Psychological & Speech Intervention for Children with Selective Mutism

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Marissa A. Barrera, MS, CCC-SLP
Medical Speech-Language Pathologist, Trinitas Hospital
Doctoral Student, Neurolinguistics, City University of New York
Assistant Director of Neurorehabilitation, New York Neurorehabilitation Group

Tatiaana L. Laine, MA, CFY-SLP
Speech-Language Pathologist, NYC Board of Education
Doctoral Student, Developmental Neurolinguistics, City University of New York

Insight into the life to a SM child turned adult….

http://www.youtube.com/watch?v=WdvnmezcNNE&NR=1
http://www.youtube.com/watch?v=A2rRU7bq8_s&feature=related

Aims

- *To raise awareness of what selective mutism means …*
- *To increase understanding of selective mutism in the classroom…*
- *To enhance confidence in working with this population….*
- *To share a case study and a work in progress…*
- *Invite suggestions…*

Discussion

- What is your experience of selective mutism?
- What questions do you have right now about selective mutism?

Fact or Fiction

"Selective mutism is not a speech disorder. Speech therapy and traditional individual therapy for SM children are in fact typically non-productive."

– Jonathan Berent, L.C.S.W., A.C.S.W.,

http://www.social-anxiety.com/area-selective-mutism.html

WHAT IS SM?

- Selective mutism (SM) is defined as the persistent failure to speak in specific social situations (e.g. to teachers at school, people in a restaurant) when speaking is expected, despite speaking in other "comfortable" situations (APA,2000).
- SM is a childhood anxiety disorder (Black & Uhde, 1995).
- Over 90% of children with Selective Mutism also have social phobia or social anxiety, and some experts view Selective Mutism as a symptom of social anxiety. (Black & Uhde, 1995).
- It is likely SM is different from social phobia, although most researchers believe they are more similar than different.

WHAT IS SM?

- SM is a disturbance that interferes with educational or occupational achievement or with social communication.
- The biggest mistake made regarding selective mutism is the belief that the child "will grow out of the problem".
- Because of its low prevalence, most teachers, school administrators, therapists and parents have little knowledge and/or experience working with this sensitive population.

History of SM

- 1877, Kussmaul named a disorder where individuals would not speak in certain situations, despite ability, *aphasia voluntaria*
- 1934, Tramer coined the term *elective mutism* describing a group of children unable to speak to in various communicative situations.
- DSM-IV term selective mutism adopted, implying non-speaking in select situations

Diagnostic Criteria

- #1 Symptoms must persist at least one month, excluding the first month of school.
- #2 SM is **not** diagnosed if a child's failure to speak is a lack of knowledge or comfort with the spoken language required in the social situation (i.e., child is not comfortable in English so they do they choose not to communicate in school).
- #3 SM is not diagnosed if the disturbance is better accounted for by embarrassment related to having a communication disorder (i.e., stuttering).

Diagnostic Criteria

- #4 SM children frequently often use gestures, nodding, pulling, pushing, or monosyllabic utterances.
- #5 Associated features include excessive shyness, fear of social embarrassment, social isolation and withdrawal, clinging, compulsive traits, negativism, temper tantrums and controlling or oppositional behavior *(Dow, Sonies, Scheib, Moss, Leonard, 1995)*

In Brief...

A child meets the criteria for SM if the following are true:

1. The child does not speak in 'select' places such as school or other social events.
2. But, he or she can speak normally in at least one environment; usually this is in the home environment but a small percentage of children with SM are mute at home.
3. The child's inability to speak interferes with his or her ability to function in educational and/or social settings.
4. The mutism has persisted for at least one month.
5. The mutism is not caused by a communication disorder (such as stuttering/second language learning) and does not occur as part of other mental disorders (such as autism).

Speech Characteristics

- 20-30% of SM children have a subtle abnormalities with speech and language.
- SM children produce shorter, linguistically simpler utterances.
- Narratives are less detailed than non-SM children.
- Research suggests subtle expressive language skill deficits play a role in SM (Fung, Manassis et al., 2002)
- Bilingual environments are believed to produce two times more SM children than monolingual environments.

Behaviors & Personality Traits

Characteristics found to be common in some children with SM:

- Heightened sensitivity to noise/crowds/touch (possible Disorder of Sensory Integration aka DSI)
- Difficulty separating from parents & difficulty sleeping alone
- Introspective and sensitive (seems to understand the world around them more thoroughly than other children the same age, and displays an increased sensitivity to feelings and thoughts)
- Behavioral manifestations at home, such as: moodiness, inflexibility, procrastination, crying easily, temper tantrums, need for control, bossiness, domination and extreme talkativeness.
- Intelligent, perceptive and inquisitive, creative and artistic
- Bedwetting, daytime wetting accidents (enuresis), anxiety over using public restrooms (paruresis), or accidents with bowel movements (encopresis)
- Excessive tendency to worry and have fears (manifested in children >6)

- ***While not all of the above is true for every child, these behaviors & traits are frequently described by parents & teachers of children with SM.***
- ***It is clear that mutism is just one of the many characteristics that SM children portray.***

Incidence of SM

- Lloyd & Browne, 1975
  - 1 in 100 school-aged children (1 percent) could be described as selectively mute during the first 8 weeks of starting school, after 2 terms, rate had decreased to 1 in 1,200 children (0.08 percent)
- Kopp and Gillberg, 1997
  - 18 in 10,000 children
- The average age of diagnosis is between 3 -8 years old; however, in retrospect many parents will say that their child displayed signs of excessive shyness and/or inhibition since infancy. It is not until children enter school, where there is an expectation to perform, interact and speak, that SM becomes more apparent.

Why SM? The role of genetics

Why does a child develop SM?

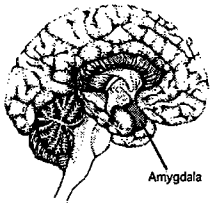
- About 70% of kids with SM have an immediate family member who also struggles with social anxiety.
- The majority of children that have SM have a genetic predisposition to anxiety. In other words they have inherited the tendency to be anxious from various family members and may be vulnerable to the development of an anxiety disorder.
- Very often, these children show signs of anxiety, such as difficulty separating from parents, moodiness, clinging behavior, inflexibility, sleep problems, frequent tantrums and crying, and extreme shyness from infancy on.

Why SM? The role of genetics

- When they reach the age when they begin to interact socially outside the family environment, persistent fear of speaking or communicating begins to manifest in symptoms like freezing, lack of response, stiff posture, blank facial expression, lack of smiling, and mutism.
- Studies have shown that some children are born with inhibited temperaments. This means that even as infants, they are more likely to be fearful and wary of new situations. There is reason to believe that many or most children with SM were born with this inhibited personality type.

Why SM? The role of neurobiology

- Research has also shown that behaviorally inhibited children have a decreased threshold of excitability in the almond-shaped area of the brain called the ***amygdala.***
- Normally, the amygdala's function is to receive and process signals of potential danger and set off a series of reactions that will help individuals protect themselves. In anxious individuals, the amygdala seems to overreact and set off these responses even when the individual is not really in danger.



Why SM?

- In the case of SM children, the anxiety responses are triggered by **social** interactions in settings such as school, the playground, or social gatherings. Although there may be no logical reason for the fear, the feelings that the child experiences are real.
- Over time, a child with SM becomes mute because of the inability to cope with fearful feelings that occurs when he or she is expected to speak.

Why SM?

- Besides genetics and biological factors, it is currently believed that other factors may contribute to the development of SM.
- A significant number of children with SM also have expressive language disorders, and a fairly large number come from a bilingual environments; it is thought that these factors may also add to a child's vulnerability to SM.
- Anxiety is still the root cause of the mutism, and it is theorized that these language difficulties may make the child even more self conscious about his or her speaking skills and thus may increase his/her fear of being judged by others.
- These risk factors are probably additive; in other words, if a child has genetic risk of anxiety, plus a bilingual environment and/or a speech disorder, the likelihood of that child developing SM becomes higher with each added factor.

SM v. Shyness

- When compared to the typically shy and timid child, SM children are at the extreme end on the spectrum for timidity and shyness.
- The difference between shyness and SM may be a matter of degree, but the important distinction is that SM is an social phobia disorder that interferes with a child's ability to function.
- If left untreated, it has a severe impact on a child's education, self-esteem, and social development.
- Children typically grow out of shyness, while SM children need multidisciplinary intervention in order to improve.

Misconception

- A stressful environment may be a risk factor, but there is **NO** evidence that the cause of SM is related to abuse, neglect or trauma.
- It is important to stress this point because this assumption has been made in the past and is still believed by many today.
- This misconception is often very harmful to families seeking help.

Psychology: Various Explanations

- Psychodynamic view (Giddan *et al.*, 1997)
  - a manifestation of unresolved conflict
  - a way to cope with anger or anxiety or to achieve the goal of punishing the parent
  - *Currently losing popularity for more empirically sound behavioral theories*

Psychology: Various Explanations

- Behavioral theorists:
  - a learned response in which the refusal to speak is a method of manipulating the environment (Porjes, 1992)
  - mutism exists because of an interaction between the child and the child's environment
  - silence is functional and environment maintains this way of interacting
  - child's behavior is adaptive, not pathological (Powell & Dalley, 1995)

The Current Explanation

- Black & Uhde (1995)
  - SM is a variant of social phobia
  - excessive social anxiety a universal characteristic
  - the most extreme end of the spectrum of childhood speech inhibition and social anxiety

Parents: A Barrier?

- Often a parent suspects there is a problem, but lack of knowledge about SM makes it difficult to find help. It is all too common for parents to question their child's pediatrician about the child's inability to speak in public, and be told that the child is just shy and will outgrow the behavior.
- Some parents are also reluctant to have their child evaluated and treated. Reasons include:
  - Parent may not see the severity of the symptoms that occur in school or other settings
  - Parent may have been told that the child is just shy and have difficulty accepting other explanations
  - Parent may have suffered from SM or severe shyness during childhood and feels that he or she "turned out just fine"
  - Parent may currently suffer from social anxiety and have difficulty seeking help for the child
  - Parent may fear being accused or suspected of abuse
  - Parent may have difficulty accepting the need to "label" the child with a diagnosis

Assessment: General Guidelines

- Developmental milestones
  - Timeline of language acquisition
  - Timeline of gross & fine motor skills
- Complete case history
  - Interviews with parents to assess symptom history (onset, neurological difficulties, atypical speech and language difficulties)
  - Assess for any co-morbid factors
  - Where and to whom child already speaks
  - Audio recording of the child speaking in a comfortable context
  - Effectiveness of past treatment if applicable
  - Parents "theory"
- Selective Mutism School Evaluation Form ©
  - Developed by Dr. Elisa Shipon-Blum, President & Director Selective Mutism Anxiety Research & Treatment Center (SMart Center), Jenkintown, PA.

Assessment of Speech

- Indirect: Analysis of audio recording
  - Mean Length of Utterance
  - Story Grammar
  - Lexicon
  - Cohesion
  - Syntax
  - Sequencing of thoughts and ideas
  - Voice/Fluency
  - Articulation & phonological processes

Measuring Speech When They Don't Speak: Assessment Techniques for Children SM

- **Gortmaker, V.J., Griffin, J.R., & Shriver, M.D. (2006). Department of Psychology, University of Nebraska Medical Center.**
- **Purpose:**
  - The purpose of this study was to identify appropriate and practical ways to develop data collection procedures to effectively capture the targeted outcome and assess improvement over time for children with SM.
- **Procedures:**
  - 1. Devise a data collection plan for initial & future assessment.
  - 2. Define child's SM based upon behavioral principals.
  - 3. Identify outcome variables.
  - 4. Collect data on direct and specific measures of communication.
  - 5. Analyze data.
  - 6. Devise an intervention plan/continue data collection.
  - 7. Assess generalization measures/Follow-up plan.

Measuring Speech When They Don't Speak: Assessment Techniques for Children SM

- Methods:
  - Based upon preliminary assessment, use subjective data to define verbal behavior in terms of *frequency, intensity, stimulus conditions,* and *social appropriateness.*
  - Definitions of the measurement criteria.

Case Example: At school, David exhibited no verbal speech and limited non-verbal speech. From a behavioral approach, it was hypothesized that David's SM may have been maintained by (a) few opportunities to respond verbally or non-verbally by teacher and peers and (b) limited practice communicating when opportunities were presented.

Operational Definitions:	
Opportunity	Teacher or peer communication with David prompting him to communicate either vocally or non-vertally.
Verbal Response	Using voice (at any volume) to initiate communication or to respond to prompt communication.
Non-verbal Response	Nodding or shaking head or gestural response with hands, arms, or shoulders (e.g., motioning / pointing or shrugging shoulders) to initiate communication or respond to prompt to communicate.

Measuring Speech When They Don't Speak: Assessment Techniques for Children SM

- Data Collection:
  - Develop data-collection forms for continuous, direct outcome measures in the child's natural setting.
  - Train observers and begin observing.

Case Example: 15 second interval recording was used to document instances of David's verbal and non-verbal responses to opportunities provided by David's teachers and peers.

		Condition				
Min	15 second interval	Verbal to Teacher	Verbal to Peers	Non-Verbal to Teacher	Non-Verbal to Peers	Opportunities
	0.15					
	0.30					
	0.45					
1	1.00					

Measuring Speech When They Don't Speak: Assessment Techniques for Children SM

How to collect data:

- Weekly observations throughout the school day should be made (e.g., large group math instruction; small group reading, recess, etc.).
- Observations across multiple settings allowed the clinicians to gather more data about strengths and weaknesses.
- Observe the following: does the child have limited social skills (e.g., he did not participate in games during recess; did not contribute to group class projects, etc.).
- Continuously add data to an excel worksheet.
- Calculated and graphed the following items
  - *Total opportunities provided by teachers and peers.*
  - *Total verbal and non-verbal responses.*
  - *Percent verbal and non-verbal response to peer/teacher opportunities.*
  - *Percent verbal and non-verbal response throughout all intervals*

Measuring Speech When They Don't Speak: Assessment Techniques for Children SM

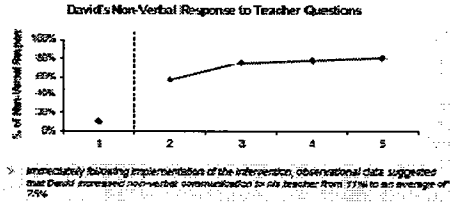
- Data Analysis:
  - After data is gathered from several different stimulus situations, decide upon criteria to evaluate outcomes (e.g., visual, statistical analysis, etc.).
  - Organize data in a systematic format to use data to continuously monitor intervention effectiveness.
  - Examine patterns and trends across time and settings.
  - Determine if additional data needs to be collected for other outcome measures.

Measuring Speech When They Don't Speak: Assessment Techniques for Children SM

- Linking data to Treatment:
  - Based upon data, select the type and form of behavioral strategies (e.g., *what* to shape, fade, expose, and/or reinforce; *where, when,* and *who* to target the intervention with).
  - Implement non-verbal communication system.
  - Continuously modify goals based upon individual needs of the client.

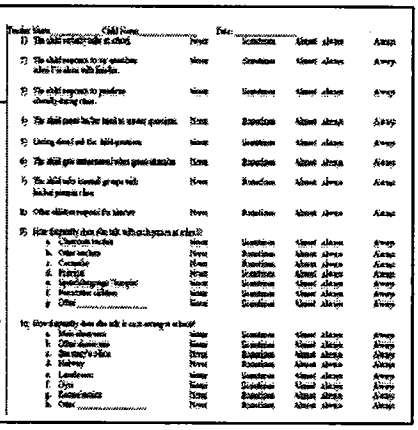
Measuring Speech When They Don't Speak: Assessment Techniques for Children SM

- Track non-verbal communication exchanges during intervention.



Immediately following implementation of the intervention, observational data suggested that David increased non-verbal communication to his teacher from 11% to an average of 75%

- Use a survey tool to monitor the child's progress.



Measuring Speech When They Don't Speak: Assessment Techniques for Children SM

Discussion:

- This is a systematic method utilized to effectively provide interventions for children with SM.
- Effective intervention for children with SM requires clear identification of outcome variables, specific interventions, and progress monitoring techniques to evaluate effectiveness.
- Data-collection should consist of a variety of measures to assess direct outcomes.
- Enables an effective linkage of assessment to individualized intervention, interventions should be modified based on continuous data.

How is SM Treated?

- Since SM is an anxiety disorder, successful treatment focuses on methods to lower anxiety , increase self-esteem and increase confidence and communication in social settings.
- The emphasis should never be on 'getting a child to talk', nor should the goal of treatment be for the child to speak to the therapist.
- Progress outside of the clinic or doctor's office is much more important than whether or not the child speaks during the therapy session!

How is SM Treated?

- ***Initially all expectations for verbalization should be removed.***
- As the child's anxiety is lowered and confidence increases, verbalization will usually follow. If this does not occur spontaneously, techniques can later be added to help encourage progress (i.e. non-verbal communication system).
- A multidisciplinary team should devise an individualized treatment plan for each child, and allow the child, family, and school to have a great deal of input into the treatment process.
- Therapy usually involves some combination of speech therapy, behavioral therapy, cognitive behavioral therapy (CBT), play therapy or psychoanalytic therapy, medication, and in some cases, family therapy.

What is Behavioral Therapy & How is it used to treat SM?

- Desensitization, Fading, and Positive Reinforcement techniques are the primary types of behavioral therapy used for SM.
  - Desensitization means exposing a child to something that is feared in a gradual way, in order to help the child overcome the fear.
- Fading therapy is a type of desensitization that creates a series of events or exposures which starts with a situation that is comfortable for the child.
  - For example: being alone in the classroom with a parent and playing a board game and then gradually introduces new variables that are progressively more difficult such as having the teacher walk past the room and overhear the child speaking to his/her parent, and then having the teacher enter the room, and eventually have the child interacting with the teacher in the classroom.
- Positive reinforcement, or the use of rewards for changes in behavior, should only be introduced after anxiety is lowered and the child is ready to begin working on goals.

What is Behavioral Therapy & How is it used to treat SM?

- It is also important to realize that there are many intermediate steps between being mute and being verbal; during the early stages of treatment, nonverbal communication such as pointing, nodding, and use of pictures to express needs, can be encouraged and rewarded.
- Though some may fear that allowing nonverbal communication will "enable" the mutism to continue, it actually is a necessary step for most children with SM to overcome their communication anxiety in a stepwise manner.
- In addition to these basic types of behavioral therapy, some therapists use video or audio taping as techniques to desensitize a child to the sound of his/her voice or may use special tapes spliced together to make it appear that a child is speaking to a teacher or other person.
  - This method, called "self-modeling", is based on the concept that "seeing is believing", therefore a child may feel more confident that he/she can speak to another individual after viewing a tape that makes it appear as though he or she has done so.

What is CBT and How is it used to treat SM?

- Cognitive behavioral therapists help children change their thoughts and actions.
- CBT therapists recognize that anxious children tend to exaggerate the frightening aspects of certain situations, so they help the children gain a more realistic perspective in order to decrease anxiety.
- They are knowledgeable that anxious children avoid situations they fear, or (in the case of selectively mute children) avoid speech in anxiety-provoking situations. Avoidance makes anxiety worse.
- Therefore, CBT helps the child overcome avoidance by gradually facing what is feared with lots of praise and positive reinforcement.
- Parents, teachers, and other adults around the child can be very helpful in this process.

Medication

- The use of medication is based on the understanding that SM is related to social anxiety, and there are medications that have been shown to help this disorder in adults.
- In recent years, it is becoming clear that anxiety problems are related to an imbalance in some of the chemical "messengers" in the brain aka *neurotransmitters*. In particular serotonin appears to be involved.
- Medication in the form of serotonin reuptake inhibitors (SSRI's) such as Prozac, Paxil, Celexa, Luvox, and Zoloft are often prescribed in the treatment of anxiety disorders.
- In addition to the SSRI's, there are other drugs that affect several of the neurotransmitters instead of just serotonin.
  - Examples are Effexor XR, Serzone, Buspar and Remeron.

Medication

- Although none of these medications is "approved" by the FDA for use in treating SM in children, it is common for doctors to prescribe medications when there is reason to believe that they are safe and effective for a particular use.
- There are several small scale studies that have shown these types of medication to be effective in the treatment of SM.

Treatment Outcomes

- Many children appear resistant to treatment (Kolvin & Fundadis, 1981)
  - WHY?? Because children with SM are often negatively reinforced for their behavior by the withdrawal of repeated requests for them to speak.
  - Children reinforced for their non-verbal forms of communication. The longer the mutism exists, the more often it is reinforced and the harder it is to extinguish.

Success Rate Only With Psychodynamic Treatment

Wergeland (1980)
- period of intervention lasted from 8 months to 4 years

Lumb & Wolff (1988)
- interventions lasted many months, using highly qualified personnel in clinic or hospital settings

Lazarus et al, 1983
- outcomes, long and short term were disappointing

Success Rate Only With Behavioral Intervention

Behavioral intervention...
- Majority of successful treatments in the literature have involved behavior therapy techniques (reinforcement, stimulus fading, token procedures, shaping or prompting, contingency management, self-modeling, response initiation procedures plus the implementation of a non-verbal communication system (Giddan et al, 1997)
- Results not quantified

When Should We Intervene?

- Porjes, 1992
- *"essential to begin intervention as soon as a child is identified"*
  - chances for positive outcomes greatest when child is younger since there has been less time for receiving reinforcement for the non-verbal behavior.
  - Secondly, longer the child does not speak at school, the greater the probability of other academic problems arising.

When Should We Intervene?

- Should we intervene? **Y-E-S!**
- It is extremely rare for children above the age of 10 to recover from SM.
- Prognosis for intervention after this age is very poor.
- Would non-intervention be more appropriate?
  - Heyden, 1980
  - cases of spontaneous remission are extremely rare

A Non-Verbal Speech-Language Pathology Intervention

Selective Mutism: Speech & Language Perspective

- Despite nearly 20-30% of SM children having a speech/language disorder, SLP's remain focused that SM is a psychological problem rooted in severe social phobia and anxiety.
- We subscribe to a multidisciplinary team treatment approach for SM.
- SLPs are often the first specialists to recognize the signs/symptoms of SM.
- SLPs along with psychologists can diagnose SM.

Interventions from Speech and Language

- Initial observation/discussion
- Work with school staff, offer parent advice and provide training
- Decide what is the most appropriate interventions.
- Assess highlight any other speech and language difficulties (phonological processes, stuttering, etc.)
- Implement non-verbal communication system.

SLPs: Addressing the Issue of Speech Anxiety

- Let the child know you understand their difficulty.
- Let the child know they are not alone.
- Impress on the child that the most important thing is for them to be happy.
- Explain how you are going to help.
- Indicate they do not need to speak nor are they expected to speak when with you.
  - This immediately lessen the anxiety

SM-STAGES of Social Communication Comfort SCALE

- SM-SCCS illustrates communication is broken down into RESPONDING and INITIATING and the FOUR different stages of communication.
  - Stage 0- Noncommunicative
  - Stage1- Nonverbal responding (1a); Nonverbal initiating (1b)
  - Stage 2- Transitional Stage and
  - Stage 3- Verbal responding (3a); Verbal initiating (3b)
- Children with SM demonstrate DIFFERENT levels of anxiety and are therefore in DIFFERENT stages of *social* communication comfort with different people within different settings.

Source: SMART-CENTER and Dr. E Shipon-Blum©.

Examples of SM-SCCS Stages

- The child who speaks normally (responds and initiates) with his/her friend at home or out of school (Stage 3) but can only communicate nonverbally (nodding, pointing) in response to her friends in school (Stage 1a and possibly 1B)
- The child who can respond to his friends via 'quiet talking' to friends in class (Stage 3a) but is mute, expressionless & cannot even respond when their teacher asks a question (Stage 0) in any size group setting
- The child who can whisper to a friend during recess (stage 2) and/or make sounds to his teacher (stage 2) via one on one interaction, but remains nonverbal (stage 1) with this same friend and teacher during class instruction.

Management: Non-Verbal Communication Systems

- In order for SM children to participate in school, social interactions, etc., the implementation of a non-verbal communication system is imperative.
- Definition: Non-verbal communication is a system of expressive features and pictures often used together to aid the expression of needs, wants and understanding.
- Speech-language pathologist refer to devices that aid non-verbal communication systems as augmentative and alternative commutation (AAC).
  - PECS (Picture Exchange Communication System)
  - Communication Boards
  - High-tech Augmentative Devices (i.e., Pocket PC, Optimist 3HD, LightWriter, Tango, etc.,)

PECS

- The Picture Exchange Communication System (PECS) was developed in 1987 by Lori Frost, MS, CCC/SLP and Dr. Andrew Bondy.

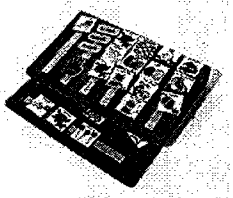
Theoretical Base:

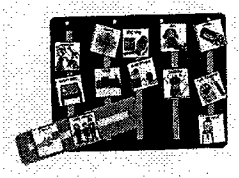
Theory and practice and is derived from the fields of applied behavior analysis and speech/language pathology. Applied behavior PECS is based on the integration analysis is a theory which believes that rewarded behaviors are far more likely to be repeated than those that are ignored.

PECS

- Goals & Objectives:

The primary goal of PECS is to help individuals with communication difficulties to acquire functional communication skills. Using PECS, the student learns to spontaneously initiate communicative exchanges.





PECS

- PECS is comprised of six phases including:
  - *Phase I: The Physical Exchange:* When seeing a highly desired item, the student will pick up a picture of the item, reach towards the communication partner, and release the picture into the partner's hand. * No verbal prompts are used.
  - *Phase II: Expanding Spontaneity:* The student will go to his/her communication book/board, remove a picture, go to the communication partner and release the picture into the partner's hand.
  - *Phase III: Picture Discrimination:* The student will request a desired item by going to their communication board, selecting the appropriate picture from a variety and give the picture to their communication partner.
  - *Phase IV: Sentence Structure:* Students learn to create multi-word phrases, by picking up the "I want" symbol, followed by the desired picture item, putting it on the sentence strip, and giving the sentence strip to the clinician.
  - *Phase V: Responding to "What do you want?":* The student can spontaneously request a variety of items and can answer the question "What do you want?"
  - *Phase VI: Responsive and Spontaneous Commenting:* The student expands communication functions to include commenting, expression of their feelings, likes and dislikes.

PECS

- Intended Beneficiaries
  - While developed for young children with autism, the system is used with children/adults with a wide range of communicative and developmental difficulties.
  - PECS is primarily used with individuals who are nonverbal or use speech with limited effectiveness to assist them in acquiring *functional communication skills.*
- Strengths
  - The exchange is clear, intentional and readily understood.
  - The individual initiates the interaction (reduced need for cueing).
  - The communication is meaningful.
  - Materials are cheap, easy to prepare, and portable.
  - The child has an unlimited number of potential communicative partners; basically, anyone willing to accept a picture or sentence strip.
  - Children are able to generalize communication to a wide circle of people very quickly.

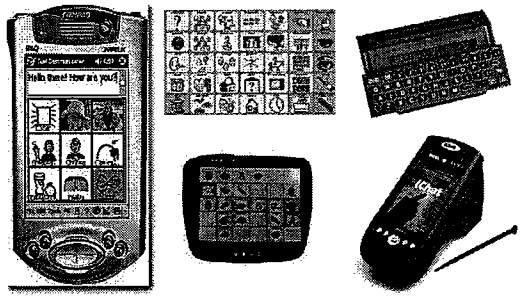
Communication Boards

- Children can easily express themselves with pictures using a communication board. They simply point to the appropriate picture to express themselves.
- Individualized communications boards are created with computer software such as BoardMaker, Overboard, etc.

Communication Boards

- Communication boards should be designed for:
  - Hygiene/Grooming
  - Classroom needs
  - Actions
  - Food/drink
  - Extracurricular activities
  - Friend/family
  - Around the home
- Additionally, SLPs and teachers must work closely to develop specific boards for:
  - Subjects (math, social studies, language arts)
  - Classroom themes
  - Books

High-Tech AAC



SLP Implementing AAC

- SLPs have the key role in evaluating and implementing the use of AAC not only in the therapy environment but in the classroom.
- Remember parents may need training in use of AAC even if the child does speak at home.
- SLPs takes the main responsibility for generalizing the child's non-verbal communication habits to multiple environments.
- SLPs are typically the first person whom establishes speech with the SM child on a 1:1 basis, then SLOWLY introduces the child to range of settings and people using both AAC and verbal communication.

Recap... Role of SLP

- Assessment & Management
  - Evaluate verbal and non verbal communication skills
  - Shape & elicit speech gradually through structured non-verbal program.
  - Build rapport
  - Prepare to elicit verbal communication 1:1
  - Elicit speech
    - Whisper
    - Single word utterances
    - Short phrase
  - Generalizing Speech
    - People
    - Settings

A Non-Verbal Psychological Intervention

Theory: Behaviorist Approach

- Belief system based upon...
  - Behavior can be reinforced
  - Positive reinforcement involves the needs of the individual being satisfied
  - Negative reinforcement involves avoiding the experience of an unpleasant stimulus.

Theory: Integrationist Approach

- Principles involved
  - Intervention involves changing the existing patterns of interaction.
  - Adult/child interaction maintains mutism.
  - Class teacher becomes involved in solving the problem.

Psychological Non-Verbal Intervention

Stages:

1. Exploration of concerns raised.
2. Psychologist meets with relevant stakeholders.
3. Staff given time to comprehend the treatment proposal with reference to their role in non-verbal communications.
4. Psychological intervention contained within classroom. Communication is intact but different.
5. Reinforce the feelings about fear and anxiety.
6. Build rapport via parallel play
7. Once child starts talking the adult responds likewise with no reference to the fact that the child is now talking.

Visualization of Non-Verbal Communication

- Staff members are asked to think what their communications might look like.
- Consider how you might communicate non-verbally with the child when:
  - a) you are shown a piece of work
  - b) explain an instruction to complete a piece of work
  - c) time to go out to play, please put your coat on.

Discussion with Stakeholders

- Psychologist meets with school staff most involved to have a shared understanding of intervention and its implications.
- Psychologist meets with parents.
- Time is given for adults to consider their involvement and the implications.
- A time scale is agreed for treatment and reevaluation.

SM Children in the Classroom

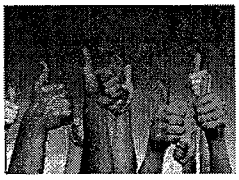
The Teacher's Role

- Classroom teachers play an equal if not the more important role in the treatment of children with SM than therapists.
- Classroom teachers spend markedly more time with the SM child then any other adult in his/her life.

- The collaboration between classroom teachers and therapists is imperative.
- Teachers are the #1 data collector and communication observer.

The Teacher's Role

- The classroom teachers reinforce the chosen non-verbal communication system.
- Teachers should always respond to a child's attempts at communication non-verbally, such as:
  - thumbs up,
  - smiling
  - nodding,
  - shrugging of shoulders



The Teacher's Role

- Teachers must reinforce that it is NOT ok for other children to try to speak for the SM child.
- Classroom peers should be told the SM child will communicate directly with the teacher who is knowledgeable of the non-verbal system.
- Teachers should educate classroom peers that everyone is different; some children communicate with words, other with their hands, and some via pictures.
- When a SM child communicates verbally, the teacher must respond as normally as possible and make no reference to the fact that the child is talking.
  - This applies to other school staff, parents, etc.

Remember: What Not To Do

- It is never acceptable for SM children to feel as if he/she is being waiting on to speak.
  - This causes anxiety!
  - SM children may feel as if they are letting their teacher down.
- Do not make a spectacle towards any verbalization that does occur. Very often, the child with SM will speak to a peer before a teacher.
- It should never be mentioned that the child's voice was heard. Children with SM will often pull away when that approach is taken!

Classroom Accommodations

- Preferential seating- front of the classroom
- Rearrangement of desks
- Individualized work NO group work (initially)
- Accessibility/availability of communication boards
- Allowing written responses as an alternative to spoken responses (initially)
- Instead of "calling out" a SM child in class, walk to his/her desk and speak with them 1:1. This drastically lowers anticipation and anxiety.

KA: A Case Study

Case Study

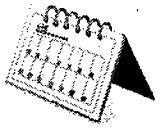
- KA
  - 5 years old English/Spanish female
  - Spoke at home with Mother, Father and sister.
  - Would not speak outside the home <u>OR</u> in the presence of family/friends inside the home.
  - Mom's hypotheses: the absence of a loved babysitter who went back to Central America.

Case Study

- Analysis of audio recordings
  - Phonological processes
  - Decreased MLU
- SM-SCCS Stage 0
  - Frozen, non-communicative
- Collaboration
  - Letter to classroom teacher
  - Required accommodations

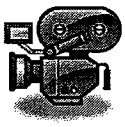
Case Study

Treatment



- Weeks 1- 3: Non-verbal communication
  - Parallel play
    - Coloring, doll house, handwriting work sheets
  - Introduction of communication board in classroom
- Week 4: First word "please"
- Week 6: Two word phrases
- Week 7: KA talks to classroom teacher
- Week 10: Social greetings and sentences to comment/request
  - Letter from teacher stating, "she's a whole new person in school"
- Week 16: Begin to informally address articulation issues
  - Small regression noted because of communicative pressure associated with articulation therapy (i.e., correct utterance & repeat over and over)
- Week 22: Fully engaged in conversation with SLP, teacher, and selected classmates in addition to speaking in public with family.
- Week 26: Discharged from therapy

Kimberly's Story Part I & II



WARNING: Grab a tissue now!

http://www.youtube.com/watch?v=9shoWJgI_9A&feature=related
http://www.youtube.com/watch?v=vEh8PxDzB6k&feature=related

Resources

- *Suggested Reading*
  - Maggie Johnson & Alison Wintgens - The Selective Mutism Resource Manual *(Speechmark)*
  - Johnson and Glassberg -Breaking down the Barriers *(East Kent Community NHS Trust)*
- *Dr. Elisa Shipon- Blum*
  - http://www.selectivemutismcenter.org/

Questions?