



# ***School-Age Fluency Treatment: Research to Practice***

**Presented to the 34<sup>th</sup> Annual Betty Fusilier  
Conference on Communication Disorders**

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# Alternative Titles for Presentation??

- Stuttering in the School-Aged Population: Uh oh.
- Treatment for Adolescent Stuttering: What the \$&@# Do I Do Now?
- Stuttering Treatment in the School-Aged Population: Turtle Talk for All!
- Treatment of Stuttering in School-Age: Does Anyone Have the Easy-Does-It Book?
- Talking About Feelings and Attitudes with Adolescents: Good Luck with That!
- Life is a Broadway Play: Constant Singing as Treatment for Stuttering

# Outline

- **Act 1**
  - Epidemiology
  - Recent Advances
    - Genetics, Neurogenetics, Resilience
- **Act 2**
  - Evidence-Based Practice
  - WHO ICF
- **Act 3**
  - Common Therapy Factors
    - Treatment Implications / Techniques
    - Case Study / Goals and Objectives

ACT 1

# What is Epidemiology?


- How many persons affected?
- What segments of the population are affected?
- When does the disorder strike, and how long does it last?
- What are its signs and symptoms?
- Is the disorder familial?
- How does this apply to treatment?

# General Epidemiological Findings

- No single cause; no single cure (“Cures are for hams and other edibles”)
- Incidence: 5%
- Prevalence: 1%
- Gender Ratio:
  - Near onset = 2:1 (males to females)
  - Later on = 4-5:1 (males to females)
- Natural or spontaneous recovery:
  - Approximately 75%
- Genetic factors involved

# Stuttering Onset

- Stuttering onset coincides with a time of rapid expansion in expressive and receptive language ability in young children, given that stuttering most typically begins in young children between 2 and 4 years of age.
- A connection between language and stuttering in young children is intuitive.
- It is in the process of using sounds to form words, and words to form phrases and sentences, that the repetitions and prolongations that characterize stuttering often are observed.



# Recent Epidemiological Advances

- Genetics
- Neurogenetics
- Resilience

# Advances in Genetics and Stuttering

- Stuttering is a behavior, a phenotype, that actually changes over time.
- The transmission of stuttering within families does not appear to follow simple, single-gene genetics.
  - Stuttering is likely to be controlled not by 1 gene but by several genes interacting simultaneously.
- Unlike other disorders with a genetic etiology, researchers in stuttering have not located a “stuttering gene.”



# Is Stuttering Familial?

- Approximately 70% of CWS have a relative who stutters in the immediate and extended family.

*BUT*

- It is impossible to study inheritance patterns without considering environmental factors.
  - Few studies in stuttering research have focused on associated environmental factors.

# Primary Genetic Analyses

- Ever-stuttered

- Chr. 9
- Chr. 2
- Chr. 7

- Persistent only

- Chr. 15
- Chr. 13

\*\* Data from NIH-funded, U. of Illinois SRP

# Natural or Spontaneous Recovery


- About 75% of all children who ever stutter recover naturally without formal treatment
- A majority of recovery occurs within 36 months of stuttering onset, some continues up to 5 years post-onset
- A marked decrease in stuttering (esp. PW & DP) occurs within about a year of onset for those who recover
- Girls tend to recover more often and sooner than boys

# Persistence in Stuttering

- Of all those who ever begin stuttering, about 25% continue to stutter beyond 4-5 years past onset
- More boys than girls persist
- Continued presence of DP may indicate tendency to persist
- As stuttering continues, virtually all receive treatment
- Many drop to very low levels of stuttering
- Some continue at higher levels despite treatment

# Genetics and Path of Stuttering: Early Prediction of Possible Persistency: **Red** Flags

- Male
- ***Family history of persistence***
- Later onset (e.g., over the age of 3 1/2 years)
- Stuttering has not abated by 6 months to a year after onset
- Disrhythmic phonations continue
- Has other communication problems (e.g., phonological disorder)



# Genetics and Prediction of Possible Recovery: “Green Flags”

- Female
- Family history of recovery
- Early onset?
- Stuttering severity has dropped significantly by a year or sooner after onset,
- Disrhythmic phonations, if any, drops to normal levels quickly

## Risk Factor Chart

*Place a check next to each that is true for the child*

<b>Risk Factor</b>	<b>More likely in beginning stuttering</b>	<b>True for Child</b>
Family history of stuttering	A parent, sibling, or other family member who still stutters	
Age at onset	After age 3½	
Time since onset	Stuttering 6–12 months or longer	
Gender	Male	
Other speech-language concerns	Speech sound errors, trouble being understood, difficulty following directions	

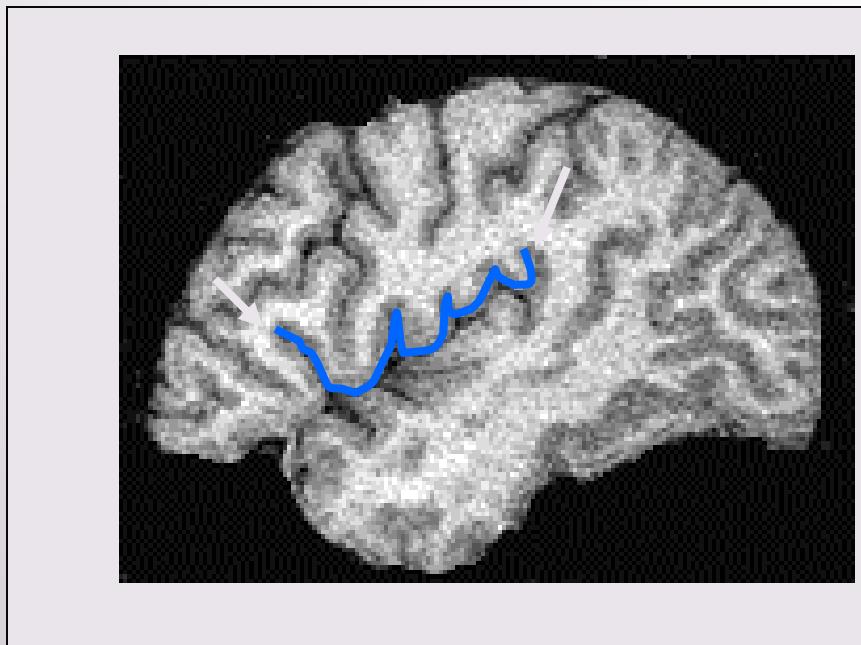
# Genetic Conclusions

- 75% recovery - close to high-end estimates
- Highest rate of recovery occurs during 2nd & 3rd year after onset
- Rate of recovery higher among females
- Strong indications of genetic basis for recovery and persistence
- Family history strongest single predictive factor



# Advances in Neurogenetics and Stuttering

\*\*Recent research took off in 2001 with the Foundas MRI study.

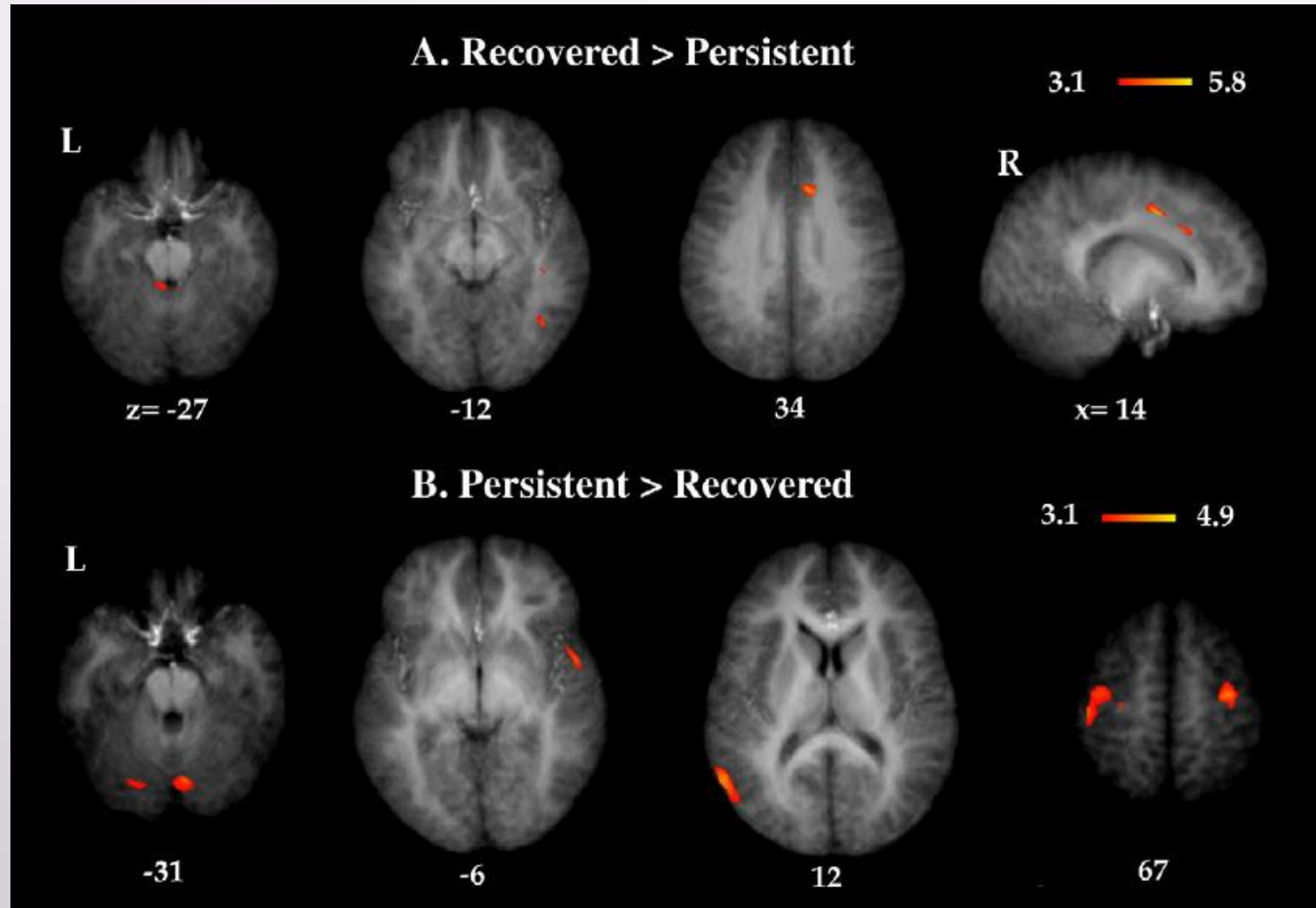


**Control Subject**



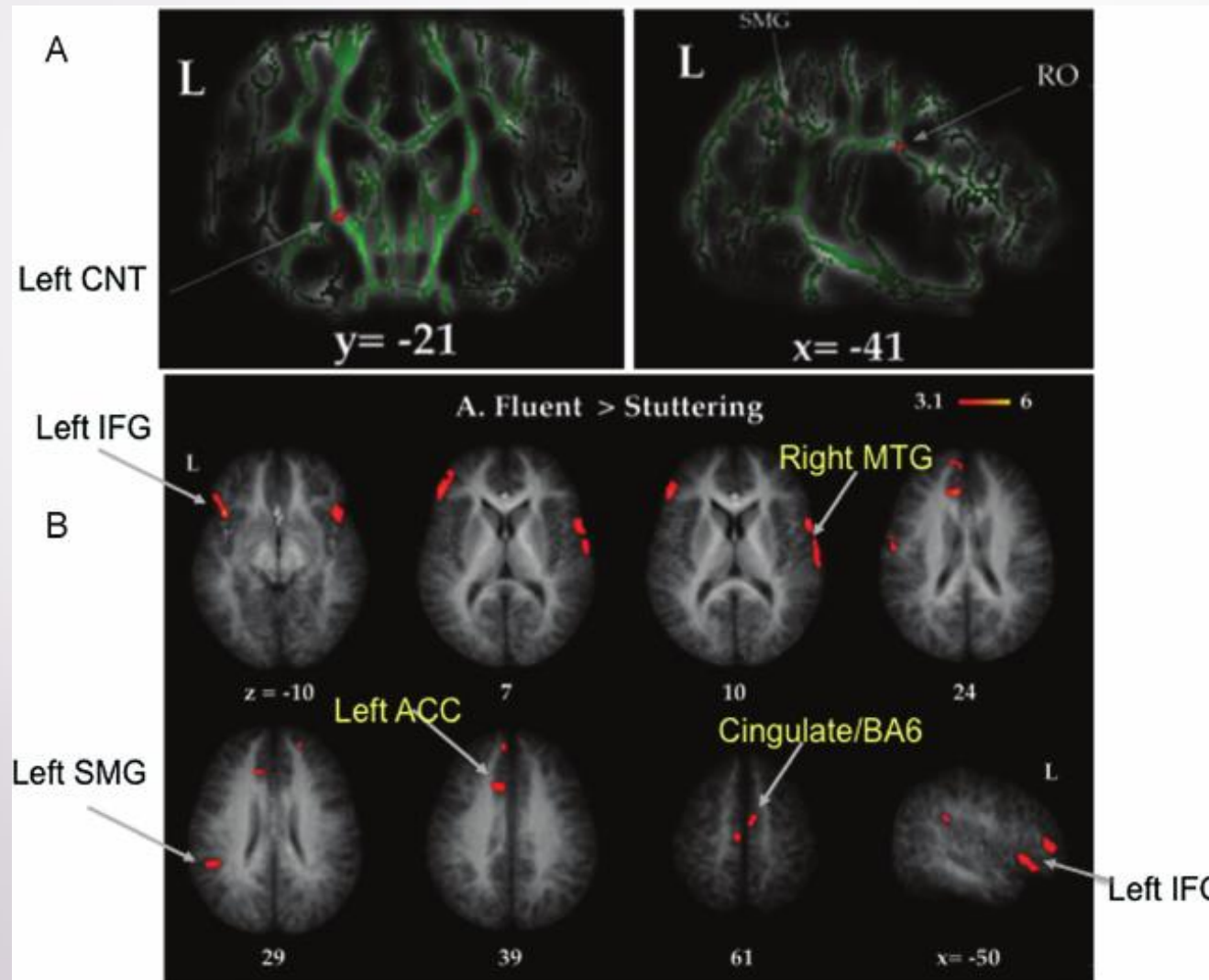
**PWS**

# More recently: Persistence vs. Recovered



\*Data  
from  
Illinois  
SRP

# More recently: White Matter Volume



\*Data from Illinois SRP

# Neurological Summary

- **Gray and White Matter Differences**

- Children with persistent stuttering showed deficiencies in left gray matter volume with reduced white matter integrity in the left hemisphere.
- Adolescents and young adults who stutter were found to have more white matter connections in the right hemisphere as compared with normally fluent controls.

- **Neural Network Connectivity Differences**

- Children who stutter (ages 3 to 9 years) have reduced connectivity in areas that support the timing of movement control. These differences may affect speech planning needed for fluency.

(Data from NIH-funded Illinois SRP; PI: Yairi; Chang & Zhu, 2013).

# Advances in Resilience and Stuttering

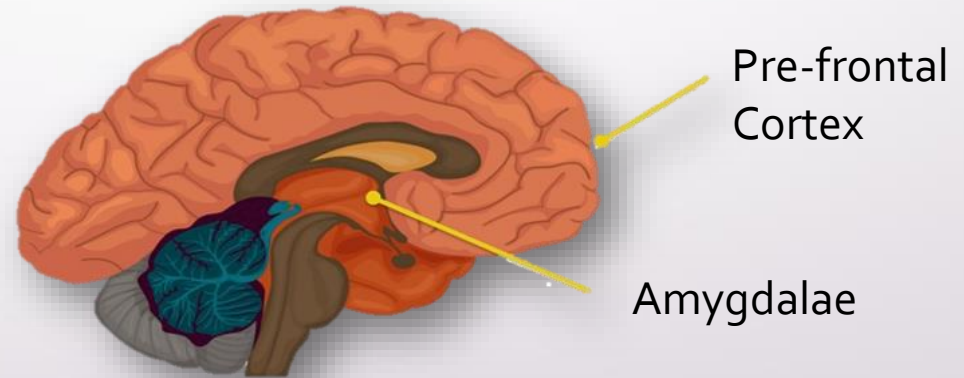
- Resilience = bouncing back
- Children who are successful at regulating excitability and emotional reactivity exhibit resilience.



*From a research study by:  
Craft, C. & Gregg, B. (2017). Presented at  
ASHA.*

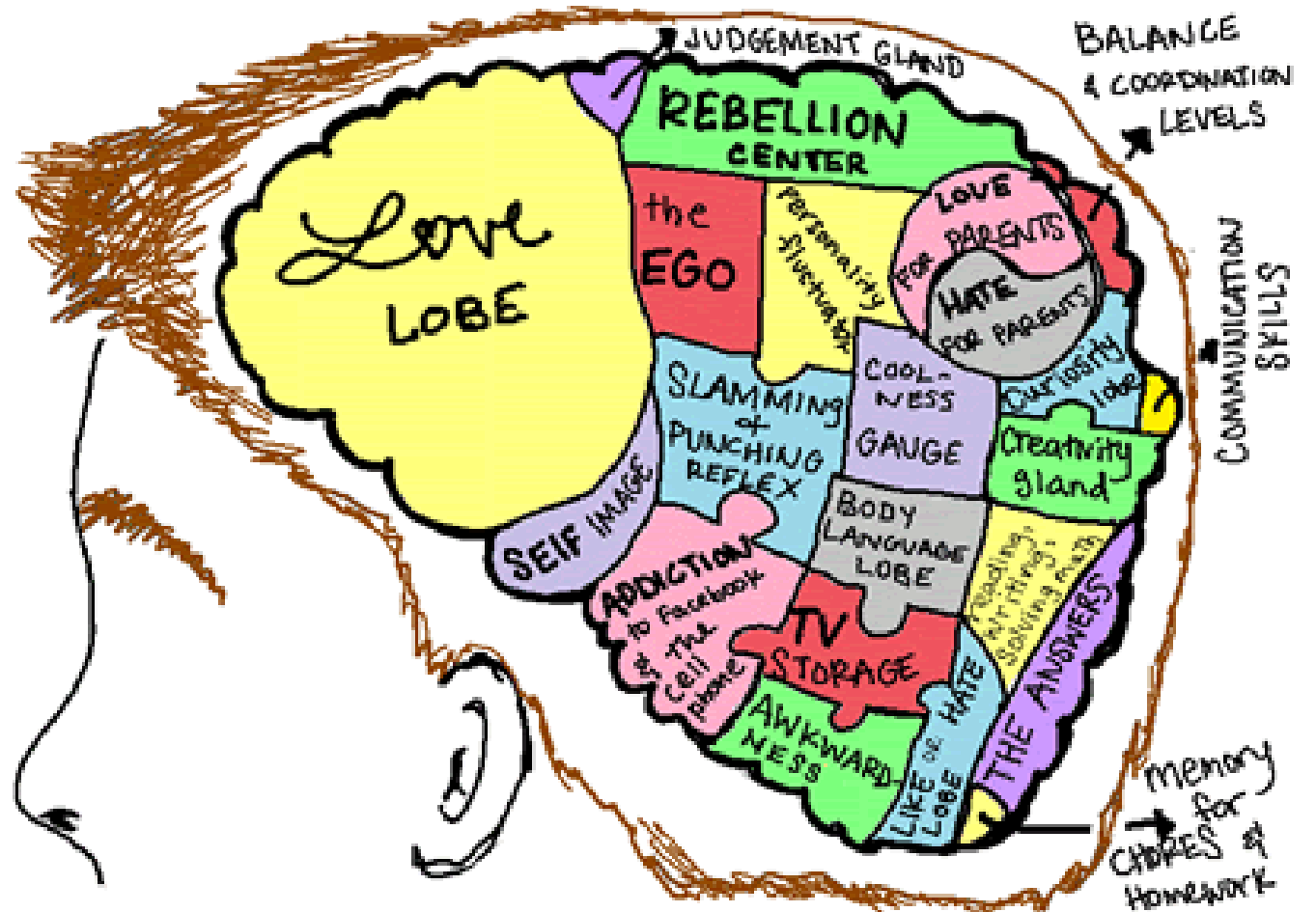
# Resilience and the Brain

- Adults who are able to regain or their emotional balance after a setback rather than wallowing in anxiety, anger, depression, or another negative emotion—have strong connections between the prefrontal cortex (PFC) and the amygdalae (Davidson, 2012).
- The Pre-frontal cortex (PFC)
  - CEO of the brain
  - Evolutionary masterpiece
  - Cognitive-regulatory function
- The amygdalae
  - Emotional engine of the brain
  - Fear & Anxiety
  - Develops before PFC
  - Innervated by release of hormones



# The Adolescent Brain

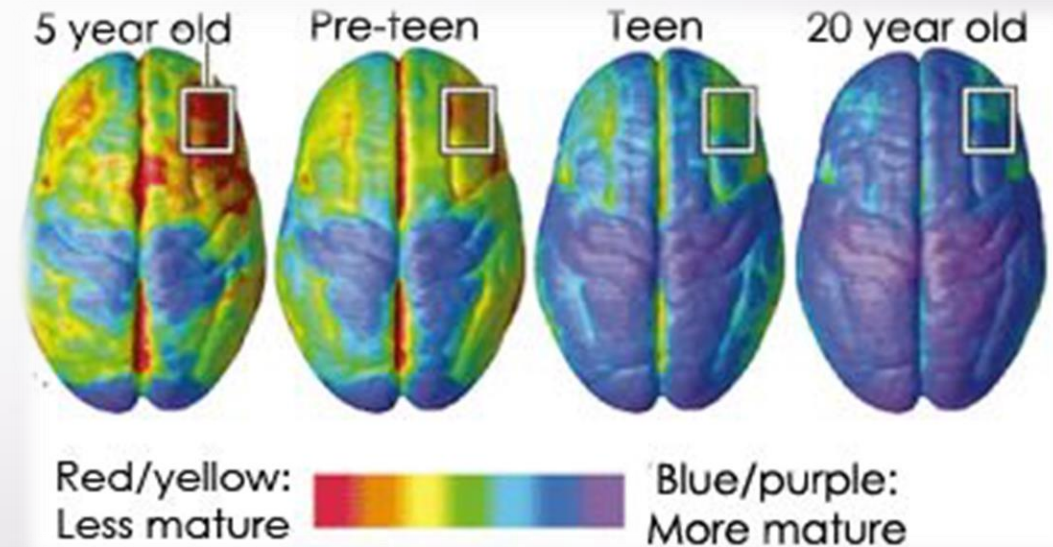
THE  
AVERAGE  
TEENAGE  
BRAIN





# The Adolescent Brain

- Regions of the pre-frontal cortex do not reach full maturity until late adolescence and into early adulthood.
- The structures of the brain involved in producing affective emotional responses (e.g., the amygdala, anterior cingulate, and thalamus) are fully developed by early adolescence.
- The developmental imbalance explains an adolescent's tendency to exhibit maladaptive coping behaviors and be overly sensitive to adversity, such as peer rejection.





# Targeting Resilience in Therapy

ASSETS	RESOURCES
<ul style="list-style-type: none"><li>• Within an individual</li></ul>	<ul style="list-style-type: none"><li>• External to individual</li></ul>
<ul style="list-style-type: none"><li>• Self-esteem</li></ul>	<ul style="list-style-type: none"><li>• Parental and peer support</li></ul>
<ul style="list-style-type: none"><li>• Self-efficacy</li></ul>	<ul style="list-style-type: none"><li>• Specialized programs</li></ul>

# UCA Resilience Study Summary

- Results revealed a statistically significant increase in resilience, as measured by the *CYRM-28* (*our resilience measure*), following intervention.
- Results revealed a moderate negative correlation between post-test *CYRM-28* scores and post-test *OASES* scores.
  - As resilience increases, the overall impact of stuttering decreases.  
*Craft & Gregg (2017)*
- Procedures now an ongoing component of our Smooth Sailing Program.



ACT 2

# Evidence Based Practice in Stuttering Therapy

## The Great Debate

<http://www.asha.org/Research/EBP/>

ASHA Evidence Maps



# Different Fields, Same Questions

- What therapy approach “works best?”
- What is the evidence?
- Are there different kinds of evidence?
- If so, do they receive equal weight in treatment planning?
- How does evidence translate into clinical practice?

# Evidence-Based Practice

1. '**Best research**' = 'outcomes research' or clinically relevant research into the accuracy, precision, and efficacy of diagnostic tests and treatments = **TECHNIQUE**
2. '**clinical expertise**' = the ability to use our best clinical skills and past experience to identify delay or disorder, appropriate intervention, and the client's personal values and expectations = **CLINICIAN**
3. '**client-values**' = the unique preferences, concerns and expectations each client brings to the clinical experience = **CLIENT**

# Evidence-Based Practice

- Clinicians frustrated by lack of well-controlled studies contrasting effectiveness of various stuttering interventions.
- Overall success rates are not significantly greater for any single approach.
- Since each approach yields nearly identical outcomes, clinicians should select an approach based on:
  - Clinical judgment
  - How well it is suited to individual child

# Difficulties in EBP and Stuttering

- Linking “Cause” to Treatment
  - Current research describes stuttering as a neurologically-based disorder that may carry a risk of genetic transmission, involving speech motor coordination.
  - In PWS, speech coordination appears to be destabilized by language or dual task demand, among other stressors—and if that is the case, how could behavioral contingencies permanently reset this problem?
- The current debate of “best treatments” may be ahead of our ability to know whether all current treatments may be hastening normal recovery from stuttering and just leaving high-risk children behind.

# EBP: What Can We Learn from Psychotherapy Research?

- With *rare exception*, research has uncovered little significant difference among different psychotherapeutic approaches.
- This observation has been described as "***the dodo effect***" (e.g. Tallman & Bohart, 2004).

***"Everybody has won and all must have prizes"***

***- Lewis Carroll***





# Explaining the “Dodo Effect”

- Limited data available on efficacy of stuttering therapy for either children or adults.
- Studies have shown that in general, *treatment* is better than *no treatment*.
- Primary dependent variable is % stuttered words or syllables.
- There are ***common factors*** throughout all therapies that facilitate change or progress.

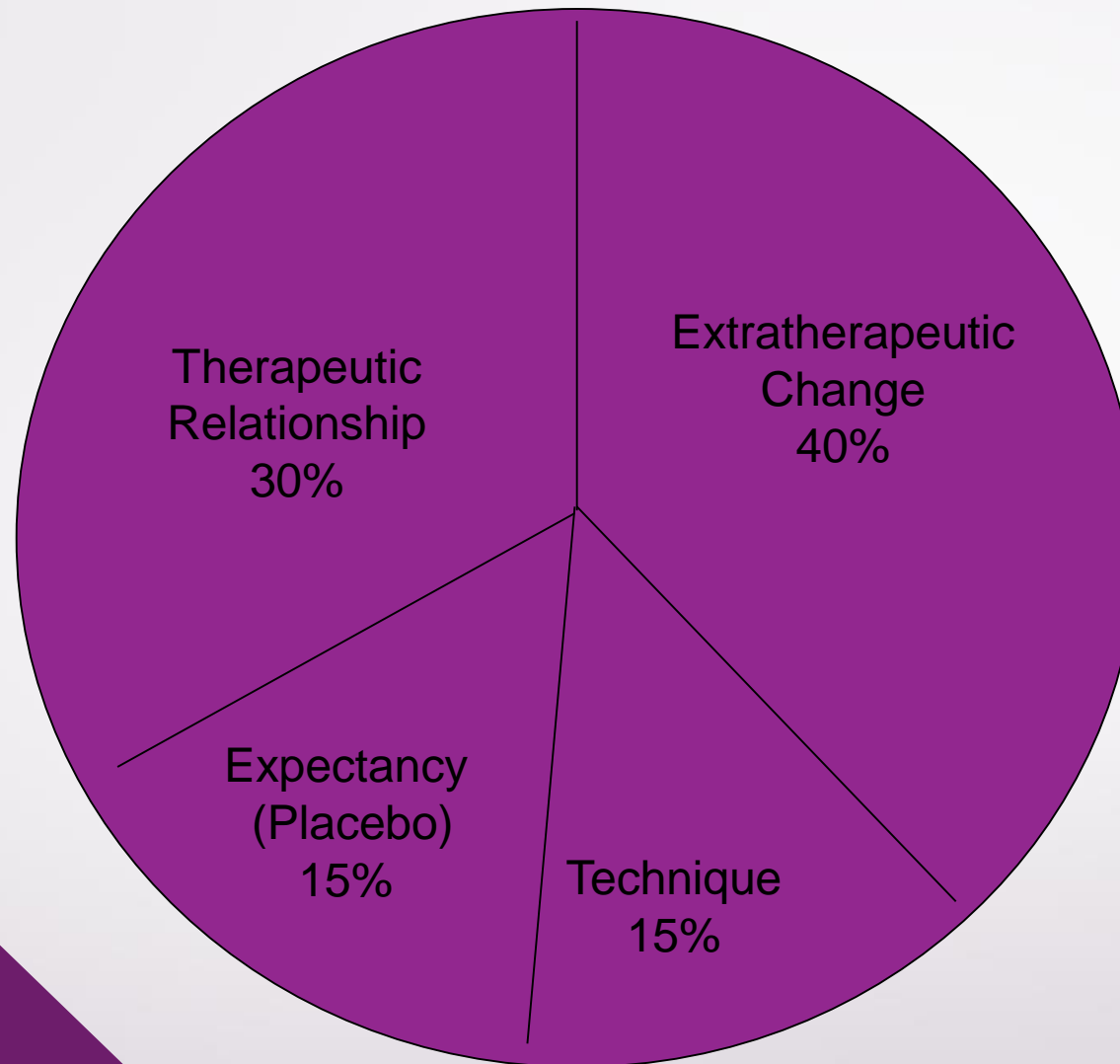
# Explaining the “Dodo Effect”: Common Factors

- Clinicians often rely solely on their clinical experience, but this increases potential for cognitive bias:
  - Ex: if a clinician is already expecting a Tx approach to work, those expectations may influence data interpretation.
  - Ex: if we have observed positive effects of a certain approach, this could compromise our ability to observe contradictory findings.

# Explaining the “Dodo Effect”:

## 4 Common Factors

- **Technique** = factors or ‘strategies’ unique to different therapy approaches (e.g. “easy onset”, “voluntary stuttering”)
- **Extratherapeutic Change** = characteristics of the client and his/her environment (e.g. temperament, social support)
- **Therapeutic Relationship** = characteristics of the clinician/client that facilitate change and are present regardless of clinician’s therapy orientation (i.e. ‘technique’). Components include shared goals, agreement on methods, means and tasks for treatment, and an emotional bond.
- **Hope or Expectancy** = sometimes thought of as “placebo”. Improvement that results from client (and clinician’s?) belief that treatment will help.



**Lambert & Bergin (1994)**

**Asay & Lambert (1999)**

**Bernstein Ratner (2005)**

**Franken, Kielstra-Van der Schalk & Boelens (2005)**

# The “Dodo” Effect in Stuttering Treatment Research?

“Results support the claim that intervention for stuttering results in an overall positive effect.

Additionally, the data show that no one treatment approach for stuttering demonstrates significantly greater effects over another treatment approach.”

- Herder, Howard, Nye, & Vanryckehgem (2006).

# The “Dodo” Effect in Stuttering Treatment Research

- Treatment approaches with the most evidence of efficacy or effectiveness are:
  - modification
  - parent-administered (operant)
  - GILCU
  - prolonged/smooth speech
- Future work should focus on client characteristics + clinician skill + treatment approach = EBP!!

# EBP Does Not Stop With the Selection of a Therapy Approach

- One Tx does not work equally well for all patients.
- Lesser amounts of evidence that something works is not evidence that something does not work.
- Reject the idea that any treatment with the larger body of research is the best treatment.

# EBP Does Not Stop With the Selection of a Therapy Approach

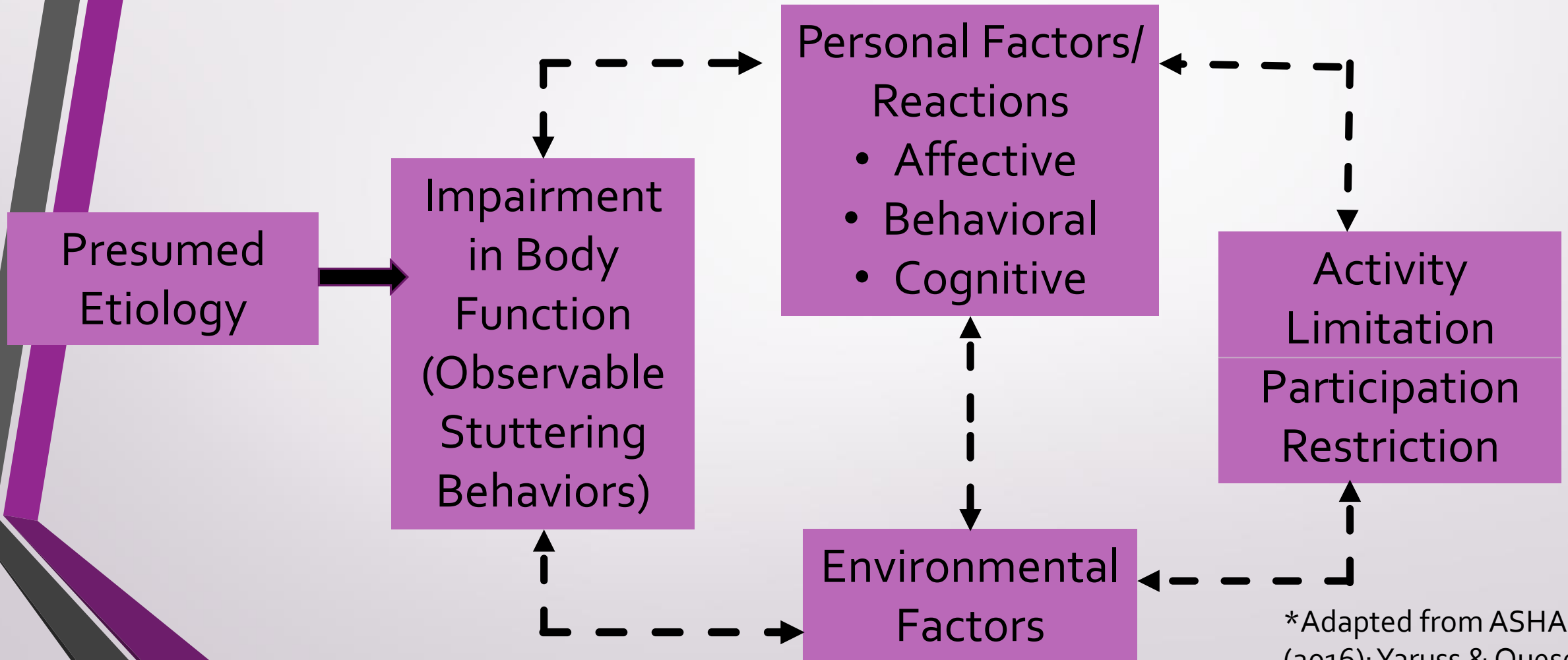
- Patient-centered care is mindful that what seems to work for large numbers of people in large trials, actually did not work for large numbers of individual patients.
  - It is important for families to have choices; more not fewer.
  - We need to readily have options for working with a client and options that would remain available should the child not respond optimally to the first one chosen.



# WHO ICF Framework

- The 2016 ASHA Scope of Practice outlines that assessment and treatment should be based on the WHO's ICF framework, which assess/treat client in 4 domains:
  - Body functions and structures
  - Activity and participation
  - Environmental factors
  - Personal factors
    - Using the ICF model for assessment/treatment allows clinicians to observe surface-level behavior as well as identify other personal/environmental factors present for the client

# Considering the Entire Stuttering Disorder



\*Adapted from ASHA (2016); Yaruss & Quesel (2004)

# WHO ICF Framework: Considering Assessment

- A comprehensive assessment means more than just a frequency count.
- Successful stuttering therapy involves more than just changes in observable fluency.
- Remember that severity  $\neq$  adverse impact. Some kids may stutter frequently but experience minimal adverse impact.
  - Can use tools like *Overall Assessment of Speaker's Experiences of Stuttering* (OASES) or *Behavioral Assessment Battery* (BAB) – includes *Children's Attitudes about Talking* (CAT).

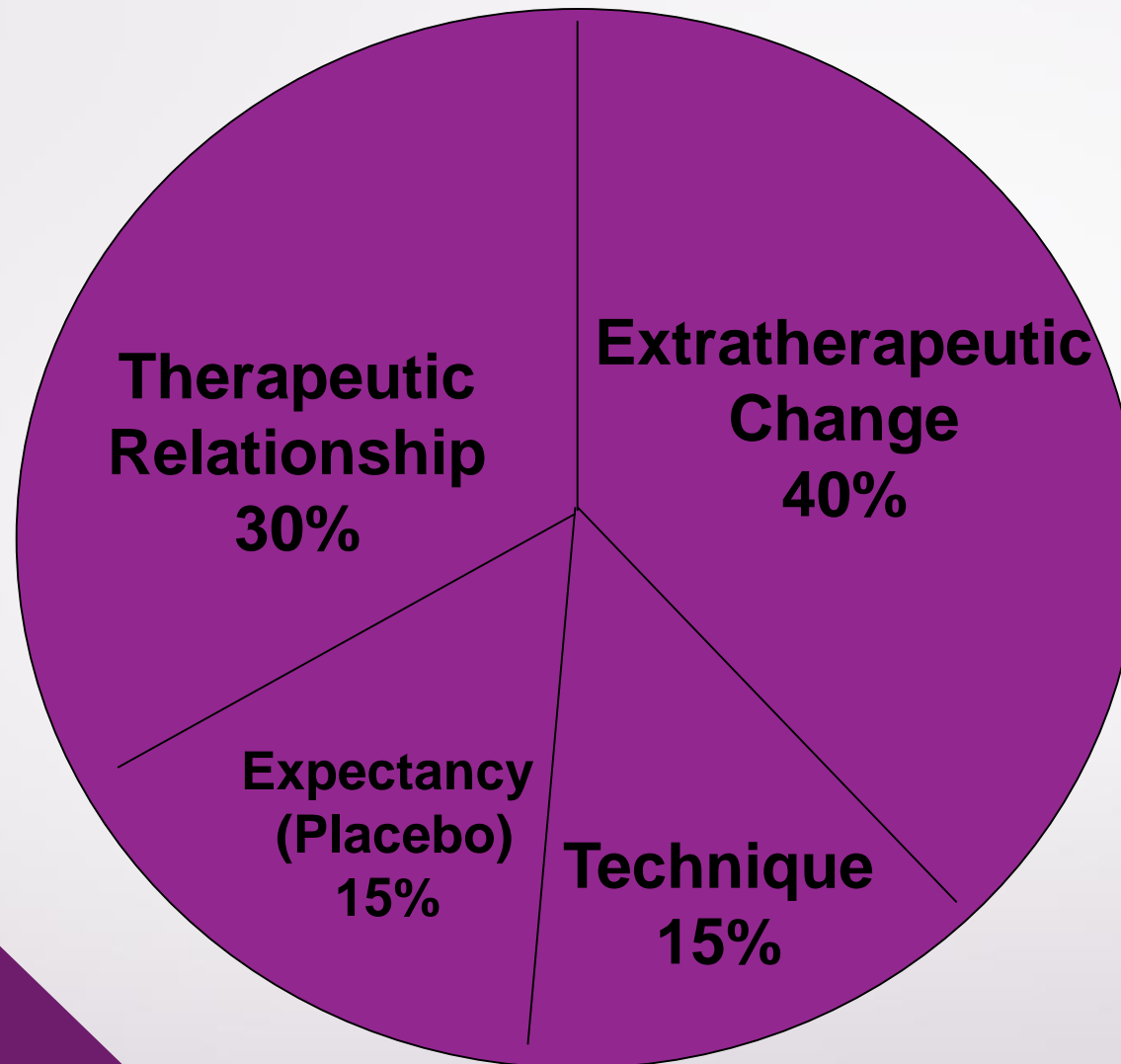
# Considering Recommendations

- Children don't necessarily need therapy just because they stutter.
  - Not all children are ready for therapy.
  - Decision is based on the child's readiness.
- When ready?
  - When the negative impact of stuttering is great (when the pain of staying the same is high).
  - When he sees he can make changes (when the pain of change is minimal).



Act 3

# The Common Factors in Stuttering Therapy for School-Aged Children



**Lambert & Bergin (1994)**

**Asay & Lambert (1999)**

**Bernstein Ratner (2005)**

**Franken, Kielstra-Van der Schalk & Boelens (2005)**

# 1. Extratherapeutic Change

- Characteristics of the client and his/her environment (e.g. temperament, social support).
- E.g. Child Strengths
  - Resilience
  - Temperament and Personality
  - “Signature Strengths”
  - Self-Perception of Control and Competence

## 2. Therapeutic Relationship

- Shared goals, agreement on methods, means and tasks for treatment, and an emotional bond.
- Child and Family Education and Preparation
- Attending to the Child's and Parent's "Theory of Change"


*\*\*All can assist with family perception of improvement in therapy!*





# Child and Family Education and Preparation

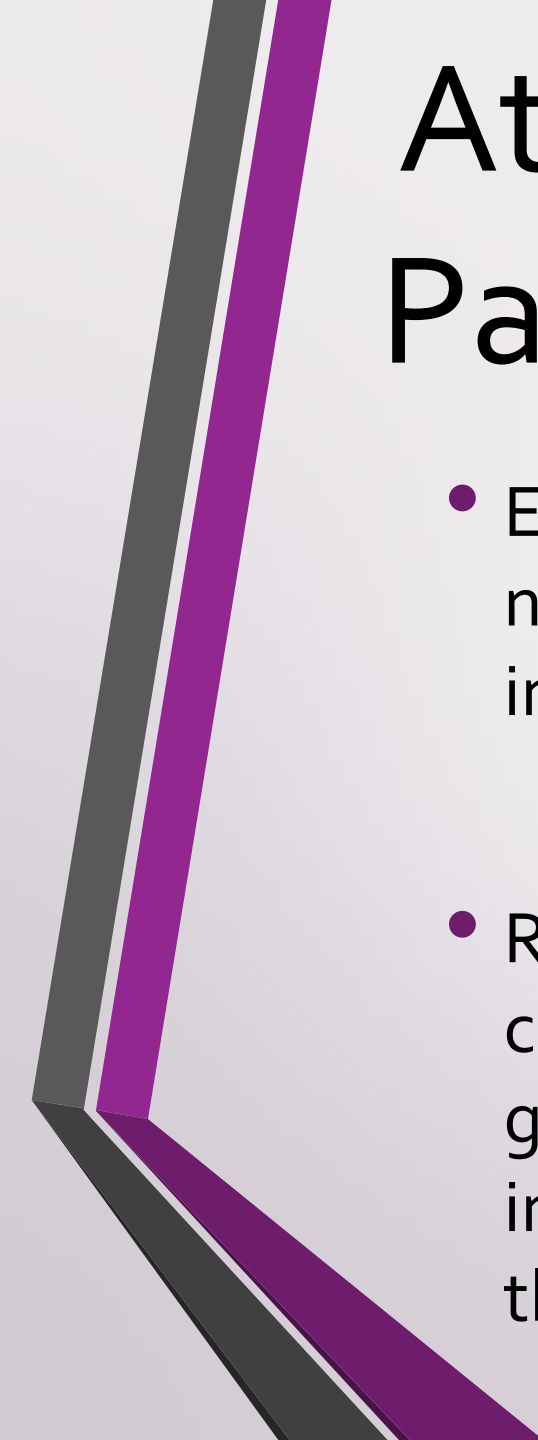
- Child and family will respond positively to treatment when engaged in an exploration of various topics, including:
  - nature of stuttering
  - why children come for therapy
  - the general structure of therapy
  - some specifics of behavior change



# Attending to the Child's and Parents' "Theory of Change"


"Within the client is a theory of change waiting for discovery, a frame-work for intervention to be unfolded and accommodated for a successful outcome."

(Hubble, Duncan & Miller, 1999)



# Attending to the Child's and Parents' "Theory of Change"

- Each client and family presents the clinician with a new theory to learn and a new, client-directed intervention to suggest.
- Research in psychotherapy has shown that what the client and family want from treatment, how these goals are accomplished, and their perception of improvement may be the most important factors in therapy.



# Attending to the Child's and Parent's "Theory of Change"

- Questions to consider:
  - What ideas do you have about what needs to happen for improvement to occur?
  - In what ways do you see me and this process helpful in attaining your goals?
  - How does change usually happen in your life?
  - What do you do to initiate change?
  - What have you tried to help with stuttering so far? Did it help? How did it help? Why didn't it help?

## Child Session Rating Scale (CSRS)

Name \_\_\_\_\_ Age (Yrs): \_\_\_\_  
Sex: M / F  
Session # \_\_\_\_ Date: \_\_\_\_\_

How was our time together today? Please put a mark on the lines below to let us know how you feel.

### Listening

\_\_\_\_\_ I ----- I \_\_\_\_\_  
did not always listen to me. ☹️ ☺️ listened to me.

### How Important

\_\_\_\_\_ I ----- I \_\_\_\_\_  
What we did and talked about was not really that important to me. ☹️ ☺️ What we did and talked about were important to me.

### What We Did

\_\_\_\_\_ I ----- I \_\_\_\_\_  
I did not like what we did today. ☹️ ☺️ I liked what we did today.

### Overall

\_\_\_\_\_ I ----- I \_\_\_\_\_  
I wish we could do something different. ☹️ ☺️ I hope we do the same kind of things next time.

Institute for the Study of Therapeutic Change

[www.talkingcure.com](http://www.talkingcure.com)

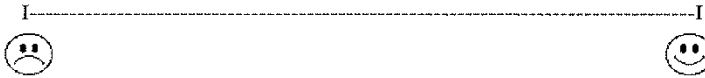
## Child Outcome Rating Scale (CORS)

Name \_\_\_\_\_ Age (Yrs): \_\_\_\_\_  
Sex: M / F \_\_\_\_\_  
Session # \_\_\_\_\_ Date: \_\_\_\_\_  
Who is filling out this form? Please check one: Child \_\_\_\_\_ Caretaker \_\_\_\_\_  
If caretaker, what is your relationship to this child? \_\_\_\_\_

How are you doing? How are things going in your life? Please make a mark on the scale to let us know. The closer to the smiley face, the better things are. The closer to the frowny face, things are not so good. *If you are a caretaker filling out this form, please fill out according to how you think the child is doing.*

### Me

(How am I doing?)



### Family

(How are things in my family?)



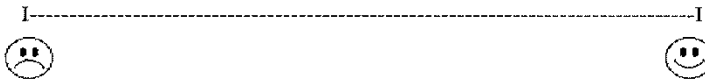
### School

(How am I doing at school?)



### Everything

(How is everything going?)



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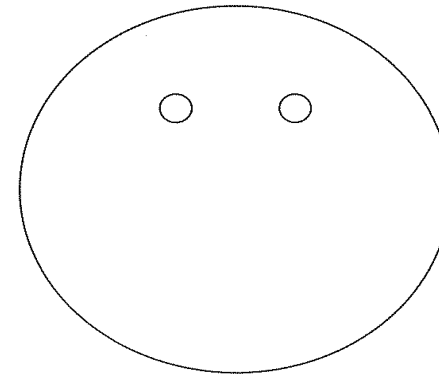
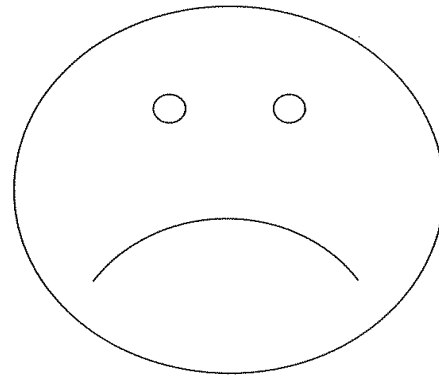
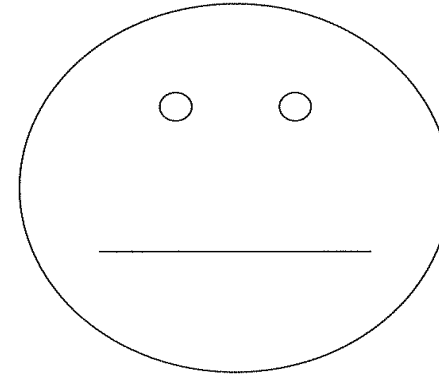
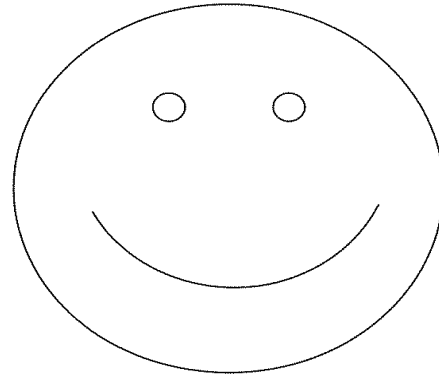
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# Young Child Session Rating Scale (YCSRS)

Name \_\_\_\_\_ Age (Yrs): \_\_\_\_\_  
Sex: M / F \_\_\_\_\_  
Session # \_\_\_\_\_ Date: \_\_\_\_\_

Choose one of the faces that shows how it was for you to be here today. Or, you can draw one below that is just right for you.



Institute for the Study of Therapeutic Change

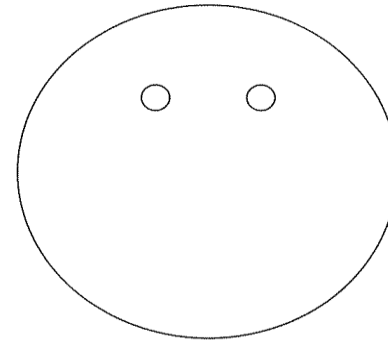
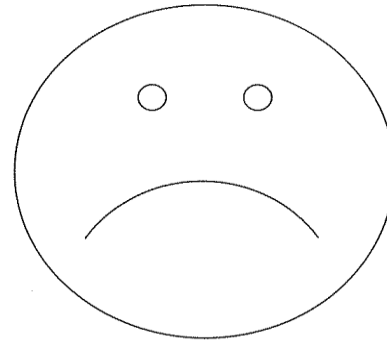
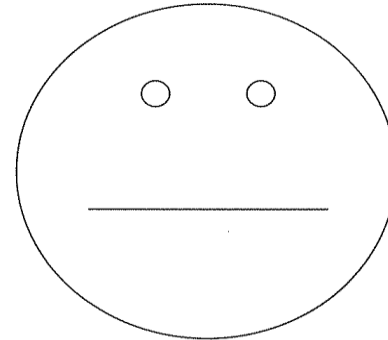
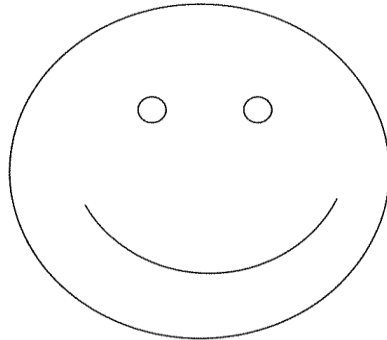
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## Young Child Outcome Rating Scale (YCORs)

Name \_\_\_\_\_ Age (Yrs): \_\_\_\_  
Sex: M / F \_\_\_\_\_  
Session # \_\_\_\_\_ Date: \_\_\_\_\_

Choose one of the faces that shows how things are going for you. Or, you can draw one below that is just right for you.



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# 3. Hope or Expectancy

“The positive emotion that stems from the ability to successfully engage in both pathways and agency thinking is the essence of hope. Hope is not a purely emotional phenomenon; it is an emotional response that is rooted in cognition.”

- Barnum, Snyder, Rapoff, Mani & Thompson, 1998

# Hope or Expectancy

- Pathways thinking – developing one or two ways to accomplish change
- Agency thinking – the ability to begin and persist in doing what is necessary to change.
- Inability to experience either pathways or agency thinking causes stress and difficulty in coping

# Hope or Expectancy

- “Expectancy Theory” – With hope for change comes expectancy that change can and will take place. An individual’s belief that a certain treatment will yield a certain effect either triggers or correlates to that effect.
- Expectancy Theory has long been used to explain the placebo effect in medicine.

# 4. Techniques

## *Making Speech Change*

- Exploring Talking *and* Stuttering
- Changing Talking
- Changing Stuttering
- Choosing Tools: What and When

# Exploring Talking

- In order to understand and feel what s/he does during stuttering, the child must know how we talk.
  - Establishes common terminology b/t child and clinician
  - Develops understanding of respiration, phonation & articulation for speech (i.e. “speech helpers”)
  - Reinforces that speech system is “normal”; i.e. **NOTHING NEEDS TO BE ‘FIXED’**
- Rationale for this step:
  - Starting treatment in a way that is removed from emotion: neutral and objective
  - Encouraging child to approach something that he/she fears and is used to avoiding

# Exploring Talking

- Changing speech:
  - Tools for changing airflow, tension, voicing, movement, rate

*WHICH LEADS TO...*

- New ideas about speaking (e.g.):
  - I don't have to keep using the same patterns of speaking
  - I have options for speaking and for stuttering
- Timing vs. Tension

# Exploring Stuttering

- Identify aspects of stuttering:
  - In order to change behavior, need to know *when and what* to change.
- Exploring stuttering ties information from exploring talking to child's own behavior/speech patterns
- Desensitizing

# Exploring Stuttering: How do *you* stutter?

- Disfluency and stuttering represent difficulty in connecting sounds, syllables and words. Given that...
  - Attend to where you are “disconnecting” and what you are doing. What needs to be done to “move forward” and smoothly connect sounds, syllables and words while speaking?
  - The same principles are used to both initiate and maintain ‘easy’ speech, *and* to produce ‘easier’ stuttering.



# Tools For Change

## Changing Talking

- Soft starts/easy onsets/light contacts
- Changing rate

## Changing Stuttering

- Voluntary stuttering
- Holding & tolerating a moment of stuttering
- In-block corrections/pullouts
- Post-block corrections/cancellations

# *Changing Talking: Soft Starts/Easy Onset & Light Contacts*

- What are they?
  - Slower, physically relaxed speech initiation
  - Decreased muscle tension and less tense articulatory constriction (e.g. bilabial closure, tongue-alveolar contact)
- Why use them?
  - Help initiate smooth airflow, voicing, and physically relaxed, smooth articulator movement
- When to use them?
  - Beginning of phrases or utterance (Phrase boundaries)

# Changing Talking: Changing Rate

- What is it?
  - Slower speech overall: fewer syllables/words per minute
  - Should sound smooth and connected, not choppy
- Why use it?? It's fluency enhancing because it...
  - Helps child attend to what he/she is doing
  - Gives more time to process
  - Gives child time to make changes in complex motor coordination
  - Helps child feel changes in muscle tension
- How can rate be changed?
  - Stretching sounds or syllables
  - Phrasing and pausing

# Changing Stuttering: Deliberate (or Voluntary) Stuttering

- What is it?
  - The child stutters “on purpose”, choosing when and how.
- Why use it?
  - Can be used to teach any aspect of changing and varying stuttering
  - Assists in building awareness of stuttering moments
  - Decreases fear and avoidance of stuttering
  - Desensitizes to listener reactions
  - Creates a feeling of confidence in the ability to say feared words
  - Confront what might otherwise be avoided
- When and how to use it?
  - Prelude to using “pullouts”

# Changing Stuttering: Holding & Tolerating Moment of Stuttering

- What is it?
  - Staying in a moment of stuttering
  - Child continues speech “movement” rather than stopping, “backing up”, or otherwise using “reactive” speech strategies
- Why use it?
  - Increases child’s awareness of what he/she is doing during the stuttering moment
  - Helps reduce avoidances
  - Is desensitizing
- When and how to use it?
  - After child can identify when and how he/she is stuttering
  - Clinician HAS to be supportive and encouraging as the child is holding the stuttering moment

# Changing Stuttering: Pullout

- What is it?
  - “Holding on” to the stuttering moment and “staying with it”
  - Helps to focus in on site of physical tension and cessation of movement so as to
  - Change the stuttering moment through reducing or “easing off” tension and slowly moving ahead into the next sound or word
- Why use it?
  - Confront the stuttering moment and “take charge” (desensitization)
  - Release tension and keep speech moving forward
  - Reinforce a looser or “easier” way of stuttering



# Changing Stuttering: Pullout

- When and how to use it?
  - When the child experiences a high degree of emotionality or feels “stuck” in a moment of stuttering
  - After the child has learned to “hold onto” a moment of stuttering and tolerate it
  - Start with deliberate or “fake” stuttering at the single word level

# Changing Stuttering: Cancellation

- What is it?
  - Finishing a stuttered word then
  - Pausing for a moment to plan (e.g. pantomime or silently revisit the word) then
  - Stuttering on the word again in an easier way
- Why use it?
  - The child learns to “cancel out” or replace hard stuttering with a looser, more controlled form of stuttering
  - Cancellation discourages avoidance behaviors such as recoiling, changing words, stopping in a block and backing up
  - Cancellation reinforces easier stuttering and build confidence



# Changing Stuttering: Cancellation

- When and how to use it?
  - Child **MUST** complete the hard stutter before pausing and making it easier.
- If the child is unable to pullout or missed the opportunity to use a pullout, this will provide another opportunity to learn to stutter more easily and build confidence.
- Typically used in the therapy room only as a way of learning a strategy, not in the outside world.

# Disclosure

- What is it?
  - Child chooses to openly acknowledge own stuttering to listeners
- Why use it?
  - Allows the child to take control of the situation
  - It promotes openness about using techniques
  - Helps listeners know what to expect
  - Informs listeners what the client wants them to do
- When to use it?
  - Like other tools, it should occur in a hierarchy (e.g., family, friends, group therapy, teachers/co-workers, strangers)
  - At the beginning of a conversation or presentation

# Case Study (Handout)

- 14-year-old male adolescent (Sam) presents with an 11-year history of stuttering
  - increased speech disfluencies (repetitions, prolongations, blocks)
  - avoidance of words/speaking situations
  - difficulty initiating conversations
  - limited participation in social and academic settings
  - increased physical tension/secondary behaviors (eye blinking, head nodding, hand tapping) during stuttering episodes

# Smooth Sailing 2018

- **The program will feature:**
  - individual and group therapy sessions
  - fluency assessment and recommendations for
  - home programs
  - fluency enhancing activities
  - recreational activities to help transfer fluency skills outside the clinic
- **Additionally, for the older children, the program will feature:**
  - Overcoming a Stuttering Frame of Mind
  - Building Self-Confidence
  - Developing Resilience
  - Developing Good Communication Techniques
  - Dealing with Teasing

## WHO:

*School-aged children:  
2<sup>rd</sup> Grade and Up*



## WHEN:

*June 11th through August 3rd  
Tuesdays and Thursdays  
8:30-10:30 a.m.*

# Questions?

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