

SPA 461. Introduction to Fluency Disorders

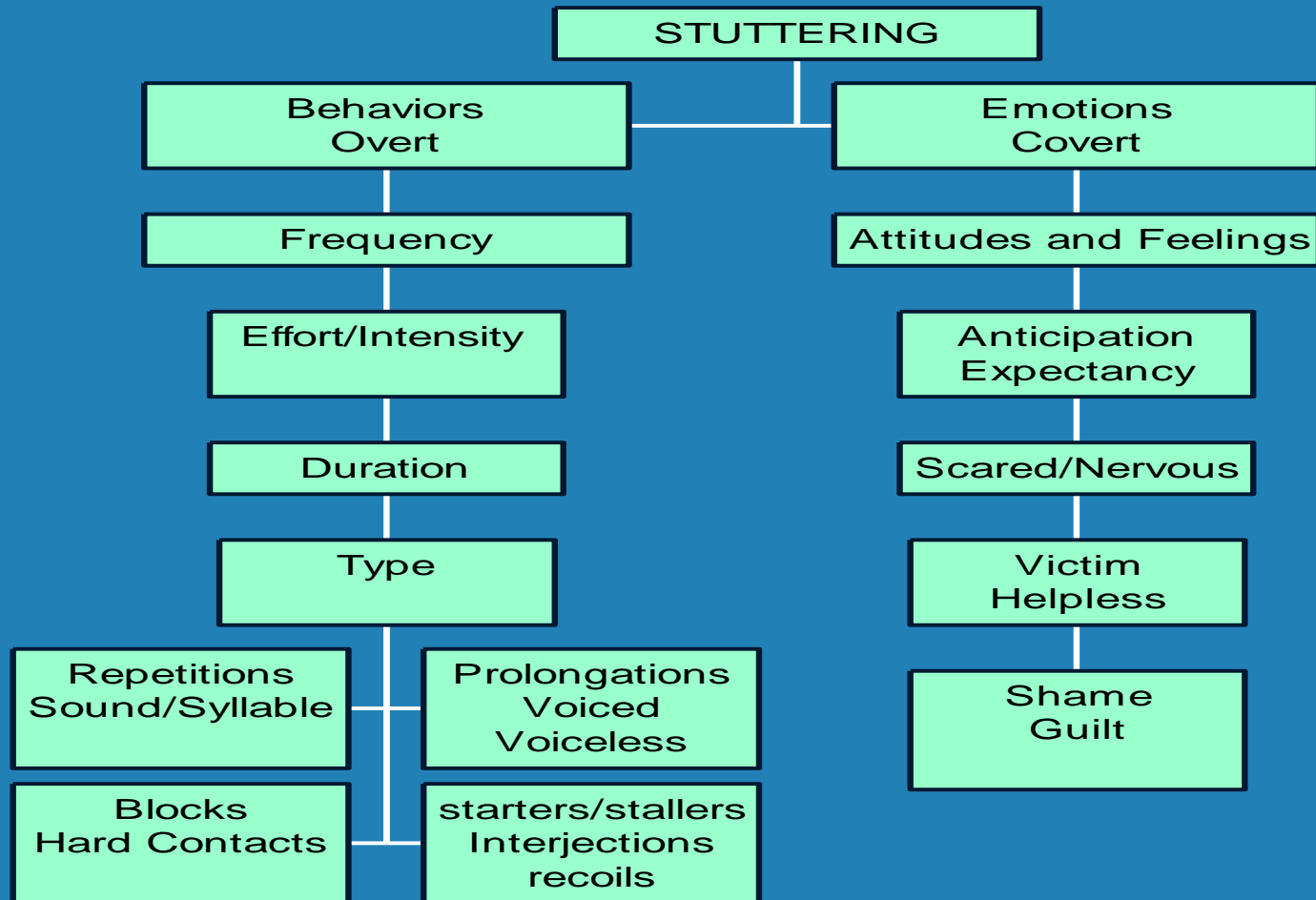
Fall Semester, 2003

M-W-F: 8:00-8:50

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Behavioral and Emotional Dimensions



Sheehan's Iceberg of Stuttering

Core Features

Repetitions

Prolongations

Blockages

Secondary Features

Escape

Avoidance

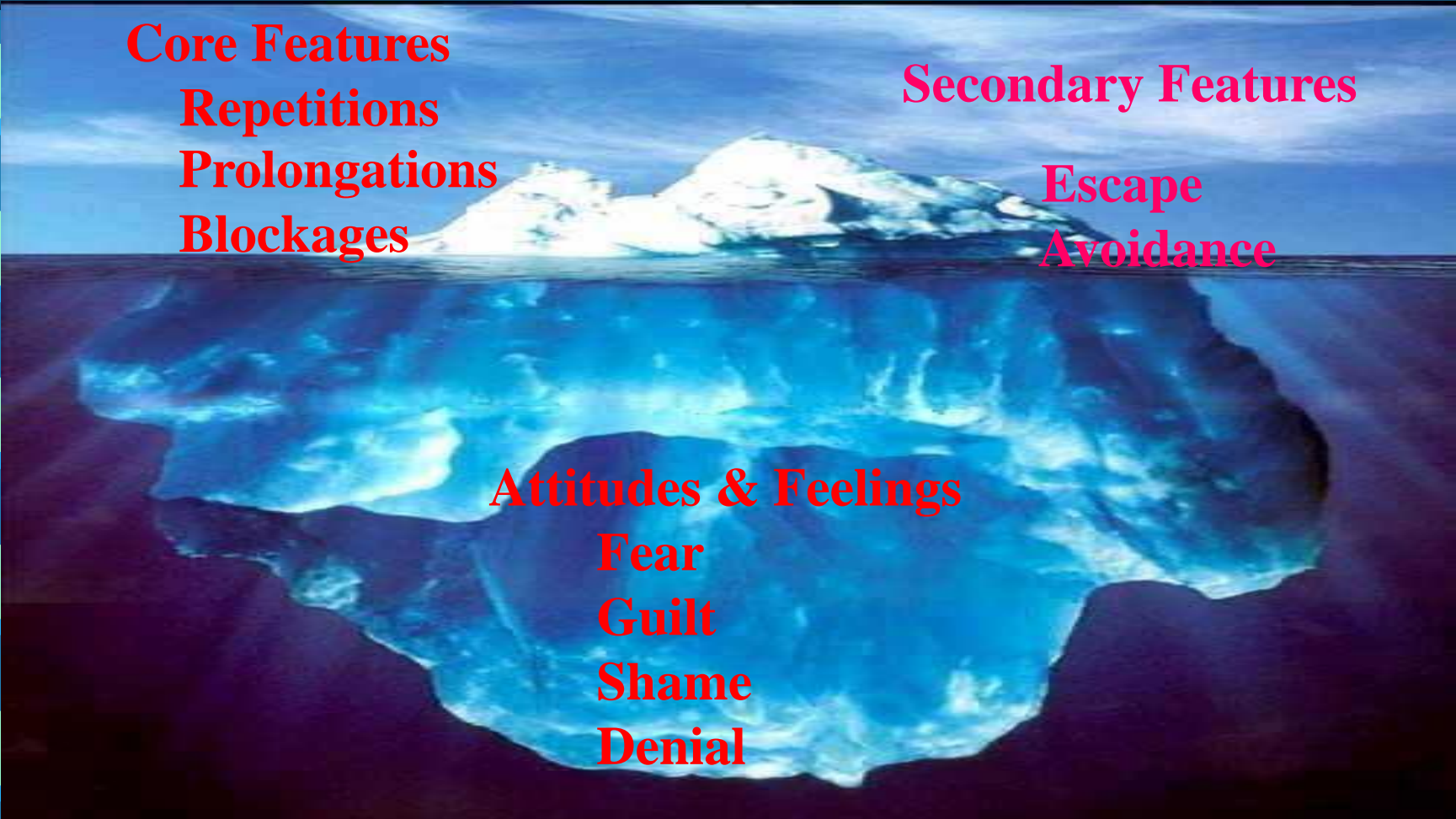
Attitudes & Feelings

Fear

Guilt

Shame

Denial



Time Sequencing of Events

Pre-Disruption

Emotional	Behavioral
Anticipation	Avoidance
Expectancy	Postponement
Fear	Word Substitution
Worry	Disguise
Apprehension	Antiexpectancy
Anxiety	Timers
Dread	Starters
Worry	Pauses
Negative- Emotion	Circumlocutions
Abulia	Body Movements
(etc.)	Refusal (etc.)

Fluency Disruption

Behavioral
Disfluency
Fluency Failure
Stuttering
Audible-Vocalized
Part-Word Repetitions
Word Repetitions
Phrase Repetitions
Sound Prolongations
Audible-Nonvocalized
Part-Word Repetitions
Sound Prolongations
Dysrhythmic Phonations
Inaudible-Nonvocalized
hard contacts
tense pauses
silent blocks
Struggle-Escape
Recoil
Interrupters
Effort/tremor/struggle (etc.)

Post Disruption

Emotional
Embarrassment
Humiliation
Guilt
Relief
Shame
Withdrawal
Anxiety
Hostility
Frustration
Penalty
Denial

>> ---rate changes----- >>
 >> -----speeding and tensing----- >>
 >> -----holding back----- >>

Key Terms and Concepts

- ✓ Episodic (VR- stages I and II)
- ✓ Chronic (VR- stages III and IV)
- ✓ Intermittent -- always
- ✓ “Descriptive Language Framework”
 - ✓ (Dean Williams)
- ✓ “Normal nonfluency” -- “normal disfluency”
 - ✓ easy, effortless, rhythmic, infrequent
 - ✓ multiple word repetitions, multisyllable whole word repetitions, revisions, interjections
 - ✓ usually only one, or maybe two, reiterations

Key Terms and Concepts (continued)

- “Stutter-like disfluency” (SLD)
 - More fragmented: sound and syllable repetitions, single-syllable whole word repetitions, sound prolongations and disrhythmic phonations, hard contacts, tense pauses and silent blocks
 - Reiterations of repetitions usually more than two
- Overt features -- Covert features
- Escape behaviors -- Avoidance behaviors
- Predisposing, Precipitating, Sustaining



Key Terms and Concepts (Continued)

- Incidence -vs- Prevalence
- “Stutterer” -vs- “Person Who Stutters”
- Spontaneous Recovery
- Gender Differences



Factors Related to Fluency

- Melody/prosody/inflection
- Pauses
- Rate: speech rate -vs- articulation rate
- Amount of information flow
- Effort: both physical and mental
- Fluency
 - Phonologic
 - Syntactic
 - Semantic
 - Pragmatic

Historical Definitions of Stuttering

Wendell Johnson

- ❑ Stuttering is an anticipatory, apprehensive, hypertonic, avoidance reaction.
- ❑ Stuttering occurs when speaker expects to stutter, dreads it, becomes tense in anticipation, and tried to avoid it.
- ❑ Diagnosogenic theory: “stuttering begins not in the child’s mouth, but in the listeners ear.”
- ❑ X =speech characteristics, Y= listener reactions, Z = speaker reactions to listener.



Historical Definitions of Stuttering

Charles Van Riper

- “Stuttering occurs when the flow of speech is interrupted abnormally by repetitions or prolongations of a sound, syllable or articulatory posture, or by avoidance and struggle reactions.”
- These produce interruptions and breaks in the rhythmic flow of speech.



Historical Definitions of Stuttering

Oliver Bloodstein

“Stuttering is an anticipatory-struggle reaction. It represents an exacerbation of the tensions and fragmentations that are common occurrences in the speech of normally developing children.”

“Stuttering develops readily in circumstances in which speech pressures are unusually heavy, the child’s vulnerability to them is unusually high, or communicative difficulties are unusually frequent, severe or chronic.”

Core Features (Guitar)

Refer to Textbook, for developmental stages

- Prolongations / Fixations (often develop second)
 - Audible: Vocalized and Nonvocalized
 - Disrhythmic phonations
- Blocks (Usually develop last)
 - Inaudible -- Nonvocalized
 - Silent fixations of posture
 - Complete stoppage
- Repetitions (usually develop first)
 - Sounds, syllables, single syllable whole words
 - Audible: Vocalized and Nonvocalized
 - Inaudible and Nonvocalized

Secondary Features

ESCAPE

- ❑ Escape behaviors develop prior to avoidance behaviors. At first, these are probably random, but later serve to release the person from the stuttering moment.
- ❑ Later, become well learned through negative reinforcement.
- ❑ Prominent in Intermediate and Advanced Stages.

AVOIDANCE

- ❑ Learned as response to anticipation of stuttering. May actually be similar to escape behaviors, but now used to avoid prior to stuttering.
- ❑ Become maintained by positive reinforcement.
- ❑ May begin in Intermediate Stage, and highly prevalent in Advanced Stage.



Feelings and Attitudes

Feelings (Affective)

- Refer to text for examples, relative to developmental stage
- Examples: frustrated, nervous, scared, upset, embarrassed, guilt, shame, denial

Attitudes (Cognitive)

- Related more to your beliefs about stuttering and stutters. Refer to text for examples related to developmental state
- e.g., that stuttering is bad, wrong, nasty, etc. That stutterers are stupid, unworthy



Developmental and Environmental Influences

Developmental

- Physical
- Cognitive
- Social-Emotional
- Speech & Language

Environmental

- Parents
- Speech & Language Environment
- Life Events



Diagnosogenic Theory: Johnson

- ❑ Johnson emphasized the overlap between children beginning to stutter and children who were normally nonfluent.
- ❑ Stuttering results from its (mis-)diagnosis.
- ❑ “Stuttering begins not in the child’s mouth, but the listeners ear.”
- ❑ Johnson was wrong as to etiology, but correct with respect to “critical evaluations”
- ❑ Mary Tudor and the “Monster Study”



Communicative Failure and Anticipatory Struggle: Bloodstein

- Kids with communication difficulties (articulation, language, word-finding) are more at risk for stuttering to develop. When kids have a hard time being understood, especially in a demanding environment, then they are even more vulnerable.
- Early communicative failures lead to tension and fragmentation
- Tension and Fragmentation can lead to anticipatory-struggle



Capacities and Demands: Starkweather

1. The child's capacity for fluency does not equal environmental demands for it.
2. Reduced capacity may be caused by "organic predisposition."
3. It is the ratio of demands to capacities that is important. This becomes a focus of therapy.
4. Components: Motoric, Linguistic, Emotional, Cognitive, Social-Pragmatic.



The Development of Stuttering

- ❑ Van Riper's 4-Stage model (Handout)
- ❑ Douglass and Quarrington - Exteriorized Interiorized (Handout)
- ❑ Guitar (Borderline, Beginning, Intermediate, Advanced (Handout and Text))
- ❑ Learning Theory: Brutten and Shoemaker. Will be covered in Unit II.



UNIT II: Learning Theory and Assessment

- Assessment
 - Overt-Behavioral Features
- Learning Theory:
 - Emotional Learning
 - Behavioral Learning
 - Avoidance
 - Escape
 - Covert-Emotional Features



Learning Theory

- Although there may be some debate as to precise etiology (organic-constitutional, psycho-emotional, environmental) there is strong agreement that once stuttering gets started, learning theory plays a major role.
- Learning theory may not explain predisposing factors, but it helps explain precipitating and maintaining factors.

Classical Conditioning

- ✓ Synonyms
 - ✓ Classical, Pavlovian, Respondent, reflexive
- ✓ Contiguous Pairings
 - ✓ UCS -----> UCR
 - ✓ NS -----> ?
 - ✓ NS---UCS -----> UCR
 - ✓ CS -----> CR
- ✓ Examples
 - ✓ Audiology -- Galvanic Skin Responses
 - ✓ Students -- # 2 Pencils, and test sheets
 - ✓ Stutterers -- The ringing of a telephone

Operant Conditioning

- ❖ Synonyms

- ❖ Operant, Skinnerian, Behavioral, Instrumental

- ❖ Contingencies

- ❖ Response \rightarrow Consequence $R \rightarrow C$

- ❖ $R \rightarrow Rf+$ positive reinforcement

- ❖ $R \rightarrow Rf-$ negative reinforcement

- ❖ $R \rightarrow NR$ no reinforcement

- ❖ $R \rightarrow P$ punishment

- ❖ See Guitar Text. Pages 89-100

- ❖ See Class Handout Booklet



Brutten and Shoemaker

- ❑ Stuttering is a form of fluency failure which is the consequence of learned, antecedent, negative emotion. Consistent because the emotion is learned.
- ❑ Fluency failures are the involuntary consequence of antecedent negative emotional. Sporadic because they are unlearned.
- ❑ See Diagrams in Class Handout.

Conflict Learning Theory: Sheehan (see class handout)

Sheehan's Double Approach-Avoidance Conflict Theory applies to precipitating and maintaining factors. It is not a theory of etiology.

□ Levels of Conflict

- approach-approach
- avoidance-avoidance
- approach-avoidance
- double approach-avoidance



Sheehan, Continued

□ Conflict Hypothesis

- The stutterer stutters when conflicting approach and avoidance tendencies approach equilibrium

□ Fear Reduction Hypothesis

- The occurrence of stuttering reduces the fear that elicited it, so that during the moment of stuttering there is sufficient reduction in fear-motivated avoidance to resolve the conflict and permit release of the stuttered word.



Sheehan, continued

□ The Fear of Both Speech and Silence

- Speaking holds the promise of communication, but the threat of potential stuttering
- Silence temporarily eliminates the threat of speaking and possibly stuttering, but at the abandonment of communicating.
- Guilt can be attached to both speaking and being silent.

Sheehan, continued

□ Sources of Conflict

- Speech -vs- Silence
- Primary Guilt and Secondary Guilt
- Self as Stutterer -vs- Self as NonStutterer
 - Role Acceptance -vs- Role Denial

□ Levels of Conflict

- Word/Sound - specific sounds and/or words
- Situation - time-pressure telephone, talk in class, to a group
- Emotional Content - strong emotional valence to topic
- Role-Relationship - status-gap, authority figures
- Ego Protective -- when ego being threatened



Assessment

STUTTERING

Behavior

Frequency

Intensity

Duration

Type

Emotions

Attitudes

Feelings

Disfluency Analysis

Key Concepts of Importance

- ❑ Obtaining valid samples
 - ❑ rote automatic (count/days/months/poem, nursery rhyme)
 - ❑ picture description
 - ❑ monologue, telling story, relating an event
 - ❑ reading (at age level)
- ❑ Number of meaningful words and syllables spoken
- ❑ Duration of speaking task
- ❑ Molar Frequency Count
- ❑ Molecular assessment of disfluency types.
- ❑ Speech Rate -versus- Articulation Rate
- ❑ See disfluency analysis worksheet -- Class Handout



Unit III: Prevention and Treatment

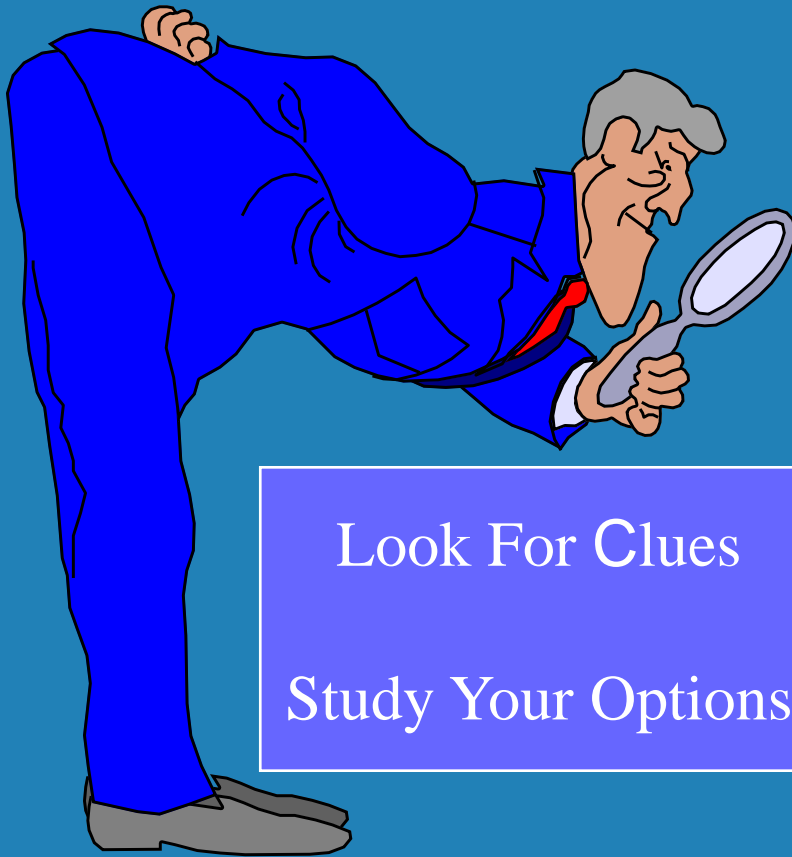
Borderline-Mild

- Prevention and early intervention
- Manipulation of talking environment
- Family Involvement

Intermediate-Advanced

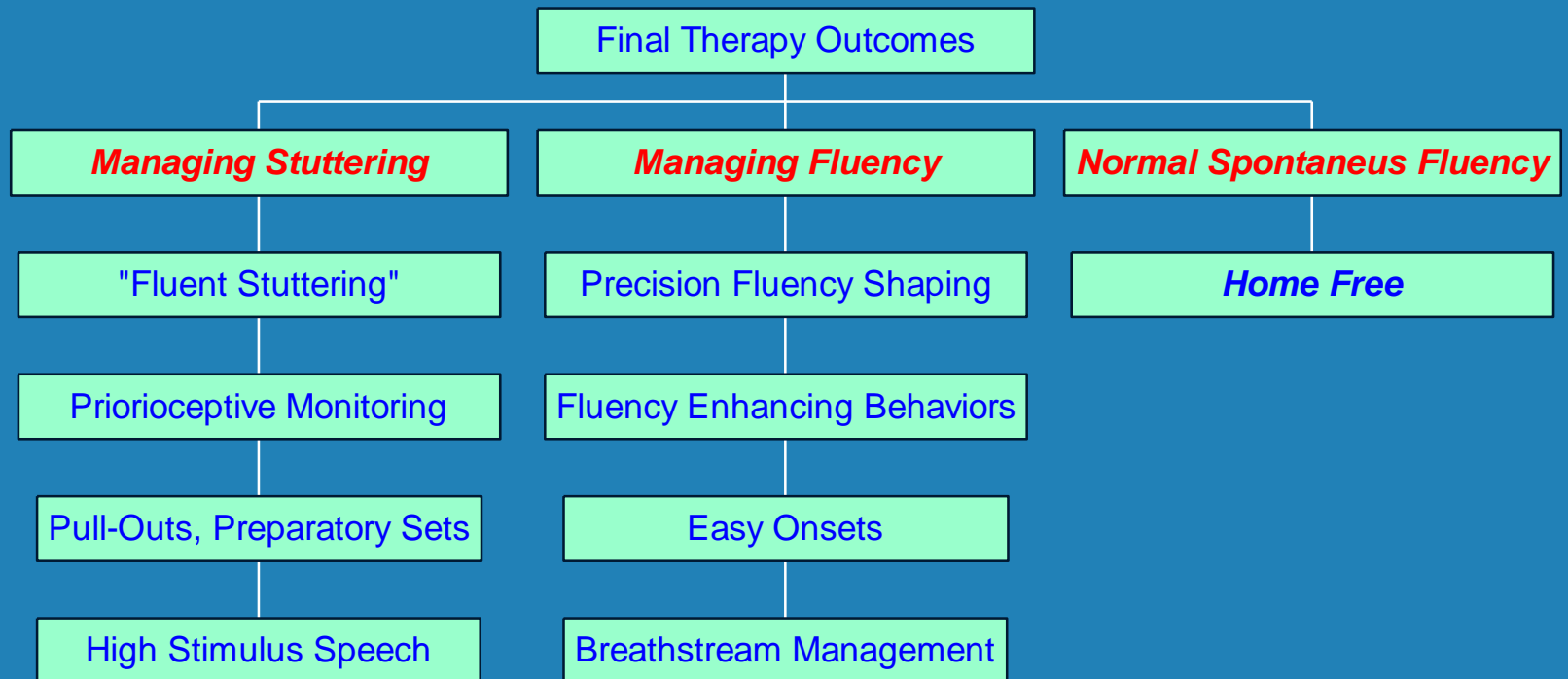
- Direct focus on stuttering: fluency shaping and stuttering modification
- Desensitization and coping
- Acceptance
- Attitudes & Feelings

Explore your Options



- Components
 - Attitudes
 - Feelings
 - Behaviors
 - Avoidance
 - Stuttering
 - Escape
- Goals/Objectives
 - be fluent
 - fluent stuttering
 - manageable stuttering
- EFFECTIVE COMMUNICATION

Final Outcomes from Therapy: Goals, Options and Choices



Realistic Outcomes:

for adults for whom stuttering has become chronic and severe

- ❑ To be able to talk any time, any place and to any body
- ❑ And to be able to communicate effectively and efficiently
- ❑ And to be able to do so with little more than a normal amount of negative emotion.



Therapy For the Advanced Stutterer

- Fluency Shaping Approaches
- Stuttering Modification Approached
- Combined Approaches
- Traditional Scheduling
- Intensive Programs

See Text. Pages 231-233, and 237.

Components of Therapy for Advanced (older) stutterers

Behavioral

- Identification behaviors and emotions
- Desensitization behaviors and emotional
- Modification
- Stabilization

Emotional

- Being open, honest, accepting
- Stuttering is really OK. Be able to talk about it.
- Reduce shame, guilt, denial
- I don't need to chase the "Fluency God"



Changing Stuttering Behaviors: (Additional Information in SFA Booklets)

Fluency Shaping


- Slower rate
- Easy Onset
- Soft Contact
- Proprioception

Stuttering Modification

- Voluntary Stuttering
- Cancellation
 - erase and fix
- Pull-Out
 - freeze and release
- Proprioceptive monitoring
- Preparatory Sets


Changing Stuttering Behaviors (continued)

- ❑ Identification and understanding core behaviors, secondary behaviors of escape and avoidance, and attitudes and feelings
- ❑ Discussing stuttering openly
- ❑ Using feared words, and entering feared situations
- ❑ Freezing, holding and gradually releasing
- ❑ Voluntary stuttering (and advertising in other ways)
- ❑ Using FEBS (Fluency Shaping)
- ❑ Stuttering more easily (Stuttering Modification)
 - ❑ Cancellation, Pull-Outs, Preparatory Sets.



Ideas from the Internet Along with other Sources

- ❑ I no longer need to chase the “Fluency God.”
- ❑ I can live without constant fear.
- ❑ I can speak well without scanning ahead for difficult words.
- ❑ I can speak for myself, rather than rely on others.
- ❑ I can explore and follow career opportunities that require talking.
- ❑ I can make decisions in spite of stuttering, not because of it.
- ❑ I am not suffering or handicapped because of my stuttering.
- ❑ I accept myself.
- ❑ I don't feel guilty when I stutter, and I am not ashamed of myself.
for when I do sometimes stutter.
- ❑ I have choices I can make that help me talk easily.
- ❑ I communicate effectively, and feel comfortable doing so.
- ❑ “I'm really an o-k person” -- and I like being me.



Crucial Experiences: (Adapted from Van Riper and Czuchna)

- ▶ Stuttering can be deliberately endured, touched, maintained and studied.
- ▶ Avoidance only increases fear, and must be reduced.
- ▶ Struggled, hurried escapes and recoils from stuttering make it worse than it needs to be.
- ▶ It is possible to build barriers to destructive listener reactions.
- ▶ Society in general rewards the person who obviously confronts and attempts to deal positively and constructively with stuttering.
- ▶ Every effort must be made to build up your ego-strength, self-confidence and self-respect.
- ▶ When the moment of stuttering occurs it can be studied, and its evil effects erased as much as possible.
- ▶ It is personally more rewarding to stutter easily and stutter fluently than to stutter severely, and it is fun to be able to talk anywhere, even though you do stutter.

Ways to Talk Easily -- (Which Implies helpful prerequisite attitudes)

Post-It Notes

AVM	Air-Voice-Movement
KYMR	Keep Your Motor Running
RTSE	Remember to Start Easily
NNTH	No Need to Hurry

Speech Rate -vs- Articulation Rate

“Slow it down -- to speed it up”

“Gearing down and gearing up”

Speeding Tickets (car) -vs- Talking Tickets (mouth)

Dealing With Time Pressure



Ways to Talk Easily -- (which implies helpful prerequisite attitudes)

Self Talk and the Use of Language: action oriented verbs

Dean Williams: The language of self-responsibility

“What Happened” -vs- “What am I doing”

“Having a block” and “Getting Stuck”

“Little men are fighting in my throat”

Nowness

Superstitious Behaviors

Safety Margins

Adjustment to easy talking and fluency. No more secondary gains

Openness: Advertising, Voluntary Stuttering, Pseudo-Stuttering



Hood's Hopefully Helpful Hints

- Although you may not have a choice as to WHETHER you stutter, you have a choice as to how you stutter.
- Attempting to hide, repress, conceal, avoid stuttering makes it worse than it needs to be.
- Stuttering is something you do, not something that happens to you.
- The things that may have originally caused stuttering are not the same as the things that influenced its development -- and are not the same as the things that are now serving to maintain the problem.
- Fluency is more than the absence of stuttering.
- It is important to understand the process of talking.
- The process of desensitization is two fold: both emotional AND behavioral.
- It is better to do more and more things to talk easily, than more and more things to try not to stutter.



Therapy for Intermediate Stuttering

- Therapy is related to severity of stuttering, and Intermediate stuttering is highly similar to advanced stuttering, although client is probably younger, and has not been stuttering for as long.
- Therapy involves both fluency shaping and stuttering modification.



Therapy Goals and Behaviors Targeted for Therapy (Intermediate)

- Fluency enhancing behaviors
 - slow rate, gentle onset, light contact
- Stuttering modification
 - cancellations, pullouts, preparatory sets and proprioceptive monitoring.
- Desensitization:
 - to understand,
 - to accept
 - to cope

Clinical Procedures (Intermediate)

- Explore and understand stuttering moments
 - reduce negative feelings
 - increase acceptance
 - reduce/eliminate secondary behaviors of avoidance and escape
 - use of FEBS and modification techniques
 - speech helpers, AVM, KYMR, etc.
 - Monitoring: gearing up and gearing down.



Clinical Procedures (Intermediate)

- Reducing negative feelings
- Coping with teasing
- Desensitization to fluency disrupters
- Eliminating avoidances
- Being open and accepting of stuttering
- Maintaining eye contact
- Being helpful to parents and teachers



Therapy for Beginning Stuttering

- Whereas fluency shaping and stuttering modification are quite different in Intermediate and Advanced levels, they is more overlap with beginning stuttering.
- Working to establish easy, ongoing, fluent talking, and then transferring and maintaining it.



Therapy for Beginning Stuttering

- ❑ Make speech fun
- ❑ Make talking environment “fluency-friendly.”
- ❑ See Hood’s Handout on “suggestions to help children talk fluently” for ideas to use with family.
- ❑ Desensitize to fluency disrupters.
- ❑ Gradually increase the length and complexity of child’s fluent utterances
- ❑ Other procedures are highly individualized, and will be covered more in the graduate course.



Therapy for Borderline Stuttering

- ❑ See Hood's Handout on helping children talk easily
- ❑ Work TOWARD easy, fluent talking, rather than away from stuttering.
- ❑ Work with family to create positive talking environment for the child. Family counseling is important.
- ❑ See page 371 and 372. Guitar text.