

23rd Annual Children's Mental Health Research and Policy Conference
Tampa, FL
March 9, 2010

Validation of the DC:0-3R for Diagnosing Anxiety and Sensory Stimulation Disorders in Young Children



Ilene R. Berson, Ph.D.
Associate Professor, USF Early Childhood Program
Evaluation PI, Sarasota Partnership for Children's Mental Health
María José García-Casellas, MS, MPH
Evaluation Director, Sarasota Partnership for Children's MH



Early Childhood Mental Health

- Experiencing & expressing **emotions**
- Forming close, secure **relationships**
- Exploring the environment & **learning**

- With **primary caregivers**
- In a **family**
- In a **cultural context**
- In a **community**



Developing Diagnostic Classification Systems for Young Children

- "Research data in preschool psychopathology are so scant that the extrapolation of most diagnoses to preschool age is unsupported by any convincing research data." (Postert et al., 2009)
- **Challenges**
 - Preschool children are limited in their ability to self-report due to cognitive immaturity and limited verbalizing skills
 - Compared to other age groups, preschool children represent the group most variable in developmental changes in important domains like emotional regulation, interpersonal interactions, play, control of physical functions, motor skills and language.
 - Thresholds for the frequency of symptomatic behavior in older children are not transferable to preschoolers if these behaviors are developmentally normal in young children.
 - In early child mental health development biological and environmental factors closely interact requiring a dynamic model of mental health development. However, the difficulty of developing reliable measurements of relationship factors remains a serious empirical challenge.



Challenges of Diagnostic Classification Systems

- **DSM IV**
 - Offers only a small number of child psychiatric disorder categories for young children and lack developmentally sensitive adaptations
 - Lacks integrated emphasis on contextual factors influencing developmental psychopathology in young children, i.e., child-parent attachment, parental sensitivity and interactive behavioral patterns
- **Research Diagnostic Criteria—Preschool Age (RDC-PA)**
 - 2001 to 2002 task force from the American Academy of Child and Adolescent Psychiatry (AACAP)
 - Aim: devise complementary and developmentally sensitive modification to the appropriate categories of DSM-IV-TR based on empirical data
 - 17 diagnostic categories of the DSM-IV classification system were deemed relevant to children ages 0-5 years
 - *Agoraphobia without history of panic disorder, social phobia, obsessive compulsive disorder and generalized anxiety disorder have insufficient evidence-based data to warrant a revision but their clinical relevance to young children required their provisional inclusion into RDC-PA without proposal for modification.*



Purpose of the Diagnostic Classification: 0-3R (DC:0-3R)

- To focus on the first 3-4 years
- To provide a developmentally sensitive diagnostic tool for young children that frames diagnosis as an ongoing process and leads to the development of a comprehensive prevention and/or treatment plan
- To consider the impact of relationships and obtain a complete understanding of a young child, in the context of his/her family
- To consider problems/behaviors not captured by other classification systems
- To complement other systems (e.g., DSM, ICD)



The 5 Axes of the DSM-IV and DC: 0-3R

DSM-IV

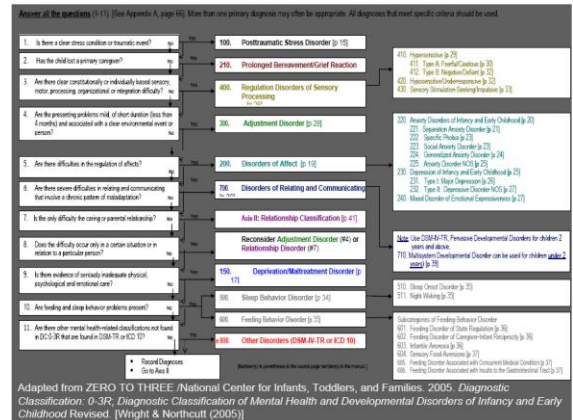
- **AXIS I:**
 - Clinical disorders
- **AXIS II:**
 - Personality disorders
 - Mental retardation
- **AXIS III:**
 - General medical conditions
- **AXIS IV:**
 - Psychosocial problems
- **AXIS V:**
 - Global assessment of functioning

DC:0-3R

- **AXIS I:**
 - Clinical disorders
- **AXIS II:**
 - Relationship classification
- **AXIS III:**
 - Medical & developmental disorders and conditions
- **AXIS IV:**
 - Psychosocial stressors
- **AXIS V:**
 - Emotional and social functioning

Axis I: Clinical Disorders

- 100 Posttraumatic Stress Disorder
- 150 Deprivation / Maltreatment Disorder
- 200 Disorders of Affect
- 300 Adjustment Disorder
- 400 Regulation Disorders of Sensory Processing
- 500 Sleep Behavior Disorder
- 600 Feeding Behavior Disorder
- 700 Disorders of Relating & Communicating
- 800 Other Disorders (DSM or ICD)



Diagnostic Classification: 0-3R

AXIS I: 220. ANXIETY DISORDERS



Axis 1: 220. Anxiety Disorders

- Occurs when a child experiences excessive worry, concern, or fear while involved in developmentally appropriate tasks, ordinary interactions, and everyday routines.
- Characterized by worry, concern, or fear that is exaggerated, pervasive, disproportionate to the situation at hand, and inappropriate for the child's age or developmental level.
- Applicable for children ages 2 and older (for children under age 2, Anxiety Disorder NOS is recommended)



Axis I: 221. Separation Anxiety Disorder

- Separation from the caregiver causes the child excessive anxiety and distress that has intensity and duration beyond that of typical development and lasts more than one month.
- May refuse to be held or comforted by a substitute caregiver
- Preoccupied with fears that their primary caregiver will have an accident or become sick
- Fear that they might have an accident or illness while separated from their primary caregiver
- Worry about getting lost or kidnapped
- Physical complaints such as headaches, stomachaches, nausea, or vomiting when separation from the caregiver occurs or is anticipated



Axis I: 222. Specific Phobia

- Children experience excessive fear when they are in the presence of (or anticipating) specific objects or exposed to certain situations
- The fear must last at least four months.
- Exposure to the object or situation will cause an immediate reaction by the child
 - ◆ usually crying, a tantrum, becoming immobile, or becoming "clingy."
- The child will attempt to severely limit their own activities and their family's activities to avoid possible exposure to the feared object or situation.



Axis I: 223. Social Anxiety Disorder (Social Phobia)

- A child will have a persistent fear of social or performance situations that include people unfamiliar to the child or the child will be in a situation where they are under the scrutiny of others (i.e., play dates, large family gatherings, birthday parties, religious ceremonies, and/or collective sharing times at childcare or preschool)
- Fear must last at least four months.
- Reactions include: crying, tantrums, becoming immobile, becoming clingy, or strongly resisting being involved in social situations.
- The child will avoid the feared social situation and may have anticipatory anxiety that interferes with their normal functioning and development.



Axis I: 224. Generalized Anxiety Disorder

- Children experience excessive anxiety and worry more days than not for a period of more than six months.
- Difficulty concentrating and/or difficulty falling or staying asleep
- Appear on edge or irritable
- Emotional instability
- Anxiety and worry interferes significantly with functioning and/or development.



Axis I: 225. Anxiety Disorder NOS (Not Otherwise Specified)

- Although not often used, this category may be used when a child exhibits some symptoms of an anxiety disorder but, taken together, the symptoms do not fulfill the diagnostic criteria of a specific anxiety disorder.
- Symptoms may include: uncontrollable crying or screaming, agitation and/or irritability, sleeping and/or eating disturbances, separation distress, or social anxiety.
- Caregivers should be careful to notice if the onset of the symptoms occurred after the child endured a trauma; in that case, the child may be at risk for posttraumatic stress disorder.



DC: 0-3 R Diagnosis		ICD-9-CM Diagnosis	
220	Anxiety Disorders of Infancy and Early Childhood		
221	Separation Anxiety Disorder	309.21	Separation anxiety disorder
222	Specific Phobia	300.29	Other isolated or specific phobias Acrophobia, animal phobias, claustrophobia, or fear of crowds
223	Social Anxiety Disorder (Social Phobia)	300.23	Social phobia Fear of eating in public, speaking in public, washing in public
224	Generalized Anxiety Disorder	300.02	Generalized anxiety disorder
225	Anxiety Disorder NOS	300.00	Anxiety state, unspecified

Diagnostic Classification: 0-3R

AXIS I: 400. REGULATION DISORDERS OF SENSORY PROCESSING



Axis I: 400. Regulation Disorders of Sensory Processing

- Difficulties in regulating emotions/behaviors in response to sensory stimulation, leading to impairment in development and functioning
- Motor difficulties
- Behavior patterns exhibited across settings and within multiple relationships



Axis I: 400. Regulation Disorders of Sensory Processing

- Requires presence of the following:
 - Sensory processing difficulties
 - Motor Difficulties
 - Specific Behavioral Pattern
- Three types:
 - 410. Hypersensitive
 - 420. Hyposensitive/ under-reactive
 - 430. Sensory stimulation-seeking/



Axis I: 430. RDSP Sensory Stimulation-Seeking/Impulsive

- Actively seeking high intensity, frequent input to satisfy sensory needs and to be engaged. Craving high-intensity stimuli
- **Sensory Reactivity Patterns:**
 - Under-reactivity to touch, sound, smell, taste, movement, proprioception



Axis I: 430. RDSP Sensory Stimulation-Seeking/Impulsive

- **Motor Patterns:**
 - High need for motor discharge
 - Diffuse impulsivity
 - Accident prone without clumsiness
- **Behavioral Patterns:**
 - High activity levels, high-risk behaviors
 - Seeks constant contact with people/objects
 - Seeks stimulation through deep pressure
 - Recklessness; disorganized behavior as a consequence of sensory stimulation



DC: 0-3 R Diagnosis		ICD-9-CM Diagnosis	
430	Sensory Stimulation-Seeking/Impulsive	314.01	Attention deficit disorder with hyperactivity <ul style="list-style-type: none"> ▪ Combined type ▪ Overactivity NOS ▪ Predominantly hyperactive/impulsive type ▪ Simple disturbance of attention with overactivity
		314.1	Hyperkinesis with developmental delay <ul style="list-style-type: none"> ▪ Developmental disorder of hyperkinesis
		314.9	Unspecified hyperkinetic syndrome <ul style="list-style-type: none"> ▪ Hyperkinetic reaction of childhood or adolescence NOS ▪ Hyperkinetic syndrome NOS
		313.9	Unspecified emotional disturbance of childhood or adolescence

DC: 0-3R Axis I (n = 97)	n(%)
Adjustment Disorder	32(32.9)
Anxiety Disorders	14(14.4)
Sensory Stimulation-Seeking/Impulsive	13(13.4)
Hypersensitive	12(12.4)
Regulation Disorders of Sensory Processing	7(7.4)
Mixed Disorders of Emotional Expressiveness	4(4.1)
Sleep Disorders	4(4.1)
Other Disorders	3(3.1)
PTSD	2(2.1)
Disorders of Relating and Communicating	1(1.0)
Deprivation/Maltreatment Disorder	3(3.1)
Prolonged Bereavement/Grief Reaction	1(1.0)
Hyposensitive/Underresponsive	1(1.0)

Demographics	Anxiety	Sensory Stimulation-Seeking/Impulsive
Gender		
Male	50%	86%
Female	50%	14%
Average Age at Intake	4.7 years	4.3 years
Age Group		
Girls	3.7-5.8 years	2.8 years
Boys	4.5-4.7 years	2.8-5.3 years
Race		
Black or African American	25%	
White	75%	86%
Multi-Racial		14%
Hispanic/Latino Background	50%	29%



Average Scores of Child Behavioral and Emotional Problems for Children Ages 1½ to 5 at Intake

Measure	Borderline Clinical	Clinical	CBCL 1½-5 Average Syndrome Scale Score
Anxiety			
Anxious/Depressed T-Score	25%	25%	64 (Range 59-79)
Attention Problems T-Score	0%	0%	58 (Range 50-60)
Sensory Stimulation-Seeking/Impulsive			
Anxious/Depressed T-Score	14%	14%	62 (Range 50-74)
Attention Problems T-Score	57%	29%	68 (Range 57-73)

For the syndrome scales, T scores less than 67 are considered in the normal range, T scores ranging from 67-70 are considered to be borderline clinical, and T scores above 70 are in the clinical range.



Looking Toward the Future



Ilene R. Berson, Ph.D.
Associate Professor
Coordinator, Early Childhood Doctoral Program
Department of Childhood Education & Literacy Studies
University of South Florida
4202 E. Fowler Ave., EDU 202
Tampa, Florida 33620
iberson@usf.edu