

What's an Error Anyway? Reframing “Persistent Speech Patterns”

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Asking Without Answers: Moving Forward Through Inquiry

We recognize that many of the questions we'll be asking today **do not have concrete answers**—and that's okay.

By asking them, we are taking a meaningful step forward:

- challenging assumptions
- questioning “normal” vs “different”
- opening dialogue
- expanding our understanding
- reflecting on our practices as clinicians, academics and researchers

Positionality of Self and Audience

Philip is a researcher and SLP in SSDs and multilingualism

Carlos is a former school SLP and researcher in SSDs

Rick is a person who stutters and a stuttering researcher

Naomi is a person who stutters and stutter-affirming researcher

Matt is a person who stutters (with /r/ distortions), speech therapist, and PhD student specializing in stuttering

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What is a “Residual Speech Error” (RSE)?

- ❖ A term used to refer to all speech distortions and misarticulations that persist beyond 8 years of age, regardless of historical intervention or etiology (McAllister Byun, 2017).
 - typically include later developing sounds (e.g. /s, z, ʃ, tʃ, ʒ/)
 - residual, persistent speech errors (Flipsen, 2015)
 - 51.4% and 65% of the individuals with “RSEs” may never have accessed intervention from an SLP (Daniel & McLeod, 2017; Veríssimo et al., 2012).
- ❖ Some self-selected terms by adults with these speech patterns:
 - my “s”s; my lisp; my “r”s
- ❖ 2-5% of people may produce speech with one or more “RSEs” (McAllister et al., 2020; Veríssimo et al., 2012) or “persistent speech patterns”

“Residual Speech Errors”

- ❖ Can intervention create change? (Shields & Hopf, 2024)
 - For some, existing clinical research shows that intervention can create change
 - Benefit is greater with intensive intervention that incorporates traditional approaches & instrumental biofeedback
 - We know most about /ɹ/
 - Errors may not fully resolve
 - Long-term maintenance & generalization
 - Limited data across variable measures
- ❖ Parallels to accent modification?
 - Even if we have the capacity to make change... When is it appropriate?
 - Do pros always outweigh cons?
 - Is there harm in pathologizing persistent speech patterns?



If you work with school-age children, estimate the percentage of kids ages 8+ on your caseload with one or more “residual speech errors” or “persistent speech patterns”.



In your experience, how satisfied are you with the effectiveness of intervention for children with RSEs/PSPs?

Impact of “Residual Speech Errors”

Reported Impact

My child's speech has an impact on his or her social interactions.

My child's speech has an impact on his or her general life satisfaction.

My child has been teased or bullied because of the way his or her speech sounds.

My child feels that his or her speech sounds different from other children's.

My child's speech sounds different from the speech of other children his or her age.

Impact of “Residual Speech Errors”

Reported Impact	<i>Discrim. Param.</i>
My child's speech has an impact on his or her social interactions.	2.73
My child's speech has an impact on his or her general life satisfaction.	1.27
My child has been teased or bullied because of the way his or her speech sounds.	0.88
My child feels that his or her speech sounds different from other children’s.	0.38
My child’s speech sounds different from the speech of other children his or her age.	0.37

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Impact of “Residual Speech Errors”

Impact on **interpersonal interactions and relationships**

Impact on **‘academic performance’**

Impact of producing speech **differently** from peers

Hitchcock, Harel, & McAllister Byun (2015)

Social, Emotional, and Academic Impact of Residual Speech Errors in School-Aged Children: A Survey Study

Impact of “Residual Speech Errors”

Impact of **effective,**
appropriate intervention

Impact of **extended,**
ineffective intervention

“Persistent Speech Patterns”

Reframing and Discussion

If we're hoping to reframe PSPs, it's helpful to look at what related populations have done

- Stuttering and PSPs are both conditions affecting speech production that is usually observable (and judged) by listeners
- The field of stuttering is undergoing a big shift regarding how it's viewed and treated (building off momentum from the Deaf and Autistic communities)
- WHO-ICF biopsychosocial model can be helpful for understanding the broader influences and outcomes of the impairment
- We argue that PSPs may benefit from a similar perspective shift

Stuttering Perspective

Harmful early therapy experiences

- Stuttering viewed as “errors”
- Focus on fluency perpetuated guilt, shame, avoidance
- Intensified unachievable expectations (child, parents, teachers)
- No carryover (“The tools didn’t work”)
- Felt alone, like no one understood

Re-conceptualizing the experience of stuttering:

- Campbell et al (2019) – difference not disorder
- Gerlach et al (2021) – concealable stigmatized identity

Re-conceptualizing stuttering therapy:

- Constantino et al (2020) – effort and spontaneity
- Stutter-affirming therapy that focuses on **communication and confidence** (Byrd et al., 2024; Constantino, 2023; Irani et al., 2025; Reeves et al., 2023; Sisskin, 2018)

Stuttering

PSP

- Functional etiology involving motor timing and coordination differences in speech network
- Variable and situational
- Escape and struggle behaviors
- Strong community and identity component (e.g., “I am a stutterer/person who stutters”)
- Counseling is integral

- Rooted in complex motor learning and/or neurological differences
- May persist despite prolonged therapy
- “Fix it” mentality; may experience shame or perfectionism due to years of being corrected
- Even “mild” presentations can have large internal toll (e.g., frustration, self-consciousness, embarrassment)
- “Fluency” and “corrections” sound and feel unnatural
- Scanning/anticipation
- Avoidance

- Structural or functional etiology
- Usually highly consistent
- Limited recognition of communication competence or self-acceptance as outcomes
- Few community or advocacy spaces

Shared Experiences: Common Threads Across PRSEs and Stuttering

Early data analysis from our research exploring the lived experiences of individuals with residual articulation differences has uncovered shared experiences, including:

- Dynamic nature of PRSEs
- Masking, Talking Around, Rehearsing
- Cognitive Load and Self-Monitoring
- Acceptance & Identity
- Intersectionality & Microaggressions

Centering Lived Experience in Today's Panel Discussion

We aim to anchor today's panel with the voices of adult individuals who have experienced persistent speech sound errors across their lives, and have kindly shared their perspectives with us.

Their reflections, insights, and stories are not just illustrative—they are foundational to how we frame this conversation.

Centering Lived Experience in Today's Panel Discussion

Rather than speaking **about** individuals with speech differences, we are committed to speaking **with** and **alongside** them – not just as clients, but as co-creators, collaborators and leaders.

This work is ongoing and iterative.

To reflect this stance, we are in the process of assembling a Community Advisory Panel composed of individuals with lived speech sound error experience to inform this work.

Panel Q&A: How to Submit Your Questions via Slido

Two-Part Q&A Format:

- **Pre-Selected Questions**
 - The panel will begin by responding to questions submitted in advance.
- **Live Audience Questions**
 - During the session, you're invited to submit your own questions via **Slido**.
 - Our team will monitor submissions and select questions for the panel to answer live.

How to Participate:

-  Go to slido.com
- Enter the event code:
#1445091
-  **Write your question and submit**
-  **Upvote questions** you find most relevant or interesting

Why is so much cognitive effort expected from individuals with PRSEs to conform to a standard that may not reflect their natural speech patterns? At what expense?

How can we apply the lessons learned in the realm of stuttering and ASD to our approaches to PRSD?



How can we help clients maintain social confidence and connection even when their speech doesn't conform to normative expectations?

How do we support children in reclaiming their confidence without implying that accuracy or "fixing" speech is the path to acceptance?

What does it mean when confidence returns only after gaining control over speech - are we celebrating the person or the conformity?

What power dynamics are at play when clinicians shape speech toward normative models—who benefits, and who is burdened?

How can we reflect on the boundaries between dialect, accent, and speech impediment, challenging the definition and authority behind what is considered a speech disorder.

How do we reconcile the tension between supporting communication access and perpetuating normative speech ideals that marginalize difference?

How can we shift from “fixing” speech to affirming it as a valid expression of identity?

What can we as SLPs do right now to better support clients with PRSD?

Thank You

Questions? Contact Us

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Resources

