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Introduction

Stuttering is a complex, individualized disorder. Treatment for stuttering is no less complex. Therapy approaches for stuttering include everything from programmatic, single-focus fluency shaping methodologies, to holistic programs that incorporate psychotherapy approaches, mindfulness, and community activities. For the average speech-language pathologist who needs to craft an appropriate treatment plan for a specific, individual client, sifting through the myriad of evidence-based options can be overwhelming (especially given that equally evidence-based treatments may have entirely conflicting philosophies). It is not surprising, then, that speech-language pathologists consistently report that they are uncomfortable assessing and treating stuttering (Santus, Tellis, & Kong, 2019; Tellis, Bressler, & Emerick, 2008). Research is being released daily uncovering new aspects of the nature of stuttering, but these findings are often not applied clinically. In addition to typical research-to-practice lag times, clinicians who are already overwhelmed or confused by the quantity of existing treatments may be especially hesitant to adopt new approaches that incorporate current research.

We propose a new framework for stuttering therapy: the 3Es. The purpose of this framework is twofold. The first purpose is to provide non-specialist SLPs with an evidence-based tool for identifying, analyzing, selecting, and implementing stuttering interventions for an individual client. The second purpose is to present newer evidence-based interventions alongside “classic” treatments, facilitating therapy that is up-to-date with current research and socially relevant for people who stutter living in the 2020s.

Research Base

The need for a new model became abundantly clear upon taking a close look at research trends and developments from the last decade (2010-2020). Most of this new research is not accounted for in a current therapy model. The emerging trends that have challenged these existing approaches include redefining the stuttering experience, understanding the stigma of stuttering, anticipation of the stuttering moment, disability rights, and self-help and support.

Efforts to define stuttering often come from the listener’s experience of stuttering. Researchers at Michigan State University are working to redefine stuttering from the perspective of the person who stutters (Tichenor & Yaruss, 2018), suggesting that stuttering comes from the sensation of loss of control leading to an interrelated chain of events consisting of affective, behavioral, and cognitive reactions, environmental factors, and reactions of listeners.

Almost half of all people who stutter feel the need to hide the fact that they stutter (Boyle, Milewski, & Beita-Ell, 2018). This desire to conceal may result from a high amount of felt stigma (shame, fear) even with low levels of enacted stigma (actual negative experiences) (Boyle & Blood, 2015). This stigma can then lead to increased stress and decreased physical health (Boyle & Fearon, 2018).

Anticipation, in regards to stuttering, is the cognitive or proprioceptive sense that one is about to stutter. There is a high prevalence of anticipation among people who stutter (Jackson, Yaruss, Quesal, Terranova, & Whalen, 2015). Anticipating stuttering increases the likelihood of stuttering (Arenas & Zebrowski, 2016) and often leads to anxiety and uncertainty (Jackson et al., 2015).

Proponents of disability rights argue that unclear and conflicting expectations are forced upon people who stutter, which causes stuttering to be seen as a moral failure. Constantino (2018) notes that therapy should focus on the well-being of the person who stutters, not normalization of superficial behaviors. People who stutter report personal benefits from stuttering including emotional growth, feeling stronger, deepening of relationships, increased sensitivity to others, and finding positive meaning in challenges (Boyle, Beita-Ell, & Milewski, 2019).

Covert stuttering is a type of stuttering that exists when a person attempts to hide his/her stutter in order to pass as fluent. This “active form of resistance” occurs when a person who stutters learns that stuttering has ethical ramifications (Constantino, Manning, & Nordstrom, 2017). A variety of strategies are used by people who stutter to conceal their stuttering including avoiding stuttering, avoiding taking on the identity of a person who stutters, changing words, content, or sounds, and changing vocal tone. Covert people who stutter are often managing high anxiety and significant cognitive impacts, especially when transitioning to more overt stuttering (Douglass, Schwab, & Alvarado, 2018).

Support groups (safe spaces for people who stutter to meet others who stutter) have positive benefits for both children (Gerlach, Hollister, Caggiano, Zebrowski, 2019) and adults who stutter (Trichon & Tetonowski, 2011).

The 3Es Model

The 3Es is a stuttering therapy planning tool for clinicians working with clients who stutter. The model can be used to understand different approaches and how they relate and compare to one another. This is not a treatment approach or intervention itself. This tool is conceptualized by identifying three key thematic components of stuttering therapy, incorporating a mnemonic for easy recall and application. These three stuttering therapy elements are *education*, *ease*, and *empowerment*.

Education includes any activity where the client is learning about the science, psychology, or sociology of communication. This could include high-level concepts like code switching or the approach-avoidance hypothesis, or technical knowledge like vocal anatomy and the rationale behind techniques.

Ease includes any activity that focuses on skill or proficiency. Anything that requires “practice” typically falls in this category. This includes common interventions like working on rate of speech, voice or fluency techniques, or anything relating to reducing struggle.

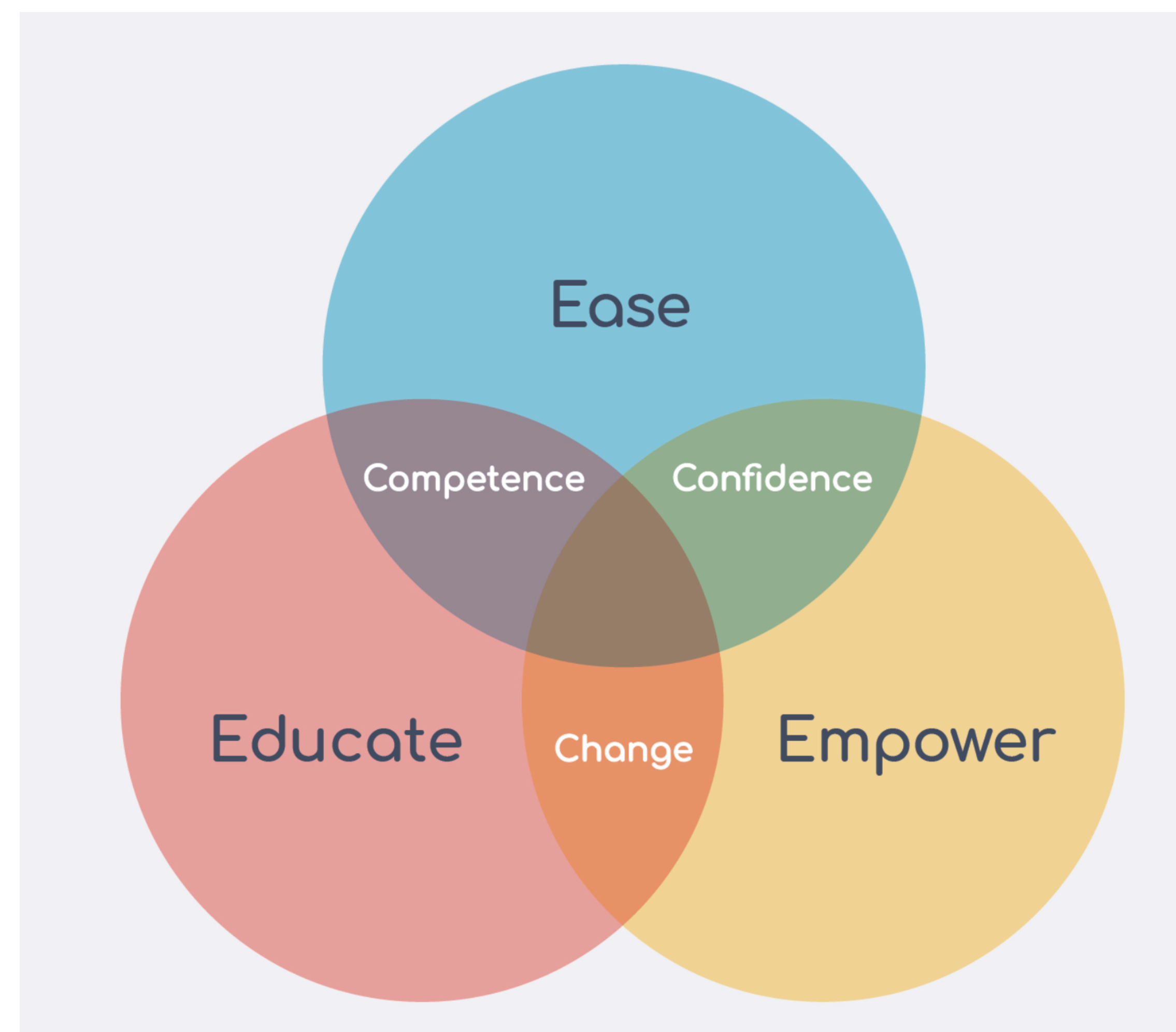
Empowerment includes activities that focus on the nexus between the individual person and the world that they live in. Communication exists only in context, and a challenging or unsupportive environment can derail even the most effective speakers. Empowerment activities include everything from role-play to self-disclosure to taking on a new challenge, like a presentation or blind date.

The Es overlap in unique ways to create communication *outcomes*, or in another word, goals. These outcomes are the 3Cs.

Competence (ease x education) occurs when the client knows what they are doing and why they are doing it; they become proficient enough to produce the desired result consistently.

Confidence (ease x empowerment) occurs when the client can consistently execute a skill and is able to adapt to environmental challenges. They might not be perfect, but they’re able to get up and continue on if they’ve been knocked down.

Change (education x empowerment) occurs when the client has the knowledge and courage to forge their own path forward. They’re able to see a goal or challenge they want to overcome and keep themselves moving forward.



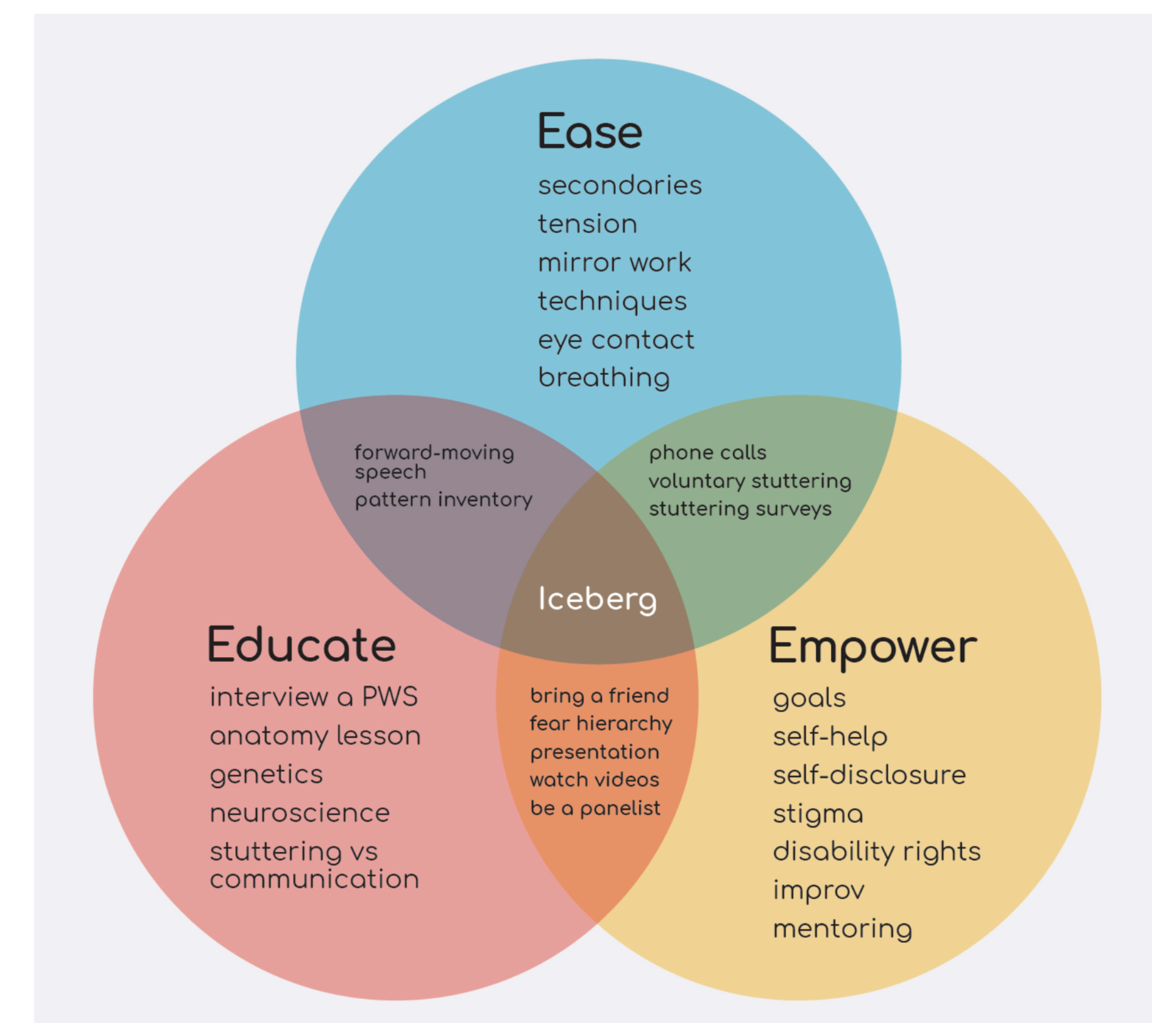
Application

The primary application of the 3Es tool is treatment planning. Once values-based treatment goals are established, the tool directs clinicians to a specific set of evidence-based therapy activities. It does not go so far as to specify which activity to do in which session—that’s an individual choice for the clinician and client to make. The purpose is to provide an accessible, robust, and structured “menu” of activities that can be flexibly combined throughout the course of treatment.

Current and future treatment planning materials include creating an exhaustive list of traditional and non-traditional stuttering therapy activities, with an associated E or C value and developing a mini-curriculum that walks clinicians and clients step-by-step through the first four sessions of treatment.

Future Directions

Future work will include research-based validation and continued development of associated treatment resources for clinicians. Research validation will focus on strengthening the efficacy and efficiency of this model, implementing new research as it becomes available. Resource development includes continued creation of learning modules and therapy materials for clinicians.



Stigma Education

Stuttering is misunderstood

Almost 50% of AWS feel the need to hide their stuttering (Boyle et al., 2018)
High felt stigma even in absence of enacted stigma (Boyle & Blood, 2015)
Self-stigma can lead to health problems (Boyle & Fearon, 2018)
Disadvantages in the labor market (Gerlach et al., 2019)
PWS adopt a variety of strategies to pass as fluent (Constantino et al., 2017)
Positive association between self-disclosure and well-being (McGill et al., 2018)
Expanded definition of stuttering to include covert behaviors (Tichenor & Yaruss, 2018)

- Create educational packet/presentation with client to present to family/friends/coworkers
- Create functional self-disclosure statements and practice them up the fear hierarchy
- Identify and monitor avoidance behaviors

Spontaneity Ease

Stutter beautifully

Spontaneity: speech characterized by little premeditation or effort (Constantino et al., 2020)
An increase in spontaneity, not fluency, is associated with a decrease in adverse impact of stuttering on people's lives (Constantino et al., 2020)
Increases of spontaneity, self-efficacy, speaking to family, speaking to people with whom you've discussed stuttering (Constantino et al., 2020)
Move from effortful speech to more spontaneous speech (Constantino et al., 2020)
Defining stuttering as a loss of control (Tichenor & Yaruss, 2019)

- Building awareness of tricks/secondaries
- Learning about different ways to stutter
- Identifying strong communication behaviors other than fluency to work on (e.g., eye contact, pausing, organizing, tone)

Support Empowerment

It's okay to stutter

Benefits of attending a stuttering support group for both kids and adults with results maintained at 3 month follow up (Gerlach et al., 2019; Trichon & Tetonowski, 2011)
Progress involves stepping out of one's comfort zone which can result in progress in communication and feelings of confidence (Boyle & Gabel, 2020)
Environmental factors such as reactions and attitudes of listeners and others influence stuttering (Tichenor & Yaruss, 2019)

- Watch videos, listen to podcasts, and/or read books about stuttering
- Attend a stuttering support group
- Post on social media about stuttering and how you want others to react

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Disclosures

Katie Gore:
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Courtney Luckman:
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References

Arenas, R. M. & Zebrowski, P. M. (2016). The relationship between stuttering anticipation and verbal response time in adults who stutter. *Speech, Language, and Hearing*, 1, 1-14.

Boyle, M. P. & Gabel, R. M. (2020). "Openness and progress with communication and confidence have all gone hand in hand": Reflections on the experience of transitioning between concealment and openness among adults who stutter. *Journal of Fluency Disorders*, 65, 1-15.

Boyle, M. P., Beita-Ell, C., & Milewski, K. M. (2018). Finding the good in the challenge: Benefit finding among adults who stutter. *Perspectives of the ASHA Special Interest Groups*, 40(1), 1519-1526.

Boyle, M. P., Milewski, K. M., & Beita-Ell, C. (2018). Disclosure of stuttering and quality of life in people who stutter. *Journal of Fluency Disorders*, 58, 1-10.

Boyle, M. P. & Fearon, A. N. (2018). Self-stigma and its associations with stress, physical health, and health care satisfaction in adults who stutter. *Journal of Fluency Disorders*, 56, 112-121.

Boyle, M. P. & Blood, S. W. (2015). Stigma and stuttering: Conceptualizations, applications, and coping. In *Stuttering meets research, stigma, and discrimination: An overview of attitude research* (pp. 43-70). West Virginia University Press.

Constantino, C. D., Eshorn, N., Butler, E. H., Beck, J. C., Manning, W. H. (2020). The Speaker's Experience of Stuttering: Measuring Spontaneity. *Journal of Speech, Language, and Hearing Research*, 63, 988-1001.

Constantino, C. (2018). What can stutterers learn from the neurodiversity movement? *Speech and Language*, 38(4), 382-396.

Constantino, C. D., Manning, W. H., & Nordstrom, S. N. (2017). Rethinking covert stuttering. *Journal of Fluency Disorders*, 53, 26-40.

Douglass, J. E., Schwab, M., & Alvarado, J. (2018). Covert stuttering: Investigation of the paradigm shift from covertly stuttering to overtly stuttering. *American Journal of Speech-Language Pathology*, 27(3), 1235-1243.

Gerlach, N., Hollister, J., Caggiano, L., & Zebrowski, P. M. (2019). The utility of stuttering support organization conventions for young people who stutter. *Journal of Fluency Disorders*, 62, 1-12.

Gerlach, N., Totty, E., Salamantini, A., & Zebrowski, P. (2018). Stuttering and labor market outcomes in the United States. *Journal of Speech, Language, and Hearing Research*, 61(7), 1849-1863.

Jackson, E. S., Yaruss, J. S., Quesal, R. W., Terranova, V., & Whalen, D. H. (2015). Responses of adults who stutter to the anticipation of stuttering. *Journal of Fluency Disorders*, 45, 38-51.

McGill, M., Siegel, J., Nguyen, D., & Rodriguez, S. (2018). Self-report of disclosure statements for stuttering. *Journal of Fluency Disorders*, 56, 22-34.

Santus, N., Tellis, S., & Kong, F. (2019). Are graduate students receiving adequate education and training in fluency disorders? *Clinical Archives of Communication Disorders*, 4(3), 236-251.

Tellis, G. M., Bresler, L., Emerick, K. (2008). An exploration of clinicians' views about assessment and treatment of stuttering. *Perspectives on Fluency and Fluency Disorders*, 18(1), 16-23.

Tichenor, S., & Yaruss, J. S. (2018). Stuttering as defined by adults who stutter. *Journal of Speech, Language, and Hearing Research*, 62, 4036-4049.

Tichenor, S., & Yaruss, J. S. (2018). A Phenomenological Analysis of the Experience of Stuttering. *American Journal of Speech-Language Pathology*, 27(3), 1180-1194.

Trichon, M., & Tetonowski, J. (2011). Self-help conferences for people who stutter: A qualitative investigation. *Journal of Fluency Disorders*, 36(4), 290-295.