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Logopedics**

**Fluency Disorders:
Theory and Practice**

**University of Silesia
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**The investigation of speech-associated
attitude across the life span,
and its therapeutic implications**

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• or recording the video clips

Thank you

Behavior Assessment Battery

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Behavior Assessment Battery

- Multi-dimensional, evidence-based approach to diagnostic and therapeutic **decision making**
- Helps **decrease diagnostic errors**
 - *alpha* and *beta* diagnostic errors and clinical mismanagement

Behavior Assessment Battery (BAB)

- Patient history
- **Self-report: normed assessment tools**
- Observation: operational definition and measurement!
 - Type of behavior
 - stuttering and other disfluencies
 - behaviors secondary to stuttering
 - Extemporaneous speech versus reading
 - Anticipation, consistency, adaptation
- Physiological measurement
- Interview

Inside View

- The **uni-dimensional view** that stuttering is a disorder whose assessment and treatment essentially *only* requires attention to the particular forms of *disfluency* that interrupt the forward flow of speech has been *challenged*

(Barber Watson, 1995; Conture, 2001; Cooper, 1979, 1984; Guitar, 2006; Manning, 2009; Van Riper, 1982; Williams, 1979; Yaruss & Quesal, 2006)

- To define stuttering *uniquely* in terms of *speech disruptions* is *insufficient* because it does “not allow the differentiation between stuttering and other fluency disorders”

(Silverman (2004 p. 11)

- Stuttering is best seen as a **multi-dimensional disorder** in which speech-associated *attitudinal* and *affective* reactions, and behaviors of *avoidance* and *escape* are vital components

(Barber, 1981; Barber Watson, 1988, 1995; Brutton & Shoemaker, 1967; Brutton & Vanryckeghem, 2003a,b, 2007a; Conture, 2001; Cooper, 1979; Guitar, 1976, 2006; Manning, 1999; Riley, 1994; Smith & Kelly, 1997; Yaruss & Quesal, 2006)

- “though observable speech dysfluencies ... [are] an essential element in labeling one a stutterer... the label does not apply unless the dysfluencies are accompanied by *feelings, attitudes, and other behaviors* characteristic of the stuttering syndrome“ (Cooper, 1999, p.10)

- **Covert** attitudinal, affective and behavioral variables can serve to more fully characterize the *person* who stutters
 - seek ways to **augment the clinical observations** of the frequency and severity of stuttering
- Broaden the meaningfulness of the elements that characterize the PWS to include **personal reactions** that are not directly observable

- Explore the **intrinsic features** of stuttering - ones that are *experiential* in nature rather than directly observable

- clinicians have turned increasingly to the development and use of standardized *self-report* procedures
- provide clinicians with a more extensive understanding of the PWS and stuttering, one that includes a “*view from within*”

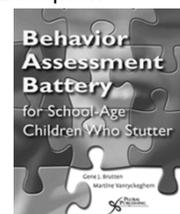
➤ Self-report procedures

- **data-bound attention** to the reactive aspects of the disorder

- Self-report measures of the attitudinal, emotional and/or coping elements of stuttering
 - some test procedures’ results are **confounded**: total score and/or sub-scale scores cut across a **molar** mixture of various reactive and behavioral elements
 - tests that **separately** explore the affective, coping and attitudinal reactions that are part of the stuttering disorder; and their impact on a PWS

Behavior Assessment Battery

- Affective:
 - Speech Situation Checklist – Emotional Reaction
- Behavioral:
 - Speech Situation Checklist-Speech Disruption
 - Behavior Checklist
- Cognitive:
 - KiddyCAT
 - Communication Attitude Test (CAT)
 - BigCAT



Cognition

Cognition as integral component of molecular analysis of PWS' experiences

- Importance of the relationship between **cognition** and **stuttering** and its role in the onset and development of the disorder has long been recognized (Lincoln, Onslow & Menzies, 1996)
- Speech-associated attitude = fundamental component of the speech disruption, negative emotion, coping behaviors that characterize PWS
 - Barber Watson (1995): inter-relationship between these
 - components, the “**reciprocal nature** of attitudes and behaviors”
 - Dealing with “**head**” issues is as important as addressing a
 - PWS’ speech

Cognition/Attitude

- Automatic thoughts, imaginations, self-verbalizations
 - rational (real) or irrational
 - can be intra- and interpersonal
- When cognitions become irrational
 - have an influence on speech – strengthen stuttering behavior
 - serve a mediating and controlling function
 - prohibit PWS to deal with problems in a constructive manner
- When certain cognitions stabilize to a more **permanent** totality of negative thoughts and anticipations \Rightarrow **negative communication attitude** has been established

Speech-Associated Attitude

Attitude

- Relationship between **stuttering** and speech-associated **attitude**: topic of discussion by theorists, diagnosticians, and clinicians
- Concerned with and differed about “**cause or effect**”
 - disruptive impact that negative attitude may have on fluency
 - possible effect of fluency failure on speech-related attitude
- Both viewpoints suggest a **link** between attitude and stuttering
 - speech-associated mal-attitude and stuttering might have a bidirectional or “**loop**” **relationship** (Liebert & Liebert, 1995)
 - cause and effect can “**mutually influence** each other” and have a “**contributory causal role**”

Attitude

- - way a person *thinks* about his speech and communication in
- general, self-perception as a person, views of the communication partner
- - Typically, the PWS thinks *negatively* about his or her own
 - speech
 - - perceives speaking as difficult, unpleasant and challenging
 - - visions himself as being inherently unable to produce fluent speech.
- - PWS may have an *unrealistic* view of the nonstuttering speaker
 - - someone who is always fluent
 - - who might be critical or pitying

Attitude

- PWS might perceive stuttering as the *cause* for
- academic *failure*, the basis for a lack of friends or an
- intimate *relationship*, or the reason for not advancing in
- his or her *profession*
- *Negative self-concept* as a PWS, first and foremost, has
- far reaching consequences
 - Often irrational inter- and intrapersonal reactions might
 - start to dominate the thinking of the PWS
 - Deviations from reality might in turn elicit and strengthen
 - stuttering, and prohibit the PWS from dealing with
 - situational problems in a constructive manner.

25 Research Partnerships involving the BAB

Argentina•Belgium•Brazil•Canada•Croatia•France•Germany•Greece•India•Iran•Israel•Italy•Japan•Malaysia•Malta•Netherlands•Norway•Pakistan•Poland•Puerto-Rico•Slovenia•Spain•Sweden•USA



Adults

- Pretreatment **attitude**: seen as a good **prognostic measure** of the instatement and maintenance of fluency (Guitar, 1976)
- **Long-term maintenance** of fluency that resulted from the operant treatment program used: at least partially dependent on improved attitude toward speech (Andrews & Cutler, 1974)
- **Relapse** was more often associated with negative speech-associated attitude than was a positive belief (Guitar, 1979; Guitar & Bass, 1978)

- Clinically-based research: contention that attitude toward speech and fluency are related: **attitude change incorporated in treatment**
 - Boberg (1981): belief that improvement might not hold up if a negative attitude toward speech persisted
 - Ryan (1974) and Perkins (1979) contended that a positive attitude toward speech is essential for normal sounding speech to have permanence
 - Cooper (1979, 1999):
 - **negative attitude** toward speech is a **basic element** of the disorder that is stuttering
 - therapy is inadequate if it does not assist the individual in clarifying his feelings and attitude about dysfluency

School-age Children

- **Absence of data** that verify the relationship between negative beliefs and dysfluency for children who stutter
- **Indirect studies** of speech-related attitude of young CWS
 - wishes of children who stutter: no suggestion that stuttering
 - youngsters have a particularly negative viewpoint with respect to their speech (Silverman, 1970; Culatta et al., 1985)
- **More direct investigations**
 - asked CWS and their classmates to evaluate their own speech competence and that of their peers
 -  self-report investigations

Communication Attitude Test for School-Age Children© (CAT)

Vanryckeghem & Brutten

CAT

- Cognitive component of the Behavior Assessment Battery
- Designed to *specifically* investigate the speech-associated *belief* system of grade-school children
 - speech-associated attitude as a purely *cognitive* measure
 - does not cut across a mixture of *unweighted* affective, behavioral, and attitudinal items
- Youngsters (age 6 – 16) who stutter and those who do not are asked to reflect *directly* on their attitude toward speech
- 33 True – False statements

CAT

1. I don't talk right..... True...False
 7. I like the way I talk..... True...False
 16. My words come out easily..... True...False
 19. Kids make fun of the way I talk... True...False
 22. Many words are hard for me
 to say.....
 True...False

CAT

1. Ja nie mówię poprawnie.....
 Prawda....Nieprawda
 7. Podoba mi się w sposób jaki mówię.....
 16. Potrafię mówić z łatwością.....
 19. Dzieci śmieją się, gdy mówię.....
 22. Trudno mi jest powiedzieć wiele słów

CAT: Cross-cultural comparative investigations

- Group comparisons revealed repeated *between-group differences* (CWS versus CWNS) that were *statistically significant*
- Repeated confirmation that CWS generally view their speech significantly more negative than CWNS

CAT: Test-retest reliability

- **Positional stability** of the PWS' scores: .83 between initial test and re-administration one week later (p=.0001)
 - the CAT scores' rank order was statistically consistent over a period up to three months
- **Absolute closeness of the CAT scores:**
 - absolute amount of speech-associated attitude did not change over a one week period (F=.02, p=.90)
 - it did over a period of 11 weeks (F=17.97, p=.0001)
- CAT's **sensitivity:**
 - absolute difference among the test means over a 3 month period
 ⇒ capable of reflecting attitudinal change

CAT and Internal Reliability

- Repeated internal reliable investigations ⇔ removal of two items from the original CAT: currently 33 items
- **Reliability: Summary**
 - CAT scores tend to be stable over time and have both good inter-item reliability and item-to-total score concordancy

CAT and Negative Emotion

- Relationship CAT scores and negative emotion (Vanryckeghem, Hylebos, Brutten & Peleman, 2001)
 - statistically significant .89 correlation coefficient
 - presence of a strong relationship between mal-attitude and negative emotion among CWS
- supportive of the view that attitude and negative emotion tend to influence each other - are a part of the stuttering syndrome

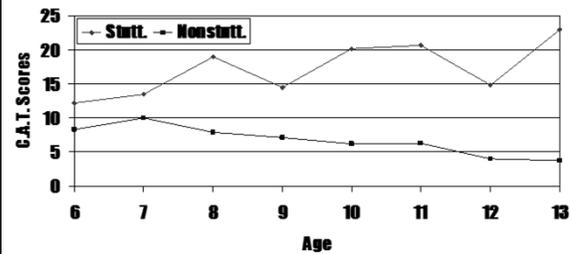
CAT and Stuttering severity

- Relationship: **CAT and Stuttering Severity** measured during reading and extemporaneous speech
 - **Correlation: fluency failure and CAT score is limited**
 - Statistically significant ($p < .05$) but low correlations were obtained for the CWS (.33 - .39, reading, conversation)
- ⇒ **Limited shared variance:** measured variables reflect somewhat different aspects of the stuttering syndrome

CAT and Age

- Mal-attitude of CWS tends to increase with age
 - Opposite trend among CWNS: CAT scores decline with age
 - Between-group disparity increases with age
- Significant and divergent trends:
- CWS: experience history affected the extent to which they viewed speech in a negative light
 - CWNS: increased their speech-related confidence

Mean CAT scores of 55 CWS and 55 CWNS at eight different age levels (Vanryckeghem & Brutten, 1997)



- Cross-sectional data: attitude of grade-school CWS and CWNS is partly related to their age
 - in divergent ways, the youngsters were differentially affected by their cumulative experience history
 - From **age 6** mal-attitude is significantly more likely to be present among CWS than it is among CWNS + significant increase in disparity between two groups
- ↓
- Between-group difference in mal-attitude toward speech is present at an earlier age than previously thought AND
 - calls for research in youngsters between ages of 2 and 6, the age at which stuttering typically has its onset

CAT and Parental Report: Concordancy investigation

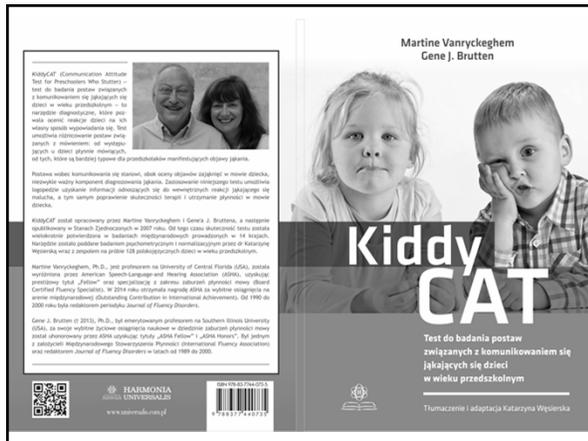
- Standard practice of clinicians to question the parents of very young children being assessed
- Question the **validity of parental reports**
 - often *limited agreement* between parental statements and either child
 - performance or offspring's reports – questionable usefulness
- Research suggests that the correlation between the reports of parents and that of their child, are less than reassuring

- **Positional relationship:** parents' CAT scores and children
 - concordance between the children's and parents CAT scores was statistically significant but low (correlations .29 to .34)
- **Parents** of CWS viewed their child's attitude toward speech as being **more negative** than their offspring reported

↓
- Parents' CAT report about their child's attitude would not serve as an adequate predictor about their child's speech-related attitude
- Worthwhile to **design a test procedure** that can be used to measure speech-associated attitude of young children
 - enable the clinician to better assess preschoolers' communication attitude and the attention that it may require

Communication Attitude Test for Preschool and Kindergarten Children who Stutter (KiddyCAT)

Vanryckeghem & Brutten



- ### KiddyCAT©
- The statistical magnitude of the **attitudinal** difference between CWS and CWNS at **age six**
 - ⇨ between-group attitudinal difference may well be present among still **younger children**
 - Research evidenced that children as young as three show an **awareness** of disfluency (Ambrose & Yairi, 1994; Ezrati, Platzky, & Yairi, 2001)

↓
 - “the traditional view of awareness as an *advanced reactive symptom* thus cannot be upheld” (Ambrose & Yairi, 1994, p242)

- ### KiddyCAT
- **KiddyCAT items**
 - Derived from the speech-associated beliefs recorded over many years in files of preschool and kindergarten CWS
 - Clark et al.: factor analysis: single factor - “speech difficulty”- underlying the KiddyCAT
 - The children are asked to respond by means of ‘yes’ or ‘no’ to simple, verbally presented questions
 - play-type activity: put one of 12 marbles into an egg box type after answering a question

- ### KiddyCAT
- Do you talk right? Yes No
 - Is talking hard for you? Yes No
 - Do your words come out easily? Yes No

KiddyCAT

- Czy uważasz, że mówisz dobrze? Tak Nie
- Czy mówienie jest dla Ciebie trudne? Tak Nie
- Czy wypowiedzianie słów przychodzi Ci łatwo? Tak Nie

KiddyCAT: Test-retest reliability

- .90 correlation between first and second test administration (1 week to max 12 days)

KiddyCAT: Between-group data

- Cross-cultural data: CWS score statistically significantly higher than CWNS
- Polish data: 58 CWS (39 males) and 70 CWNS
 - CWNS: 60% had a score of 0 or 1
97% had a score of 4 or lower
 - CWS: 3.44% had a score of 0 or 1
57% obtained a score of 4 or higher

KiddyCAT and age

- younger group (age 3 and 4): significant mean KiddyCAT score difference between CWS and CWNS
- older participants (age 5 and 6): mean KiddyCAT score differed significantly between the groups

KiddyCAT and Gender

- Within group analysis:
 - KiddyCAT score of the male and female CWS did not differ significantly
 - Mean test score of the male CWNS did not differ significantly from that of the female CWNS
- Within-gender analysis:
 - male CWS reported significantly more in the way of negative attitude than the male CWNS
 - mean KiddyCAT score for the female CWS was significantly higher than that of the female CWNS

Clinical Implications

- **Awareness** of a difference between dysfluency and fluency by children as young as three (Ambrose & Yairi, 1994)
- **Attitude** toward speech of CWS and CWNS differs significantly by the age of three or four
- Attitude of CWS **becomes increasingly negative with age** (Vanryckeghem & Bruten, 1997)
- ⇔ highlights the importance of attitude in **clinical practice**
 - **need to assess** speech-associated attitude of preschool and kindergarten children whose fluency is problematic
 - when appropriate include attitude change as an aspect of **therapy** (Conture, 2001; Zebrowski & Kelly, 2002)

Communication Attitude Test for Adults who Stutter© (BigCAT)

Vanryckeghem & Brutten

BigCAT

- BigCAT is a *singularly cognitive* measure of communication attitude
 - items specifically explore speech-associated belief
 - are not directed at affect, speech disruption or coping behaviors
- **Un-confounded** cognition-based measure of speech-associated attitude
- Respondents reflect on 34 statements and indicate whether or not the items represent what they presently *think* about their speech

BigCAT

1. There is something wrong with the way I speak..... True...False
6. Speaking is no problem for me.....True...False
26. My speech does not affect the way I interact with people..... True...False
34. The way I speak troubles me.....True...False

BigCAT

- 1. Jest coś nieprawidłowego w sposobie, w jaki mówię..... Prawda.....Falsz
- 6. Mówienie nie stanowi dla mnie problem..... Prawda.....Falsz
- 26. Moja mowa nie wpływa na sposób, w jaki kontaktuję się z innymi ludźmi..... Prawda.....Falsz
- 34. Martwi mnie sposób, w jaki mówię..... Prawda.....Falsz

BigCAT

- **Highly significant** between-group difference in the mean scores
average score of PWS is 5 ½ SD above mean score of the PWNS
- **Cronbach Alpha:** .84 for PWS and .85 for the PWNS
strong relationship between the response of the participants in each group to the items that make up the BigCAT
- **Test-Retest Reliability:** .80 for PWS (5 – 7 day hiatus)

BigCAT and Gender

- The mean BigCAT score of males and females in the sample of PWS did not prove to be statistically significant
- Mean BigCAT score difference of male and female PWNS was not statistically significant
- Gender did not have a significant influence on speech associated attitude as measured by the BigCAT

BigCAT: Clinical Implications

- BigCAT: **powerful** and **internally consistent** measure of speech-associated attitude
- Considerable between-group difference in attitude of PWS and PWNS
 - + **minimal overlap** between the groups
 - ⇒ BigCAT is useful in clinical decision-making

Implications for Treatment

Holistic, multi-modal treatment

- Stuttering is a **multidimensional** problem that involves a mosaic of behavioral, emotional and adjustive responses that need to be dealt with

Cognition/Attitude

- **Multi-dimensional framework**
 - improved fluency depends, in part, on the need to **replace** the disruptive effect of a **negative speech-related attitude** with a belief system that is **positive** and supportive of fluency
- For PWS, to bridge the gap between sounding normal and feeling normal, their speech-associated **attitudes** need to be "**identified, reinforced or modified**" (Perkins, 1979, p.383)
- Andrews & Cutler: Inter-relationship between behavior change and attitude: "**successful treatment** requires not only that stutterers speak normally but also that they *believe* themselves to be as effective as normal speakers in their interaction with others" (1974, p. 317)

Cognition/Attitude

- **Behavior** change brought about by treatment is not likely to last in the absence of **cognitive** change (Andrews & Craig, 1988; Neilson, 1999)
- **Behavior** change patterns become more stable if there is **cognitive support** (Cognitive behavior therapists: e.g. Bandura)
- Importance of a *positive attitude* in both **attaining** and **maintaining** behavior change (Meichenbaum & Cameron)
- If the client's **attitude** toward communication does not **normalize**, the outcome of treatment is likely to be poor (Guitar & Bass, 1978; Menzies, O'Brian, Onslow, Packman, St Clare & Block, 2008)

Cognition/Attitude

- Replace disruptive negative speech-related belief by a more
 - positive outlook relative to speech, life, and surroundings
- PWS need to be able to think about themselves as being effective speakers who are successful in their communication and interactions with others
- Shift from the belief of being an inadequate communicator, blaming stuttering for every unsuccessful attempt in life's events, to a more positive cognition linked to supportive affect and behavior

Cognition/Attitude

- Discuss with the client the differential effect of
 - positive and negative statements about speech and speech ability on:
 - emotional reactions
 - fluency level
 - use of coping behaviors
- Make clear to client that not all life problems should be attributed to stuttering
- life's problems will not necessarily be resolved by improved fluency

Cognitive Behavior Therapy

- Umbrella term
- Cognitive therapy
- Cognitive processing therapy
- Rational emotive therapy
- Mindfulness Therapy
- Acceptance and Commitment Therapy

Cognitive Behavior Therapy (CBT)

- Clinician tries to trace down what led to a particular way of thinking, perception, attitude
 - often grounded in years of experience history, person's sensitivity to and evaluation of different encounters and perceptions
- Look for ways to modify the often irrational belief
- When negative beliefs become irrational and steady, they stabilize into a permanent mixture of negative thoughts, create negative speech-associated attitude, take control over one's behavior and might become destructive

CBT

- Cognitive restructuring
 - - PWS is trained to systematically identify and *modify irrational beliefs* and unhelpful thinking related to stuttering
 - - *Systematic desensitization*, or graded exposure
 - - PWS becomes progressively more comfortable with particular speech situations
 - - reduces anxiety in a systematic and hierarchical way
 - - gains control over disruptive factors influencing fluency
- Followed by discussion of the original judgment and the anticipated versus actual outcome of the exposure activity

CBT

- Menzies et al. tutorial CBT framework (JFD, 2009)
 - Exposure
 - Behavioral experiments (including voluntary stuttering)
 - Cognitive restructuring (changing negative attitude into more realistic and effective thoughts)
 - Attentional training
 - - might include mindfulness-based procedures intended to assist individuals in adopting a more open, mindful position and 'attend' to, be aware of, alternative, realistic and more effective thoughts that replace the original
 - cognitive distorting beliefs and related emotional distress

Exposure

- - Confront the situation
 - - refrain from using avoidance or escape strategies
 - - remain in the situation until anxiety lessens
- - Providing evidence to counter threat-related expectancies
- - Move up in hierarchical way from lower-level fear situations to more threatening tasks
- - Reflecting on the validity of the expectancy of harm
 - - is there any evidence that the anticipated fear before entering the situation was justified

Behavioral experiments

- - Conviction: "I will stutter" will lead to negative evaluation
- - Reduce probability estimates associated with the idea of negative evaluation based on stuttering
- - Behavioral experiment can include voluntary stuttering in social situations - or other experiments to test negative predictions
- - Hierarchy from relatively non-feared situations to more feared ones
- - Record predicted outcomes of the voluntary stuttering (expected evaluation by others) prior to engaging in the experiment
 - - Outcomes are reviewed and new predictions formed

Cognitive restructuring

- - Identify and systematically modify irrational thoughts, negative beliefs, judgements
- - Create hierarchy of situations
- - Focus on evidence for and against the negative thought
- - Does the thought advance an individual's functioning
 - - let go of outcomes that are beyond ones control
 - - reframe thoughts related to everyday situations

Attentional training

- - Mindfulness-based procedures
- - Reduce the frequency of threat-related disturbing thoughts
 - - increasing a person's capacity to attend to alternative cognitive targets
 - - increasing one's ability to control where attention is placed
 - - reduce bias toward negative aspects of the social environment

Rational Emotive Therapy (RET)

➤ Change intense and deeply rooted irrational thoughts (A, B, C, D, E treatment components)

- **Activating** experience, related to an attitudinal object (e.g. talking on the telephone)
- Irrational **Belief** about the difficulty of this situation, and the troubling emotional **Consequences** linked to it
- Positive affective and behavioral experiences based on gradual exposure, will provide argumentation to **Dispute** the irrational beliefs that do not hold up any longer, and hopefully lead to more positive and rational thoughts.
- The positive behavior and cognitive experience is linked to a reduction in negative **Emotional** reaction.

Mindfulness Treatment

- - Multifaceted construct - includes observation of inner and outer experiences, awareness of current experience, and acceptance of internal and external phenomena with curiosity, openness
- - Paying attention in a particular way: purpose, present moment, and nonjudgmentally
- - Mindfulness practice: decreased avoidance, increased emotional regulation, and acceptance, improved sensory-perceptual processing and attentional regulation skills

Mindfulness Treatment

- Behavioral exposure
- Improved emotional regulation
- Changes in perceptions of thoughts and increased sensory-perceptual processing
- Attentional control
- Acceptance

ACCEPTANCE and COMMITMENT THERAPY (ACT)

➤ ACT does not focus on control or thought regulation, but on **values** identification and clarification, and behavioral decisions

- Does not attempt to eradicate negative thoughts and feelings
 - frustration reduction through *acceptance* and a focus on valued living
 - connect with the *present* moment more fully
 - increased consciousness leads to changes in persistent behavior and more *value-based outcomes* (Hayes et al., 2006)
- Addresses experiential *avoidance*, which interferes with psychological flexibility
 - PWS experiencing experiential avoidance will be unwilling to come into contact with negative events (e.g., thoughts, feelings, bodily sensations, memories, etc.) and will embrace any attempt to avoid or control the content and frequency of these experiences

ACCEPTANCE and COMMITMENT THERAPY (ACT)

- Self-concept
- Defusion
- Acceptance
- Mindfulness
- Values
- Committed action

Children/Parents

- Self-report information
- Parental report
- Teacher report
- Teasing and bullying

Children/Parents

- Provide solutions by offering professional views, ideas, facts the client may be unaware of, or may not have considered
- Discuss the client's strengths that he or she may not have realized or utilized
- Reduce negative thoughts and feelings by having the client concentrate on positive experiences, including positive speech experiences
- Have the client put stuttering in perspective so that its negative effects are not exaggerated

Children/Parents

- Evaluate and discuss therapy outcomes
- Self-help groups
- Information on websites (Friends, Stuttering Foundation)
- Presentations in class
- Poster of Famous People who Stutter

Counseling Parents

- Exploring/changing their feelings, attitudes about fluency, stuttering and their child's stuttering
- Let parents talk freely about their fears, guilt, and overt reactions to their child's speech
- Make parents aware of the strategies and tactics they use in dealing with their child's stuttering and associated behaviors, providing them with alternative ways of responding, changing their attitude and response to their child's stuttering

Counseling parents

- Discuss normal disfluency and language development (linguistic, cognitive, motor, emotional components)
- Express approval of positive feelings and helpful reactions toward child
- Help parents realize their child's strengths and limitations
- Reduce negative thoughts and feelings and eliminate belief that they have created the problem
- Have parents put their child's stuttering in perspective so that they do not exaggerate its negative effects
- Have parents realize that children are not fluent all the time

Counseling parents

- Explore actions parents may have taken that have had positive effects on the child's fluency and encourage their use
- Explore actions parents may have taken that have worsened the child's problems and encourage their elimination
- Explore parents' ideas about fluency and stuttering to encourage realistic views
- Discuss the communicative demands of the parents and ways of reducing them

Counseling Parents

- Encourage parents to create positive speech experiences for the child by withholding criticism and accepting the child's stuttered attempts at communication
- Promote a linguistic level normal for child's age
 - Model appropriate language level (vocabulary, sentence length and complexity, etc.)
 - Engage parents in play-based activities during which
 - they model the desired language level
- Give the child ample time to express him/herself