findings

Based on the transcription and classification of Sharon’s speech data, there were 124 instances of stuttering throughout the video (0:14 to 17:33). All of the data was distributed into four categories, as presented in Table 1.

Table 1. Summary of Types of Stuttering Disorders in Sharon’s Speech

Types of Stuttering	Frequency	Percentage	Dominan Sub Type
Prolongation	40	32,3%	Fricative consonant prolongation /s/
Repetition	34	27,4%	Word repetition and phoneme repetition
Block	33	26,6%	Articulation blocks and total blocks
Mixed Pattern	17	13,7%	Repetition + Prolongation; Block + Repetition
Total	124	100%	

Prolongation was the most dominant type with 40 occurrences (32.3%). Repetition was second with 34 occurrences (27.4%), followed by block with 33 occurrences (26.6%), and Mixed Pattern patterns with 17 occurrences (13.7%). Representative sample data for each type presented in Table 2.

Table 2. Representative Data Examples for Each Type of Stuttering Disorder

No	Time	Speech production	Types	Sub-Type
1	0:18	<i>ppppowerful they are (long p sound)</i>	Repetition	Repetition Phoneme /p/
2	2:39	<i>The syllable “wo” is repeated three times.</i>	Repetition	Repetition syllable
3	3:33-3:39	<i>Has / has / has / has has - the word has is difficult to pronounce when repeated</i>	Repetition	Repetition Word

No	Time	Speech production	Types	Sub-Type
4	4:15	<i>and and when - repeated because it is difficult to pronounce</i>	Repetition	Repetition Word
5	1:10-1:16	<i>view the way that we / view the way that we view ourselves - repeat three times</i>	Repetition	Repetition Phrase
6	15:50	<i>acknowledging - ack ack can be called, then na na na ledging</i>	Repetition	Repetition syllable
7	0:14	<i>our in Securities are (long s sound)</i>	Prolongation	Prolongation consonant /s/
8	1:28	<i>very v long repeated v sound</i>	Prolongation	Prolongation consonant /v/
9	4:54	<i>them - prolongation of the /t/ sound</i>	Prolongation	Prolongation consonant /t/
10	13:03	<i>started out - long st sound</i>	Prolongation	Prolongation cluster /st/
11	17:18	<i>our insecurities - long o</i>	Prolongation	Prolongation Vowel /o/
12	2:16	<i>About - It took a long time before the word “about” could come out.</i>	Block	Block Articulation
13	5:30	<i>we invest - There is a block when saying “we”; the mouth moves but there is no sound, it is very difficult.</i>	Block	Block Total (Silent Block)
14	13:52	<i>because - There is a block when saying the word “because”; there is air.</i>	Block	Block Total
15	6:55	<i>themselves - the sound th is difficult to pronounce</i>	Block	Block consonant /th/
16	8:12	<i>dissatisfaction - the syllable</i>	Block	Word Block

No	Time	Speech production	Types	Sub-Type
		'satisfs' is difficult to pronounce		
17	9:11-9:18	which the fear / the fear repeated / the word 'of' is difficult to pronounce, there is an air block	Block + Repetition	Mixed Pattern: Block + Repetition Phrase
18	1:28	ve ry v - long v sound	Repetition + Prolongation	Mixed Pattern: Repetition + Prolongation /v/
19	8:03	of kind of evolved - difficult to pronounce kkk, the word is repeated	Repetition + Block	Mixed Pattern: Repetition Word + Block /k/

Repetition

In Sharon's speech data, repetition was found in 34 pure instances and was part of 17 Mixed Pattern instances. Repetition includes four subtypes, namely phoneme repetition, syllable repetition, word repetition, and phrase repetition.

Phoneme Repetition

Phonemic repetition is found in several sounds, especially the plosive consonants /p/, /t/, /k/ and the fricative consonants /s/, /f/. Here is an example of phonemic repetition at 0:18 minutes.

*incredibly **powerful** they are the things (0.22)*

In this data, the phoneme /p/ is repeated four times before the word 'powerful' is successfully pronounced in its entirety. In addition, phoneme repetition is also found in the words 'really' (minute 2:00, the sound /r/ is repeated), 'wasn't' (minute 2:45, the sound /w/ is repeated), and 'convince' (minute 5:39, the sound /k/ is repeated).

Syllable Repetition

Repetition of syllables is found in several words that have difficult initial syllables. An example of this can be heard at 2:39 minutes into the recording.

***worthlessness** because I felt that the (2.43)*

The syllable 'wo' is repeated three times before the word 'worthlessness' can continue. Another example is found in the word 'acknowledging' (minute 15:50).

*just **acknowledging** your (15.54)*

In this data, the syllable '-now-' in the word 'acknowledging' is repeated multiple times before the speaker completes the word.

Word Repetition

Word repetition is the most frequently found subtype. Repetition occurs in function words such as ‘of’, ‘the’, ‘and’, ‘to’, and ‘I’, as well as in content words. The most prominent example of word repetition is found at 3:33-3:39. The word “has” is repeated over and over and is difficult to pronounce.

Has has has has affected how people treat me (3.54)

The word ‘has’ is repeated five times in a row before the sentence can continue. Repetition of the conjunction ‘and’ is also found repeatedly, including at 4:15, 10:24, and 12:17, indicating that the transition point between clauses becomes a locus of repeated stuttering.

Repetition Phrase

Repetition of phrases was found in several instances, with the most notable example occurring at 1:10-1:16.

view the way that we view the way that we view ourselves (1/10)

The phrase “the way that we view” is repeated three times before the clause can be completed with the word “ourselves.” After the word “ourselves” is successfully uttered, there is a note that Sharon experiences a block on that word, indicating a layered difficulty in this speech segment.

Prolongation

Prolongation was found in 40 pure instances and was the most dominant type. Prolongation includes three main subtypes, namely prolongation of fricative consonants, prolongation of plosive consonants and other sounds, and prolongation of vowels.

Prolongation of the Fricative Consonant /s/

Prolongation of the /s/ sound is the most common subtype among all subtypes of prolongation. The first occurrence is recorded at the beginning of the video, at 0:14.

Our in securities are (0.14)

Prolongation of /s/ then reappears repeatedly at various points, including in the words ‘seep’ (minute 0:26), ‘security’ (minute 1:32), ‘so’ (minute 1:41), ‘success’ (minute 5:41), ‘situations’ (minute 7:36), ‘safe’ (minute 7:56), ‘safety’ (minute 8:02), ‘speaking’ (minute 12:59), and ‘stuttering’ (minute 15:12).

Prolongation of Plosive Consonants and Other Sounds

Prolongation was also found in the plosive consonants’ /t/, /p/, /m/, consonant clusters, and the sounds /h/, /f/, and /th/. An example of data at 4:54 minutes is as follows.

We give them the power you see we assign (4.54)

Prolongation of the /t/ sound is consistently recorded at various points, including in the words ‘thinking’ (minute 14:24), ‘trying’ (minute 16:47), ‘those’ (minute 16:54), ‘things’ (minute 17:12), and ‘thank you’ (minute 17:33). In addition, prolongation of the consonant cluster /st/ was also found in the word ‘started’ (minute 13:03).

Vowel Prolongation

One instance of vowel prolongation was found at 17:18, namely the lengthening of the vowel /o/ in the word “our.”

Before **our** insecurities are incredibly (17.27)

Block

Blocks were found in 33 pure instances and were part of 17 Mixed Pattern instances. Blocks include three subtypes, namely articulation blocks, total blocks, and blocks on the /th/ sound.

Articulation Blocks

Articulation blocks are characterized by an unnatural pause before or in the middle of the pronunciation of a word. An example of data at 2:16 minutes is as follows.

*How feel **about** stuttering the fear comes from (2.16)*

Another example is found at 4:46 minutes, where the word 'our' can only come out after a long pause accompanied by an audible flow of air before the meaningful sound appears.

our long new word our can be said to be like there is air, a long sss sound.

Total Block (Silent Block)

Total block or silent block is the most extreme condition of block interference, which is when the speaker makes no sound at all even though their speech organs are moving. This occurrence is explicitly recorded at 5:30 minutes.

We invest very bad energy (5.30)

There is a block when pronouncing we, the mouth moves but there is no sound, it is very difficult

Total blocks are also found at 13:52 and 14:11 because a block occurs when pronouncing the word because, there is air post - a block occurs before pronouncing the word post, there is an air block

Block on the /th/ Sound

Blocking on the /th/ sound is a very consistent pattern in the data. This occurrence is found, among others, in the words 'themselves' (minute 6:55), 'the gutter' (minute 7:01), 'The' (minute 7:46), 'that' (minute 7:52), 'the' (minute 8:15), 'the changes' (minute 9:50), and 'that stuttering' (minute 11:13).

Block, especially silent block, is the type of stuttering disorder that has the most severe impact on the fluency of communication. The finding of silent block at 5:30 minutes where Sharon's mouth moves but no sound comes out at all is the most dramatic example of this disorder. Guitar (2006) refers to this condition as laryngeal block, which is the excessive adduction of the larynx that completely stops the flow of expiratory air before it can produce meaningful sound. Schreier (2024) adds that silent block is often accompanied by secondary behaviors such as head movements or tense facial expressions as compensation, which can also be implicitly observed in Sharon's video.

The highly consistent pattern of blocking on the /th/ sound (appearing in at least seven evenly distributed instances throughout the video) is a significant finding. Loucks et al., (2007) state that sounds requiring dual coordination, in this case the tip of the tongue having to touch the upper teeth with precision, tend to trigger blocking more frequently in stutterers. From a neurolinguistic perspective, this finding supports the view of Chang et al., (2023) that stuttering is phoneme-specific, meaning that neuromotor coordination disorders do not occur randomly in all sounds, but are more concentrated in sounds that are more demanding in terms of articulation.

Mixed Pattern

A total of 17 Mixed Pattern patterns were found, consisting of combinations of repetition and prolongation, combinations of blocks and repetition, and combinations of blocks and prolongation. An example of a Mixed Pattern pattern of repetition and prolongation was found at 1:28.

People and I you know I have a very uh very uh very a very big uh very obvious in security (1.28)
In this data, the phoneme /v/ underwent repetition and prolongation simultaneously in the word 'very'. An example of a mixed pattern of block and repetition is found at 9:11-9:18.

which the fear / the fear is repeated / the word is difficult to pronounce; there is an air block. In this data, an air block precedes the repetition of the phrase 'the fear', indicating that after the block is overcome, the speaker returns to the previous point and repeats the same phrase.

Discussion

The Dominance of Prolongation

The findings of this study indicate that prolongation is the most dominant type of stuttering with 40 occurrences (32.3%), and among all subtypes, prolongation of the fricative consonant /s/ appears with the highest frequency. The dominance of the /s/ sound is consistent with Guitar's (2006) explanation that continuous fricative sounds have a higher tendency to undergo prolongation than plosive sounds. This is due to the acoustic nature of fricative sounds, which can be prolonged without needing to be repeated, so that when the motor coordination system is disrupted, the sound becomes 'stuck' in an abnormal duration.

The consistency of prolongation of the /t/ sound throughout the video is also noteworthy. This sound appears in a prolonged form in key words scattered evenly from 4:54 to 17:33 minutes. According to Alwan and Jiang, (2011) prolongation in plosive consonants does not occur in the form of prolonging the sound itself, but rather in the form of articulatory tension (pre-plosive tension) that slows down the occurrence of the sound explosion. This pattern reflects an imbalance between subglottal air pressure and supraglottal resistance, which is a characteristic sign of neuromotor disorders in speech production. This finding reinforces the view of Chang et al. (2019) that neurological disorders in stutterers are specific to certain phoneme classes, rather than being uniform across all sounds.

The only instance of vowel prolongation found, namely the prolongation of the vowel /o/ in the word 'our' (minute 17:18), is interesting to note because it occurs at the end of the utterance. Schaeffer (2006) states that vowel prolongation is generally rare in stutterers and usually indicates a higher-than-normal level of muscle tension in the Vowel system. Its appearance at the end of the speech is likely related to the accumulation of motor fatigue during nearly 17 minutes of speaking.

Repetition as a Reflection of Phonological Processing Disorders

The repetition found in Sharon's data includes four subtypes, namely phonemes, syllables, words, and phrases. These four subtypes reflect disorders occurring at different linguistic levels. Phoneme and syllable repetition indicates disorders at the phonological and motor levels, while word

and phrase repetition indicates disorders involving the lexical and syntactic levels. The person stuttering pattern is characterized by repetition of initial syllables or stressed syllables (Rijeka et al., 2021).

Repetition is one of the most common forms of stuttering in speech. This condition occurs when the same sound is repeated multiple times, whether as a letter, syllable, word, or phrase, easily attracting the listener's attention (Al, 2025). The repetition of the phoneme /p/ in the word "powerful" (minute 0:18) and the repetition of the syllable 'wo' in the word "worthlessness" (minute 2:39) can be explained by the covert repair hypothesis proposed by Postma and Kolk (1993). This hypothesis states that stutterers have slower phonological processing speeds than normal speakers, resulting in a mismatch between phonetic planning and motor execution. As a result, the speech production system performs self-repair by repeating the unit that has been uttered while waiting for the motor system to complete the phonetic encoding process for the next unit.

The repetition of the word "has" five times in a row (minutes 3:33-3:39) and the repetition of the phrase "the way that we view" three times (minutes 1:10-1:16) are manifestations of a more complex disorder. Bloodstein and Ratner (2008) explain that high-frequency repetition of content words is a significant indicator of stuttering severity, as it shows that the disorder occurs not only at the sub-lexical level, but also in the clause formulation process as a whole. This phenomenon can be interpreted within the framework of Starkweather and Gottwald's (1990) demands and capacities model: the context of speaking in public about a highly emotional topic significantly increases cognitive demands and exceeds Sharon's motor-speech capacities, thereby triggering repetition at a higher level.

Block as the Most Severe Manifestation of Neuromotor Disorders

Block, especially silent block, is the type of stuttering disorder that has the most severe impact on the fluency of communication. The finding of silent block at 5:30 minutes—where Sharon's mouth moves but no sound comes out at all is the most dramatic example of this disorder. Guitar (2006) refers to this condition as laryngeal block, which is the excessive adduction of the larynx that completely stops the flow of expiratory air before it can produce meaningful sound. Conture (2001) adds that silent block is often accompanied by secondary behaviors such as head movements or tense facial expressions as compensation, which can also be implicitly observed in Sharon's video.

The highly consistent pattern of blocking on the /th/ sound (appearing in at least seven evenly distributed instances throughout the video) is a significant finding. Howell et al. (2008) state that sounds requiring dual coordination, in this case the tip of the tongue having to touch the upper teeth with precision, tend to trigger blocking more frequently in stutterers. From a neurolinguistic perspective, this finding supports the view of Chang et al. (2019) that stuttering is phoneme-specific, meaning that neuromotor coordination disorders do not occur randomly in all sounds, but are more concentrated in sounds that are more demanding in terms of articulation.

Mixed Pattern Patterns as Indicators of Stuttering Severity

The discovery of 17 Mixed Pattern patterns, which are combinations of two types of stuttering in one instance, is an important indicator of the severity of Sharon's stuttering. Yairi and Seery (2015) state that the consistent appearance of Mixed Pattern patterns in a speaker's speech is a characteristic of advanced stuttering, which is stuttering that has developed into a complex and established pattern over many years.

An example of a Mixed Pattern pattern at 1:28, where the phoneme /v/ undergoes both repetition and prolongation simultaneously, shows that the motor system failure is not singular. In this case, the system not only fails to continue to the next sound (repetition), but also fails to maintain the duration of the sound within normal limits (prolongation). According to Levelt's model (1989), this condition occurs when the self-monitoring process detects an error and triggers self-repair, but the repair process itself then triggers additional interference due to excessive cognitive load.

Sharon's Stuttering in the Perspective of Advanced Stuttering

Overall, the relatively even distribution between prolongation (32.3%), repetition (27.4%), and block (26.6%), accompanied by the emergence of Mixed Pattern patterns (13.7%), places Sharon's stuttering profile in the advanced stuttering category as described by Bloodstein and Ratner (2008). Stuttering in this category is characterized by the three types of disorders appearing alternately and overlapping in speech, in contrast to stuttering in the early stages, which is generally dominated by only one type, namely repetition of words or syllables.

This finding is consistent with Sharon's background, who explicitly stated that stuttering had affected her life since childhood and encouraged her to remain silent in many situations. Meier et al., (2025) states that persistent stuttering in adult speakers correlates with the development of secondary behaviors that become increasingly complex and diverse the longer a person lives with the condition. Stuttering is a complex speech disorder influenced by genetic, neurological, and environmental factors (Venkatesan, 2024). In Sharon's case, her decision to finally speak in public and make stuttering the topic of her lecture resulted in a rich recording of speech with a variety of stuttering types, making it a highly representative source of data for psycholinguistic studies.

Conclusion

This study identified and analyzed 124 instances of stuttering in Sharon's speech in the YouTube video used as the data source. The results of the analysis show that the stuttering disorders that appeared included the three main types, namely prolongation, repetition and blocking as well as mixed patterns. Prolongation of the fricative consonant /s/ was the most dominant subtype, in accordance with the acoustic properties of fricative sounds, which are continuous and can be prolonged. Word repetition was the most frequently found subtype of repetition, with repetition of content words being a significant indicator of stuttering severity. Total blocks (silent blocks) and consistent blocks on the /th/ sound are findings that indicate specific neuromotor disorders in certain

phonemes. The relatively even distribution among the three types of stuttering, accompanied by the emergence of Mixed Pattern patterns, places Sharon's stuttering profile in the advanced stuttering category.

This study is expected to contribute to clinical psycholinguistic research, particularly in understanding stuttering profiles in adult speakers. The limitation of this study lies in the use of data from only one speaker, so the findings cannot be generalized. Further research is recommended using a larger data corpus involving various speakers, contexts, and languages in order to produce a more comprehensive picture of the variation in stuttering types. However, this study has several limitations. The data were obtained from a single speaker and one video recording, which may not represent the full variability of adult stuttering patterns. Future research may involve multiple speakers or different speaking contexts to provide a broader psycholinguistic understanding of stuttering.

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