

RESEARCH DIAGNOSTIC CRITERIA – PRESCHOOL AGE (RDC-PA)

August 17, 2002

NOTE: The RDC-PA were developed primarily for use in research studies. Clinicians, other types of professionals, or parents who reference these criteria must be aware of that limitation.

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The participants wish to thank the AACAP Work Group on Research for providing the large proportion of funding for meetings. We also thank the American Psychiatric Association for supporting the organizational phase. Both meetings were held at Duke University Medical Center in Durham, NC.

TABLE OF CONTENTS

Introduction	1
Disorders Usually First Diagnosed in Infancy, Childhood, or Adolescence	
Attention-Deficit and Disruptive Behavior Disorders	
Attention-Deficit/Hyperactivity Disorder	3
Conduct Disorder	3
Oppositional Defiant Disorder	4
Feeding and Eating Disorders of Infancy or Early Childhood	
Feeding Disorder of State Regulation	5
Feeding Disorder of Caregiver-Infant Reciprocity	6
Infantile Anorexia	6
Sensory Food Aversions	7
Feeding Disorder Associated with Concurrent Medical Condition	7
Post-traumatic Feeding Disorder	8
Other Disorders of Infancy, Childhood, or Adolescence	
Separation Anxiety Disorder	8
Reactive Attachment Disorder	9
Mood Disorders	
Major Depressive Disorder	10
Anxiety Disorders	
Posttraumatic Stress Disorder	11
Sleep Disorders	
Sleep Onset Protodyssomnia	13
Night Waking Protodyssomnia	13
Appendix A	
Criteria Set Provided for Further Study	
Disorder of Inhibition/Avoidance	14

INTRODUCTION

The Research Diagnostic Criteria-Preschool Age (RDC-PA) is designed to fill a gap in our knowledge of how to reliably diagnose psychiatric disorders in children from 0 through 5 years of age. There is no validated diagnostic instrument for children under 7 years of age. Instruments known to be in development will not address children below 2 years of age. The Diagnostic Classification:0-3, published 8 years ago, moved the field forward but often lacked operationalized criteria that are needed for reliable research investigations. **The purpose of this effort is to create clearly defined criteria in order to facilitate research on the diagnostic validity of psychiatric disorders in preschool-age children.** Our purpose was to advance the field of preschool diagnoses by creating criteria that were clear, developmentally appropriate, and could be scientifically tested. This version of the RDC-PA is, of course, not considered the definitive version. We hope that future versions will be revised based on empirical data generated by research studies.

Over the course of the two intensive 2-day meetings funded by the AACAP Work Group on Research the participants reviewed 17 disorders from the DSM-IV. Two of these disorders were replaced by expanded classifications: Feeding Disorder of Infancy or Early Childhood was replaced by 6 proposed disorders; and Primary Insomnia was replaced by 2 proposed disorders. Thus, a total of 23 disorders are addressed in this draft. However, four of these disorders (Agoraphobia Without History of Panic Disorder, Social Phobia, Obsessive-Compulsive Disorder, and Generalized Anxiety Disorder) were not felt to have been completely addressed due to a lack of systematic research in young children. The majority of DSM-IV criteria were not modified. There were 87 criteria in the 13 DSM-IV disorders that were thoroughly reviewed. Fifty-one percent (n=44) of the symptoms were untouched. Another 34% (n=30) were modified with the original meaning left intact. Only 15% (n=13) were deleted on the grounds of being developmentally inappropriate. Twenty-two novel criteria were added, mostly in the expanded feeding and sleep disorders. Ten experimental criteria were listed as candidates for further study but not included in the criteria for diagnoses.

The sources of information for our deliberations were the DSM-IV, the Diagnostic Classification:0-3, published and unpublished empirical research data, and the clinical experience of the participants. Changes to the DSM-IV nomenclature were made by placing the most weight on the growing body of empirical studies in this age group. Decisions were also informed by the collective clinical and developmental expertise of the group. Decisions were based on group consensus.

Guidelines were established at the outset that have guided the development of these criteria:

1. STICK CLOSELY TO THE DSM-IV.

Existing DSM-IV criteria were not to be modified unless empirical data existed to justify a change for this age group and/or there was a consensus that a symptom was not developmentally appropriate. This included deliberations about the wording of symptoms, duration, age of onset, and the number of symptoms required. Data ruled over expert opinion. In the absence of empirical data, symptoms were modified based on the clinical and developmental expertise of the participants. While we recognized that there exist theoretical debates about categorical versus dimensional assessment in young children and about the complex etiology of disturbances in children, this effort was narrowly focused from the beginning on improving the reliability of preschool age diagnoses to be on par with the level established in older children and adults. As such, our goal was to work within the DSM-IV framework and resist the temptation to reinvent it. This strategy has the advantage of potentially allowing age-related comparisons with the vast literatures on diagnoses in older age groups. Experimental nosological schemes based on different theories may then have a stronger base from which to branch.

2. DO NOT INFER.

The internal thoughts and feelings of young children often cannot be known because of their limited cognitive and verbal capacities. In order to maximize the accuracy and reliability (i.e., validity) of diagnoses, a rule was established that if a child is not able to report on internal thoughts and/or feelings due to limited cognitive and/or verbal capacities, then these cannot be inferred by “guessing”. This means that some symptoms that are easily investigated in older children and adults simply cannot be rated in young children. Or, some symptoms may need to be modified so that behaviors, not internal states, are rated.

3. DO NOT INCLUDE PARENTAL BEHAVIORS THAT CAUSE SYMPTOMS IN CHILDREN.

In sticking with the DSM-IV philosophy, our goal was to describe symptoms in children phenomenologically rather than etiologically. The caregiving context may be tremendously important for children and adolescents, and it may be uniquely salient for infants and young children. However,

identifying parental behaviors as etiological forces in operationalized diagnostic criteria is an enormously complex challenge. This stance may be modified in the future if empirical data emerges that provides a clear and convincing case for including parental behaviors in a classification scheme.

4. MAINTAIN A FIREWALL BETWEEN SYMPTOMS AND DISABILITY.

The definition of almost every psychiatric disorder includes a mandatory criterion of impairment in functioning, or disability, caused by the symptoms. However, symptoms do not necessarily equate with disability and disability does not always neatly correlate with symptom severity. An important measurement issue that we faced was wording of the criteria to maintain this distinction (the firewall). Consultant Adrian Angold was extremely helpful in this area based on his work with older children. When assessing any age group it is tempting to fall back on the existence of disability as evidence that a behavior is really a psychiatric symptom. When dealing with preschool children, where the distinction between symptomatic behaviors and normal behavioral perturbations is blurred (i.e., temper tantrums, emotional lability, attention span, activity level, sleep patterns, eating preferences, fears, phobias, and quality of social interaction), it is even more tempting to fall back on the “disability test.” Therefore, wording in the criteria was avoided that made any linkage between symptoms and disability. The disability needed to meet the threshold for a disorder is to be met in one overall disability criterion for each disorder.

5. MAINTAIN A FIREWALL BETWEEN SYMPTOMS AND ASSESSMENT STRATEGIES.

Throughout the course of deliberations it was often tempting to digress into how these symptoms should be assessed. What are the thresholds of intensity and frequency when behaviors become symptoms? How should the clinician ask the question? In what settings should the behaviors be observed? How reliable is caregiver report? These are all assessment issues that are enormously important but separate from our goal of creating operationalized criteria.

Age limits were included in a variety of disorders. Age limits were intended to reflect children’s developmental, or mental, age, rather than simply chronological age. When using these criteria for research, assessment should be anchored within the developmental capacity of children rather than chronological age (and tracked for analysis appropriately).

Important work remains to be done in the future. First, two experimental categories have not been addressed by the group - relationship disorders and regulatory disorders. Both of these were addressed in a preliminary way in the Diagnostic Classification:0-3 and both could have an enormous impact on how some children are diagnosed and treated. Preliminary data collection is needed on these experimental categories before further work can proceed. Second, a crucial issue is the generic definition of disability/impairment related to a disorder. There must be a level of disability, or functional impairment, for a collection of symptoms to reach the threshold of being a disorder, in general. The spheres of functioning that are assessed in older children and adults include performance in school and at work, and relationships with family and peers. The spheres of functioning for preschool children are much more restricted. Plus, the extent to which caregivers adjust their lives to accommodate problematic children is a unique issue of disability that must be considered. Ultimately, each disorder will contain a mandatory criterion for disability, which is currently absent from this draft. Third, there is almost no data on the earliest age of onset for these disorders. When the DSM-IV includes an age of onset for a disorder it is for the purpose of ensuring that a disorder had developed before a certain age. We were faced with the opposite question. What was the earliest age for which it was impossible for each disorder to appear? With a few exceptions (feeding disorders, reactive attachment disorder, and sleep disorders) we opted to not set guidelines for this because of the lack of data regarding age of onset. These are all important issues for future task forces or individual researchers.

This is a working draft. Changes in future versions ought to be made based on empirical data collection. Our permission is granted to freely reproduce any portion of this document.

The diagnostic criteria are listed below in the format numbering system of the DSM-IV. If a symptom criterion was not modified from the DSM-IV wording, it was not restated here for visual clarity to highlight the changes. The overall functional impairment criterion for each disorder was not addressed and is not listed here. Exclusionary criteria were not listed unless they were modified. The reader is referred to the DSM-IV for all of these unmodified items that are not listed here.

Deviations from the DSM-IV wording are in *italics*.

Boxed messages are not part of the criteria.

DISORDERS USUALLY FIRST DIAGNOSED IN INFANCY, CHILDHOOD, OR ADOLESCENCE

ATTENTION-DEFICIT AND DISRUPTIVE BEHAVIOR DISORDERS

The determination of clinical significance of the symptoms for the attention-deficit and disruptive behavior disorders during the preschool period is challenging because typical variation in these domains is quite broad. Empirical data and clinical experience suggest that these proposed criteria are most applicable to 3-5 year old children, whereas information is more sparse about how well they apply to children younger than 3 years of age. The DSM-IV algorithms for the number of symptoms needed to meet the diagnoses are listed as a reference point but we emphasize that further research is needed to confidently establish the algorithm(s) for all ages.

Attention-Deficit/Hyperactivity Disorder

Diagnostic Features

This disorder is characterized by persistent and developmentally inappropriate short attention span and/or impulsivity and hyperactivity for a period of at least 6 months. A 6-month duration requirement may represent an inconveniently long time for confirming a diagnosis relative to the age of this population. A shorter duration may make more practical sense for research protocols (and clinical service delivery). How much this requirement ought to be shortened, if at all, awaits empirical data gathering. It should be noted that 3 DSM-IV inattention items (A1a “careless mistakes”; A1g “loses things”; and A1i “forgetful”), 1 DSM-IV hyperactivity item (A2e “driven by a motor”), and 1 DSM-IV impulsivity item (A2g “blurts out answers”) were considered by the task force to be developmentally inappropriate items. However, these items were not dropped because empirical studies have shown that preschool children can be diagnosed with these criteria and this algorithm, and no symptom utility studies have been conducted that could support their removal.

Diagnostic criteria for Attention-Deficit/Hyperactivity Disorder

No change from DSM-IV.

Experimental Symptoms:

1. Modified A1d. Often does not follow through on instructions and fails to finish *tasks or chores* (not due to oppositional behavior or failure to understand instructions).
2. Modified A1f. Often avoids, dislikes, or is reluctant to engage in tasks that require sustained mental effort (*e.g., being read to, engaging in a craft activity*).
3. Modified A2b. Often leaves seat *in situations* in which remaining seated is expected.
4. Modified A2c. Often runs about or climbs excessively in situations in which it is inappropriate (*e.g., dangerous situations*).
5. *An absence of or very limited ability to have sustained periods of calm, well-controlled activity.*

Conduct Disorder

Diagnostic Features

Conduct disorder is characterized by a repetitive and persistent pattern of behavior that violates norms and rules and the basic rights of others. The diagnosis of CD rests on the assumption that a child knowingly violates rules, a supposition that requires both knowledge of the rules and intent to break them. Most preschool children are generally able to understand the concept of rules and can control their behavior accordingly.

The duration requirement was shortened from 12 months to 6 months. This decision was made because 12 months is a disproportionate amount of a child’s life span in this population relative to older children.

Because preschoolers are not skilled in verbal negotiation, they may make threats (e.g., I won't be your friend) as a means of resolving disputes. Bullying and threatening should be endorsed positively only when threats and intimidation are persistent patterns of behavior and involve threats of aggression or cruelty (e.g., social ostracism)

Infrequent, reactive mild aggression towards peers or objects is common during this period. Atypical aggression is more frequent and may be severe (e.g., kicking, biting, and choking). The effect of physical constraints on the manifestation of symptoms during this period must be considered. For example, most preschool children are not likely to have access to firearms or knives, but may use rocks or sticks to hurt someone.

Six of the 15 DSM-IV symptoms were modified and 5 symptoms were not. Four DSM-IV symptoms were deleted because they were inappropriate in relation to the developmental capacities of this age group (A10 "broken into someone else's house, building, or car"; A13 "stays out at night"; A14 "run away"; and A15 "truant"). Since only 1 new symptom was added, this makes fewer possible symptoms available for children to meet the diagnosis.

Diagnostic criteria for Conduct Disorder

A. A repetitive and persistent pattern of behavior in which the basic rights of others or major age-appropriate societal norms or rules are violated, as manifested by the presence of three (or more) of the following criteria in the *past 6 months*.

Aggression to people and animals

- (1) No change from DSM-IV.
- (2) *Frequently initiates physically aggressive behavior towards others.*
- (3) Has used an *object* that can cause serious physical harm to others *in an aggressive act on more than one occasion.*
- (4) No change from DSM-IV.
- (5) No change from DSM-IV.
- (6) *Has bullied or threatened someone in order to take something that doesn't belong to them.*
- (7) *Has forced someone into inappropriate sexual activity (e.g., forcing another child to remove his/her clothes or touching or fondling another child's genitals).*
- (New) *Often reacts to frustration with aggressive behavior towards others.*

Destruction of property

- (8) Has *repeatedly* engaged in *destructive* fire setting.
- (9) No change from DSM-IV.

Deceitfulness or theft

- (10) No change from DSM-IV.
- (11) Has stolen items of *any value on more than one occasion (do not include taking food from in the home).*

Experimental symptom:

- (1) *Is often verbally aggressive (e.g., swearing or threats of violence) towards adults.*

Oppositional Defiant Disorder

Diagnostic Features

This disorder is characterized by a pattern of negativistic, hostile, and defiant behavior. The DSM-IV states that, since oppositional behavior is common during the preschool period, the diagnosis of ODD should be made with caution. As with older children, clinically significant oppositional defiant behavior in preschool children can be distinguished from typical behaviors in terms of the persistence, pervasiveness, severity and extent to which the behavior interferes with normative developmental functioning. For example, periodic tantruming in response to limit setting from which the child recovers relatively quickly is typical during this period. Atypical tantrums often occur multiple times per day, are intense and prolonged, and are elicited by both positive and negative social situations.

Diagnostic criteria for Oppositional Defiant Disorder

No change from DSM-IV.

Experimental symptom:

- (1) *Has significant difficulty recovering from emotional upset.*

FEEDING AND EATING DISORDERS OF INFANCY OR EARLY CHILDHOOD

The DSM-IV section titled Feeding and Eating Disorders of Infancy or Early Childhood contains 3 disorders – Pica, Rumination Disorder, and Feeding Disorder of Infancy or Early Childhood. Pica and Rumination Disorder have been well described in DSM-IV for very young children and no modifications were felt necessary. We suggest replacing Feeding Disorder of Infancy or Early Childhood with 6 proposed disorders. Each of these feeding disorders presents with different clinical symptoms, and requires different interventions.

The 6 proposed disorders all involve a clinical judgement about **growth deficiency**. The following definitions provide guidelines for determining when an individual meets the threshold for inadequate weight gain. These definitions are provided only as suggested guidelines for the clinician since it is unreasonable to specify a single standard for minimally normal weight that applies to all individuals of a given age and height. **Growth deficiency may be defined in the following ways:**

1. **Acute malnutrition** according to Waterlow criteria (1977) reflects current or “acute” nutritional status. The reference “normal” is 50th percentile weight for height (National Center for Health Statistics: Hamill et al., 1979). Current weight divided by this number gives the percent of ideal body weight. Mild, moderate and severe acute malnutrition correspond with 80-89%, 70-79%, and less than 70% of ideal body weight respectively.
2. **Chronic malnutrition** according to Waterlow criteria defines stunting of linear growth. The child’s actual height is divided by the height that corresponds to the 50% NCHS percentile for age of the child or “ideal height”. Mild, moderate, and severe chronic malnutrition correspond with 90-95%, 85-89%, and less than 85% of ideal height respectively.
3. **Additional parameters of faltering growth:**
 - A. The z-score helps characterize anthropometric data of children below the 5th percentile and allows nutritional status to be expressed across different indicators. The mean is equal to zero, and the 5th percentile is equal to -1.64 . A z-score of less than -1.64 suggests faltering growth.
 - B. The child’s weight has deviated two major percentiles in a 2- to 6-month period. This measure is particularly helpful for children who start out tall, grow at the 50th or more percentile for weight and height, and then show a downward bend in their growth pattern.

Feeding Disorder Of State Regulation

Diagnostic Features

Infants with this disorder typically exhibit state regulation problems that interfere with their ability to feed effectively. For example, such infants have difficulties reaching and maintaining a state of alert calmness, and are too sleepy, too excited or distressed to feed. Young infants with immature central nervous systems or medical illnesses, such as cardiac or pulmonary disease, may be at greatest risk for this disorder. Such infants may tire quickly and terminate feedings without taking adequate amounts of milk to grow. Some mothers can compensate for their infant’s poor state regulation by helping their infant’s reach and maintain calm, alert arousal states via reducing external stimuli. However, mothers who are depressed, anxious, or overwhelmed with stressors may have difficulty dealing with the infant’s irritability or unresponsiveness. As such, they may inadvertently intensify the infant’s state-regulation difficulties and feeding difficulties.

Diagnostic criteria for Feeding Disorder of State Regulation

A. Has difficulty reaching and maintaining a calm state of alertness for feeding; is either too sleepy or too agitated and/or distressed to feed.

- B. The feeding difficulties start in the newborn period.*
- C. Shows significant failure to gain weight or exhibits weight loss.*

Feeding Disorder Of Caregiver-Infant Reciprocity

Diagnostic Features

Most infants with this disorder are detected when they become acutely ill and require emergency treatment. The infants are weak, feed poorly, and avoid eye contact. When picked up, they scissor their legs and hold up their arms in a surrender posture to balance their heads, which appear too heavy for their weak bodies. When held, they do not cuddle like healthy well-fed infants but draw up their legs or appear hypotonic.

Frequently, the mothers are distrustful and difficult to engage, elusive and avoidant of any contact with professionals. When questioned about their infants' feeding and growth, they seem unaware that there is a problem, and may report that their infants sleep for long periods of time without requiring feeding. Some mothers may admit to propping bottles for feeding and to spending minimal time with their infants. However, the pattern of these infants tends to improve if given consistent attention by a caregiver who engages with the infant during feeding and play.

Diagnostic criteria for Feeding Disorder of Reciprocity

- A. Shows a pattern of lack of developmentally appropriate signs of social reciprocity (e.g., visual engagement, smiling, or babbling) with the primary caregiver during feeding.*
- B. Shows significant growth deficiency*
- C. The growth deficiency and lack of relatedness are not due solely to a physical disorder, or a pervasive developmental disorder.*

Infantile Anorexia

Diagnostic Features

Infants with this feeding disorder are usually referred for a psychiatric evaluation due to their food refusal and growth failure. The infants' food refusal usually becomes of concern between six months and three years, most commonly between 9 and 18 months of age, during the transition to spoon- and self-feeding. However, some parents report that even during the first few months of life these infants were distracted by external stimuli and became disinterested in feeding. They consumed only small amounts of milk and had to be fed frequently. Often, by the end of the first year of life, when infants are transitioned to spoon- and self-feeding, these infants take only a few bites of food, and then refuse to eat any more. They may refuse to open their mouths for feeding, throw food and feeding utensils, and frequently try to climb out of the high chair or leave the table to play. Most parents report that these infants hardly shown any signals of hunger and seem more interested in exploring and playing than eating. Usually, the parents become increasingly concerned about the infants' poor food intake and they may try to regulate the infants' food intake by coaxing, distracting, offering different food, feeding during play, feeding at night, threatening, and even force-feeding to get their infants to eat more. However, the parents report that these methods worked only temporarily, if at all, and that they were unable to increase their infants' food intake.

Initially, the infants fail to gain adequate weight. After several weeks or months of poor food intake, their linear growth slows down and they develop chronic malnutrition. In most cases, their heads continue to grow at a normal rate. As the children grow older, their bodies appear proportionate, small and thin, but have relatively larger heads. However, once the children begin to eat adequately, they grow better and have the potential for catch-up growth until the end of puberty, when their growth rate declines.

Diagnostic criteria for Infantile Anorexia

- A. Refusal to eat adequate amounts of food for at least one month.*
- B. Onset of the food refusal before 3 years of age.*
- C. Does not communicate hunger signals, lacks interest in food, but shows strong interest in exploration and/or interaction with caregiver.*
- D. Shows significant growth deficiency.*
- E. The food refusal did not follow a traumatic event.*

F. The food refusal is not due to an underlying medical illness.

Sensory Food Aversions

Diagnostic Features

Sensory food aversions are common and occur along a spectrum of severity. Some children refuse to eat only a few types of food and the parents accommodate the child's food preferences. Others may refuse most foods and cause serious parental concern. The diagnosis of a feeding disorder should only be made if the food selectivity results in nutritional deficiencies, and/or has led to oral motor delay.

Within this disorder, food refusal is related to the texture, taste, or smell of particular foods. When specific foods are placed in the infants' mouths, the infants' aversive reactions range from grimacing to gagging, vomiting, or spitting out the food. Sensory aversions become apparent when infants are introduced to baby food or table food with a variety of tastes and textures. After an initial aversive reaction, the infants usually refuse to continue eating that particular food, and they become distressed if forced to do so. Some infants generalize their reluctance to eat one food to other foods that look or smell similarly (e.g. an aversion to green beans may generalize to all green vegetables). Parents frequently report that these children are reluctant to eat new foods. Some children may even refuse to eat any food that has touched another food on the plate, while others will only eat food prepared by a specific restaurant or company. Older children with sensory food aversions may experience social anxiety when their peers discover that they eat only certain foods, and some older children may avoid social situations that include eating.

If infants refuse many foods or whole food groups (e.g. vegetables and fruits), their limited diet may lead to specific nutritional deficiencies (e.g. protein, vitamins, zinc, iron). If infants reject foods that require significant chewing (e.g. meats, hard vegetables or fruits), they will fall behind in their oral motor development due to lack of experience with chewing. Frequently, the infants' refusal to eat a variety of foods creates parental concern and conflict within their families at mealtime.

In addition to their sensitivity to certain foods, many of these children experience hypersensitivities in other sensory areas as well. For example, parents frequently report that these infants become distressed when asked to walk on sand or grass, and that they do not like to wear socks, certain types of fabric, or labels on clothing. Many of these children are also hypersensitive to odors and sounds.

Diagnostic criteria for Sensory Food Aversions

- A. Consistently refuses to eat specific foods with specific tastes, textures, and/or smells.*
- B. Onset of the food refusal during the introduction of a different type of food (e.g. may drink one type of milk but refuse another; may eat carrots, but refuse green beans; may drink milk but refuse baby food).*
- C. Eats without difficulty when offered preferred foods.*
- D. The food refusal causes specific nutritional deficiencies or delay of oral motor development.*

Feeding Disorder Associated with Concurrent Medical Condition

Diagnostic Features

Infants with medical conditions that cause pain or respiratory distress may develop feeding problems. Some medical conditions are not readily diagnosed and food refusal may be the leading symptom. For example, food allergies can be difficult to diagnose in this young age group and silent reflux is often overlooked by pediatricians because the infant does not vomit, the leading symptom of reflux. Infants with gastro-esophageal reflux can typically drink one to two ounces of milk before reflux is activated. However, once reflux occurs, some infants show signs of discomfort (e.g. wiggling, arching, crying) and push the bottle away. These infants are usually well engaged with their caretakers and willing to feed, but they refuse to continue feeding when they appear to experience pain or discomfort. Some infants can calm themselves and resume feeding until they experience a new episode of pain. However, some infants cry in distress and become increasingly agitated while their caretakers try to continue feeding. Some infants with respiratory distress may feed for a while and take a few ounces until they tire out and stop feeding. In general, these infants consume inadequate amounts of food, fail to gain weight, or lose weight. Although medical management frequently improves the infants' feeding difficulties, the feeding disorder does not completely resolve with treatment of the medical condition.

Diagnostic criteria for Feeding Disorder Associated with Concurrent Medical Condition

- A. *Readily initiates feeding, but shows distress over the course of feeding and refuses to continue feeding.*
- B. *Has concurrent medical condition that is believed to cause the distress.*
- C. *Medical management improves but does not fully alleviate the feeding problem.*
- D. *Failed to gain adequate weight or may even lose weight.*

Post-traumatic Feeding Disorder

Diagnostic Features

Parents may report that their infants refused to eat any solid foods after an incident of choking, or one or more episodes of severe gagging. Some parents may have observed that the food refusal followed intubation, the insertion of nasogastric feeding tubes, or major surgery requiring vigorous oropharyngeal suctioning. Depending on the mode of feeding that the infants appear to associate with the traumatic event(s), some may refuse to eat solids, but will continue to drink from the bottle, whereas others may refuse to drink from the bottle, but are willing to eat solids (e.g. an infant who choked on a cheerio may refuse to eat solids, but drinks from the bottle; and an infant who experienced reflux while drinking from the bottle may refuse the bottle, but will continue to eat from the spoon). Reminders of the traumatic event(s), e.g. a bottle or a highchair, may cause intense distress. Some infants already become fearful and distressed when they are positioned for feedings and presented with feeding utensils and food. They resist being fed by crying, arching, and refusing to open their mouths. If food is placed in their mouths, they intensely resist swallowing any food. They may gag or vomit, let the food drop out, actively spit out food, or store food in their cheeks and spit it out later. The fear of eating seems to override any awareness of hunger, and infants who refuse all food, liquids and solids, require acute intervention due to dehydration and starvation.

Diagnostic criteria for Post-traumatic Feeding Disorder

- A. *Food refusal follows a traumatic event or repeated traumatic insults to the oropharynx or gastrointestinal tract (e.g. choking, severe vomiting, reflux, insertion of nasogastric or endotracheal tubes, suctioning) that trigger intense distress in the infant.*
- B. *Consistent refusal to eat manifests in one of the following ways:*
 - 1. *Refuses to drink from the bottle, but may accept food offered by spoon. (Although consistently refuses to drink from the bottle when awake, may drink from the bottle when sleepy or asleep).*
 - 2. *Refuses solid food, but may accept the bottle.*
 - 3. *Refuses all oral feedings.*
- C. *Reminders of the traumatic event(s) cause distress as manifested by one or more of the following:*
 - 1. *Shows anticipatory distress when positioned for feeding.*
 - 2. *Shows intense resistance when approached with bottle or food.*
 - 3. *Shows intense resistance to swallow food placed in the infant's mouth.*
- D. *The food refusal poses an acute or long-term threat to the child's nutrition.*

OTHER DISORDERS OF INFANCY, CHILDHOOD, OR ADOLESCENCE

Separation Anxiety Disorder

Diagnostic Features

Minor modifications of the DSM-IV criteria were proposed for this disorder. These changes were almost all driven by the fact that young children are relatively less verbal than older children and cannot as easily express internal fears that are inherent to many of these symptoms. Three of the symptoms were modified to make them less dependent on verbalizations. One symptom was added about “persistent preoccupation”

with worry about separation that is not dependent on verbalizations. The symptom about school refusal was modified to include day care settings. A note was added to the disability criterion to emphasize that if a parent has gone to great lengths to modify their routines to accommodate the child's anxieties, and as a result the child may not have the opportunity to demonstrate separation anxiety anymore, this still counts as a disability.

Diagnostic criteria for Separation Anxiety Disorder

A. No change from DSM-IV.

- (1) No change from DSM-IV.
- (2) No change from DSM-IV.
- (3) No change from DSM-IV.
- (4) Persistent reluctance or refusal to go to school or elsewhere because of fear of separation.

Note: In young children, this may appear as:

- (a) *fear or subjective anxious affect related to leaving home for daycare/school,*
- (b) *anticipatory fear or subjective anxious affect related to daycare/school situation, or*
- (c) *the child stays out of daycare/school because of fear/anxiety/emotional disturbance.*

(5) No change from DSM-IV.

(6) No change from DSM-IV.

(7) Repeated nightmares involving the theme of separation. *Note: In preverbal or barely verbal children, there may be frightening dreams without recognizable content.*

(8) Repeated complaints or expression of physical symptoms (such as headaches, stomachaches, nausea, or vomiting) when separation from major attachment figures occurs or is anticipated.

(New) Persistent preoccupation worrying about the whereabouts of attachment figures (e.g., looking out a window or stopping play).

B. No change from DSM-IV.

C. No change from DSM-IV.

D. The disturbance causes clinically significant distress or impairment in social, academic (occupational), or other important areas of functioning. *Note: In young children, the disturbance may cause the parent to significantly modify their behavior to modify the child's behaviors.*

E. No change from DSM-IV.

Reactive Attachment Disorder

Diagnostic Features

This disorder was substantially modified from the DSM-IV definition. The two main patterns, inhibited and disinhibited have been maintained, but a revised menu of symptoms was added for each along with proposed algorithm cutoffs. The wording was modified in a number of ways to make it more clearly reflect discriminating attachment behaviors. The pervasive developmental disorders (PDD) were maintained as possible exclusionary diagnoses, but mental retardation was eliminated since individuals with less severe forms of mental retardation may show attachment behaviors. Lastly, the criterion for pathogenic care was eliminated because an emphasis on pathogenic care too narrowly focuses on maltreatment syndromes. This shift allows for the disorder to be considered in children under less extreme situations, such as children in stable, albeit unhealthy, relationships without gross abuse or neglect. This disorder describes the behavior of young children, that is, those in the first 4 or 5 years of life. It is not clear what (if any) behaviors or symptoms constitute attachment disorders in middle childhood, adolescence or adulthood.

Diagnostic criteria for Reactive Attachment Disorder

A. *A pattern of markedly disturbed and developmentally inappropriate attachment behaviors in which the child rarely or minimally turns preferentially to a discriminated attachment figure for comfort, support, protection and nurturance. The disorder is manifest as (1), (2), or (3):*

(1) An inhibited, emotionally withdrawn pattern in which the child rarely or minimally directs attachment behaviors towards any adult caregivers, as manifest by three of the following:

- (a) *Rarely or minimally seeks comfort when distressed.*
- (b) *Rarely or minimally responds to comfort offered when distressed.*
- (c) *Limited positive affect and excessive levels of irritability, sadness, or fear.*

- (d) *Reduced or absent social and emotional reciprocity (e.g., reduced affect sharing, social referencing, turn-taking, and eye contact).*
- (2) *A disinhibited, indiscriminate pattern in which the child directs attachment behavior non-selectively, as manifest by two of the following:*
 - (a) *Demonstrates overly familiar behavior and reduced or absent reticence around unfamiliar adults.*
 - (b) *Rarely or minimally checks back with adult caregiver after venturing away even in unfamiliar settings.*
 - (c) *Willing to go off with an unfamiliar adult with minimal or no hesitation.*
- (3) *A mixed pattern of inhibition and disinhibition characterized by two or more criteria from (1) and (2).*
- B. *Does not meet the criteria for PDD.*
- C. *The child has a developmental age of at least 9 months.*

MOOD DISORDERS

Major Depressive Disorder

Diagnostic Features

Similar to older children and adults, preschool children with a clinical depressive syndrome are characterized by the typical symptoms such as sadness or irritability and anhedonia. They also demonstrate vegetative signs such as changes in sleep and appetite. However, it is important to note that the age appropriate manifestations of these symptoms must be assessed. Based on empirical results, minor modifications to the DSM-IV criteria are suggested below. The two-week criterion was modified to read that the symptoms had to be present “more days than not for at least 2 weeks” because clinically depressed children in studies did not always show a solid block of sadness every day for two weeks. Preoccupation with death and/or suicidality was deemed a clinical symptom in preschool children if it was persistently present in play (in addition to the possibility that it was verbally expressed). It should also be noted that the most specific symptom of depression in preschool children was anhedonia, assessed as having “no fun”. The most sensitive symptom was sadness/irritability. The greater normative fluctuation in mood states developmentally seem to give rise to a clinical picture in which periods of depressed mood are interrupted by periods of euthymia.

Diagnostic criteria for Major Depressive Disorder

A. Five of the following symptoms present *more days than not* for at least 2 weeks and must include one of the first two symptoms:

- (1) Depressed mood most of the day, *more days than not*, as indicated by either subjective report (e.g., feels sad or empty) or observation made by others (e.g., appears tearful). Note: in children and adolescents, can be irritable mood.
- (2) Markedly diminished interest or pleasure in all, or almost all, activities most of the day, *more days than not* (as indicated by either subjective account or observation made by others)
- (3) No change from DSM-IV.
- (4) No change from DSM-IV.
- (5) No change from DSM-IV.
- (6) No change from DSM-IV.
- (7) No change from DSM-IV.
- (8) No change from DSM-IV.

Measurement note for A8: Separately track (1) concentration versus (2) indecisiveness.

- (9) No change from DSM-IV.
- (New) *Persistent engagement in activities or play with themes of death or suicide.*

ANXIETY DISORDERS

There are 9 main anxiety disorders in the DSM-IV. This group modified the criteria for one disorder (PTSD), and believed that the criteria did not warrant change for 1 disorder (specific phobia). Three disorders (panic disorder with agoraphobia, panic disorder without agoraphobia, and acute stress disorder) were not addressed by this group because it was not clear that very young children experienced these. No statement was made that these were entirely impossible to exist in young children due to the lack of developmental capacities that have not yet emerged. Rather, these simply have not been documented or observed by clinicians in this age group. The remaining 4 disorders (social phobia, agoraphobia without history of panic disorder, obsessive-compulsive disorder, and generalized anxiety disorder) have been documented in children under 6 years of age but not enough empirical data has accumulated to justify and/or provide guidance on whether or how to modify them at this point.

Posttraumatic Stress Disorder

Diagnostic Features

The type of traumatic event that leads to the development of PTSD symptoms in preschool children may be similar to but also quite different from the types of events experienced by older children and adults. The most common traumatic events for preschool children appear to be physical abuse, sexual abuse, witnessing domestic violence, and accidental injuries (usually involving automobiles). Witnessing violence against a primary caregiver may be uniquely distressing for young children because of their greater dependence on caregivers. Dog and other animal attacks are typically extremely terrifying and literally life-threatening to small children. Invasive medical procedures may also be experienced as more life-threatening relative to older children.

The traditional triad of symptoms – reexperiencing, avoidance/numbing of responsiveness, and hyperarousal – are unmistakable in young children who become symptomatic following traumatic events. Twelve of the 17 DSM-IV symptom criteria were modified slightly to make them either more developmentally-sensitive to this age group or less dependent on internal thoughts and feelings and more dependent on behavioral observations. The wording of 3 items were not changed. Two items (C3 “inability to recall”; and C7 “sense of a foreshortened future”) were dropped because they are developmentally-inappropriate.

One reexperiencing symptom and two hyperarousal symptoms are required, identical to the DSM-IV. Empirical studies have demonstrated that the avoidance/numbing of responsiveness cluster of symptoms is the cluster most difficult for preschool children to meet. This is primarily because the DSM-IV requires three items from this cluster and two of the items -sense of a foreshortened future, and psychogenic amnesia for part of the event - cannot be assessed due to limited cognitive and abstraction capacities in this age group. The item “Feeling of detachment or estrangement from others” was replaced because these internalized, abstract notions are not fully emerged in young children. The requirement for this cluster was changed from three symptoms to one symptom.

Diagnostic criteria for Posttraumatic Stress Disorder

A.1. No change from DSM-IV.

A.2. The person’s response involved intense fear, helplessness, or horror. Note: in children, this may be expressed instead by disorganized or agitated behavior. *Note: In preverbal children, this may not be known.*

B. One (or more) re-experiencing symptoms is needed:

- (1) Recurrent and intrusive distressing recollections of the event, including images, thoughts, or perceptions. Note: in young children, repetitive play *or repetitive behaviors* may occur in which themes or aspects of the trauma are expressed.

Measurement note for B1: Track recurrent recollections in three different ways: verbally, play, and non-play behaviors.

- (2) Recurrent distressing dreams of the event. Note: in children, there may be frightening dreams without recognizable content *that may be either fixed and repetitive or different and flexible each time.*
- (3) Acting or feeling as if the traumatic event were recurring (includes a sense of reliving the experience, illusions, hallucinations, and dissociative flashback episodes, including those that

occur on awakening or when intoxicated). Note: in young children, trauma-specific reenactment may occur. *Young children who dissociate may appear frozen or stilled. These children are unresponsive to significant stimuli across multiple sensory domains.*

- (4) Intense psychological distress, *or behaviors indicative of distress*, at exposure to internal or external cues that symbolize or resemble an aspect of the traumatic event. *Note: In young children, an internal cue may not be known.*
 - (5) Physiological reactivity on exposure to internal or external cues that symbolize or resemble an aspect of the traumatic event. *Note: In young children, an internal cue may not be known.*
- C. *One (or more) avoidance/numbing of responsiveness symptom is needed:*
- (1) Efforts to avoid thoughts, feelings, or conversations associated with the trauma. *Note: In young children, do not infer the presence of thoughts of feelings without verbalized verification from the child.*
 - (2) No change from DSM-IV.
 - (4) Markedly diminished interest or participation in significant activities. *Note: In young children, this may be manifest in play, social interactions, and daily routines.*
 - (5) *Increased social withdrawal.*
 - (6) Restricted range of affect *in play, social interaction, and daily routines* (e.g., unable to have loving feelings).
- D. *Two (or more) increased arousal symptoms are needed:*
- (1) *Increased* difficulty falling or staying asleep, *or bedtime protest.*
 - (2) *Increased* irritability, outbursts of anger, *or extreme fussiness or temper tantrums.*
 - (3) *Increased* difficulty concentrating.
 - (4) No change from DSM-IV.
 - (5) No change from DSM-IV.

Experimental Symptoms

1. *Night terrors. The child starts from sleep with a panicky scream, has agitated motor movements, is unresponsive and inconsolable, and shows signs of autonomic arousal such as racing heart rate, rapid breathing, and sweating. The episodes tend to occur in the first third of the night and last from one to five minutes. The contents of any dreams are not known to the child the next day.*
2. *New aggression*
3. *New separation anxiety*
4. *New fears without obvious links to the traumas (e.g., fear of toileting alone, fear of the dark, etc.)*
5. *New oppositional defiance*
6. *Purposeless, repetitive behaviors without affect*
7. *Loss of previously acquired developmental skills, e.g., toileting, speech, etc.*

SLEEP DISORDERS

DSM-IV does not adequately set criteria for the common sleep problems that affect toddlers and young children. A developmentally appropriate classification that relates to the category of dyssomnias in DSM-IV is proposed. The syndrome of difficulty in initiating sleep is labeled sleep onset protodyssomnia and the syndrome of difficulty in maintaining sleep is labeled night waking protodyssomnia. This proposed nosology controls for duration and severity by further defining each of the two protodyssomnias as a perturbation, disturbance, or disorder. Perturbations are part of normal development. Interventions are not indicated. Disturbances are considered risk conditions. If no intervention occurs, they may likely progress to disorder. Disorders require more active intervention. If untreated, it is hypothesized, disorders may likely progress to full-blown DSM-IV disorders and/or generalize into a broader array of behavioral symptoms and diagnoses. No changes were suggested for the parasomnias and other DSM-IV sleep disorders. Due to the nature of rapidly changing sleep patterns in young children, guidelines from empirical studies are presented to help distinguish perturbations, disturbances, and disorders. Protodyssomnias ought to designate disorder level problems.

- **Perturbation** 1 episode per week
- **Disturbance** 2-4 episodes per week for more than 1 month
- **Disorder** 5-7 episodes per week for more than 1 month

Sleep Onset Protodyssomnia

Diagnostic features

Sleep onset problems are reflected in either the time it takes to fall asleep, a need for the parent to stay in the room for sleep onset, and/or a need for reunions with the parent (parent leaves the room and comes back due to bids from the child).

Diagnostic criteria for Sleep Onset Protodyssomnia

A. The following symptom must be present for at least four weeks and involve 5-7 episodes per week.

B. Significant difficulty falling asleep.

Measurement note: When gathering data, quantify the following variables. Results from empirical studies are included below as suggested cut-offs.

- (1) the number of minutes needed to fall asleep
 - 12-24 months of age: >30 minutes to fall asleep
 - >24 months of age: >20 minutes to fall asleep
- (2) whether the parent remains in the room for sleep onset
- (3) the number of reunions, i.e., repeated bids, protests or struggles to go to bed.
 - 12-24 months of age: 3 or more reunions
 - >24 months of age: 2 or more reunions

C. (The impairment criterion is in a state of uncertainty because of the need for empirical data on whether to include (1) restriction of parental activities, (2) difficult to arouse the child during the day, and (3) falling asleep spontaneously during the day)

D. This disorder should not be diagnosed in children under 12 months of age because stable sleep patterns do not typically emerge until then.

Night Waking Protodyssomnia

Diagnostic features

Night waking problems are reflected in either awakenings that require parental intervention and/or removal to the parental bed.

Diagnostic criteria for Night Waking Protodyssomnia

A. The following symptom must be present for at least four weeks and involve 5-7 episodes per week.

B. Significant difficulty staying asleep.

Measurement note: When gathering data, quantify the following variables. Results from empirical studies are included below as suggested cut-offs.

- (1) the number of minutes spent awake after awakening:
 - 12-24 months of age: combined time of >1310 minutes
 - 24-36 months of age: combined time of >20 minutes
 - >36 months of age: combined time of >10 minutes
- (2) whether the parent removes the child with each awakening
- (3) the number of awakenings per night:
 - 12-24 months of age: 3 or more awakenings per night (combined time >30 minutes)
 - 24-36 months of age: 1 or more awakenings per night (combined time >20 minutes)
 - >36 months of age: 1 or more awakenings per night (combined time >10 minutes)

C. (The impairment criterion is in a state of uncertainty because of the need for empirical data on whether to include (1) restriction of parental activities, (2) difficult to arouse the child during the day, and (3) falling asleep spontaneously during the day)

D. This disorder should not be diagnosed in children under 12 months of age because stable sleep patterns do not typically emerge until then.

Appendix A

Criteria Set Provided for Further Study

Disorder of Inhibition/Avoidance

Diagnostic Features

This set of criteria is provided for further study to encourage data collection on this well-known phenomenon. While there is a substantial research literature on shy and inhibited youngsters, there is less available data to connect it to clinical-level psychopathology. Many of the features of this construct overlap with social phobia. One difference between the two is that social phobia is limited to anxiety about interactions with other persons. The proposed disorder of inhibition/avoidance is not limited to personal interaction and is relevant to anxiety triggered by other types of novel stimuli and situations, which may be important for younger children. Another difference is that social phobia requires the individual to fear humiliation or embarrassment. Since young children may not consciously experience or express these emotions, the children's behaviors are emphasized, rather than their feelings that may be more difficult to identify.

Diagnostic criteria for Disorder of Inhibition/Avoidance

- A. Excessive shrinking from contact with and persistent reluctance to approach unfamiliar people or novel stimuli (new toys, smells, tastes, or situations).*
- B. Exposure to unfamiliar people or to novel stimuli almost invariably provokes the behaviors in A which may also be expressed by crying, tantrums, freezing or shrinking from the situations.*
- C. Desire for social involvement with familiar people (family members and peers the person knows well), and generally warm and satisfying relations with family members and other familiar figures.*
- D. The situations in A are avoided or else endured with intense anxiety or distress.*
- E. Disability criterion: The avoidance, anxious anticipation, or distress in the situation interfere significantly with the child's normal routine, functioning...*
- F. Symptoms occur for a period of 3 months or longer.*
- G. The avoidance is not due to the direct physiological effects of a substance (e.g., a medication) or a general medical condition and is not better accounted for by another mental disorder.*

TABLE 1

The following table is a compilation of all of the known studies that provide empirical support for the validity of these disorders in infants, toddlers, or preschool children. These studies provided the empirical base for the deliberations of the task force.

Disorder	Reliability	Face validity	Descriptive validity	Predictive validity	Construct validity
Attention-deficit/hyperactivity disorder	Speltz et al., 1999 Keenan and Wakschlag, 2000 Wilens et al., 2002	Keenan et al., 1997 Keenan and Wakschlag, 2000 Lahey et al., 1998	Keenan et al., 1997 Keenan and Wakschlag, 2000 Wilens et al., 2002	Speltz et al., 1999	DuPaul et al., 2001 Ross et al., 1998 Wilens et al., 2002 Willcutt et al., 1999
Oppositional defiant disorder	Speltz et al., 1999 Keenan and Wakschlag, 2000	Keenan et al., 1997 Keenan and Wakschlag, 2000	Keenan et al., 1997 Keenan and Wakschlag, 2000 Ross et al., 1998 Speltz et al., 1997	Speltz et al., 1999	Greenberg et al., 1991, 2001 Keenan and Wakschlag, 2000 Ross et al., 1998 Speltz et al., 1990, 1995
Conduct disorder	Speltz et al., 1999 Keenan and Wakschlag, 2000	Keenan et al., 1997 Keenan and Wakschlag, 2000 Ross et al., 1998	Keenan et al., 1997 Keenan and Wakschlag, 2000		Keenan and Wakschlag, 2000
Major depressive disorder	Luby 2002	Luby et al., 2002, 2003, and in press	Luby et al., 2003, and in press	Luby et al., in press	Luby 2002
Posttraumatic stress disorder	Scheeringa et al., 1995, 2001, and in press	Azarian et al., 1994 Scheeringa et al., 1995, 2001, and in press	Scheeringa et al., in press		Laor et al., 1996, 1997 Scheeringa and Zeanah, 1995 Scheeringa et al., 2002
Reactive attachment disorder	Boris et al., 1998	Boris et al., 1998			
Sleep Onset Protodyssomnia and Night Waking Protodyssomnia	Anders et al., 1976. (video) Minde et al., 1993 (actigraph) Sadeh, 1994; Sadeh et al., 1995; Tikotzky and Sadeh, 2001	Crowell et al., 1987 Gaylor et al., 2001 Goodlin et al., 2001 Sadeh et al., 1995		Anders et al., 1985a Burnham et al., 2002 Gaylor et al., 2001	Anders et al., 1985b Benoit et al., 1992 Burnham et al., 2002 Goodlin et al., 1997 Halpern et al., 1994 Minde et al., 1994 Sadeh, 1994

					(waking only) Sadeh et al., 1994
Feeding disorder of state regulation		(Chatoor 2002) (Chatoor 1985)			Chatoor et al., 1997
Feeding disorder of caregiver-infant reciprocity		(Chatoor 2002) (Chatoor 1985) (Marcus, 1989)			Chatoor et al., 1997
Infantile anorexia	Chatoor, Hirsch et al., 1998	(Chatoor 2002) Chatoor, Hirsch et al., 1998 Chatoor et al., 2001	Chatoor et al., 2001		Chatoor et al., 2000 Chatoor et al., 2001 Chatoor et al., 1988 Chatoor, Ganiban et al., 1998 Chatoor, Hirsch et al., 1998
Sensory food aversions		(Chatoor et al., 2002)			
Feeding disorder associated with concurrent medical condition		(Chatoor 2002)			
Post-traumatic feeding disorder		Chatoor et al., 2001	Chatoor et al., 2001		Benoit and Coolbear, 1998 Benoit et al., 1997 Chatoor et al., 2001

Case reports are set off by being enclosed in parentheses.

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