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INTRODUCING *DC:0–3R*

The ZERO TO THREE Revision Task Force:

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abstract

This article describes the revised and updated *Diagnostic Classification of Mental Health Disorders of Infancy and Early Childhood, Revised Edition (DC:0–3R).* The authors describe the impetus for developing the original diagnostic classification system for children from birth to age 3 in the 1980s. There was a need for a diagnostic classification system that would take into account the rapid pace of development in the early years, the importance of the child's early relationships, individual differences among children, and the impact of the caregiving environment on children's health and development. To meet this need ZERO TO THREE convened an expert Task Force and published the *DC:0–3* in 1994. The 2005 revision of *DC:0–3* provides needed specifications and clarifications of criteria in order to facilitate reliability among clinicians and advance the evidence-based evolution of the system. *DC:0–3R* represents a further step toward a seamless system of diagnostic classification. The authors describe the new features of this evolving system and detail three levels of training in *DC:0–3R,* as well as a state-level Training of Trainers model where ZERO TO THREE is working with several states to build a cadre of trainers prepared to teach *DC:0–3R* to professionals statewide.

ZERO TO THREE is proud to announce the August 2005 publication of *Diagnostic Classification of Mental Health Disorders of Infancy and Early Childhood, Revised Edition*. (We encourage users of the manual to refer to it as *DC:0–3R*.) This article is a brief guide to *DC:0–3R*, designed both for readers who are familiar with the original *DC:0–3* and those who for whom the revised version is their introduction to this diagnostic classification system. We describe:

- *DC:0–3R*'s place in ZERO TO THREE's ongoing efforts to create a developmentally based classification system for mental health and developmental disorders of infancy and early childhood;
- New features of *DC:0–3R;*
- Areas for future study; and
- Training in the use of *DC:0–3R* that ZERO TO THREE is offering to mental health professionals, other infant–family professionals, and policy makers.

Creating a Developmentally Based Classification System

A diagnostic classification system is a language. It allows people who agree on the meaning of its terms to

communicate easily and efficiently with each other and to link to knowledge about disorders. A good diagnostic classification system provides a common language in which clinicians, researchers, family members, and health care policy makers can communicate, transcending the terminology of their own specialties.

As of the mid-1980s, clinicians and researchers lacked any widely accepted system for classifying mental health and developmental disorders among children from birth to age 3 years. Existing classification systems, such as the American Psychiatric Association's *Diagnostic and Statistical Manual* (DSM) provided insufficient coverage of syndromes of early childhood that needed clinical attention. Nor did DSM pay adequate attention to the developmental features of mental health disorders that are typically first diagnosed in infancy and early childhood. Researchers, clinicians, health care administrators, and families felt the need for a diagnostic classification system that reflected research and practice knowledge in the new field of early childhood mental health. Such a system would have to take into account:

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- The rapid social–emotional development of the earliest years;
- The quality of a young child's primary relationships;
- Individual differences among infants and toddlers, including health and developmental concerns; and
- The impact of the larger caregiving environment—including culture, social supports and psychosocial stressors—on very young children's mental health.

With the goal of creating such a developmentally based diagnostic classification system, Kathryn Barnard, then President of ZERO TO THREE, convened the organization's Diagnostic Classification Task Force in 1987. Stanley Greenspan and Serena Wieder became co-chairs of the Task Force, whose members were a multidisciplinary group of clinicians and researchers from North America and Europe. The Task Force met regularly for 7 years. Members systematically analyzed case reports from participating centers and identified recurring patterns of behavioral problems in infants and toddlers. By building consensus among experts in the field, the Task Force developed a system for categorizing mental health and developmental disorders in the early years of life.

In 1994, ZERO TO THREE published this system as *Diagnostic Classification of Mental Health and Developmental Disorders of Infancy and Early Childhood* (ZERO TO THREE, 1994). Clinicians from many disciplines that address the mental health and developmental needs of infants and young children welcomed *DC:0–3*, as the work was quickly nicknamed. In the decade following its publication, a growing number of clinicians, educators, and developers of early childhood mental health systems of care found *DC:0–3* useful for clinical formulation, especially in comparison to other classification systems. However, *DC:0–3* had its limitations. The system's categorizations of mental health and developmental disorders were based on expert consensus, rather than empirical research. Some diagnostic categories lacked criteria altogether; others had criteria that were not "operationalized" (measurable) enough to be useful for communication and research. Such limitations were to be expected in an initial effort. The developers of *DC:0–3* always intended their system to evolve.

In 2002, Robert Emde and Brian Wise proposed that ZERO TO THREE undertake a circumscribed revision of *DC:0–3*. The goal would be to provide needed specifications and clarifications of criteria in order to facilitate reliability among clinicians and advance the evidence-based evolution of the system. A revision of *DC:0–3* could also improve its usefulness in clinical case formulation.

In late 2003, ZERO TO THREE appointed a Revision Task Force, which was charged with drafting a revised version of *DC:0–3* within 2 years. The group reviewed clinical literature and other diagnostic systems, carried out two surveys of users worldwide, and obtained draft language and feedback from recognized experts in particular areas. The group conferred weekly, meeting via conference calls and in person in order to clarify text and diagnostic criteria. *DC:0-3R* is the product of this 2-year effort.

DC:0–3 was intended to complement existing approaches to diagnostic classification of mental health and developmental disorders of infancy and early childhood. *DC:0–3R* represents a further step toward a seamless system of diagnostic classification. For example, in 2001–2002, the American Academy of Child and Adolescent Psychiatry supported an independent work group that developed *Research Diagnostic Criteria- Preschool Age (RDC-PA)*. The ZERO TO THREE Revision Task Force incorporated these criteria into *DC:0–3R* wherever possible (The *DC:0–3R* table of contents appears as Sidebar 1.). After reviewing new evidence for DSM-IV-TR-related classifications (American Psychiatric Association, 2000), the Task Force adopted the following classifications from RDC-PA:

- Some subclassifications of anxiety disorder after the age of 2 years;
- The use of Pervasive Developmental Disorders (e.g. autism, PDD-NOS) after 2 years of age. (*DC:0–3R* retains Multisystem Developmental Disorder [MSDD]

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as a possible classification for children younger than 2 years);
- Subclassifications for Sleep Behavior Disorders; and
- Subclassifications for Feeding Behavior Disorders.

DC:0–3 incorporates a decade's worth of multidisciplinary research and clinical experience with *DC:0–3*. We hope that the work of the Revision Task Force has improved the usefulness and developmental appropriateness of the original *DC:0–3*. To the extent that we have succeeded, we are closer to the long-term goal of a developmentally based diagnostic classification system that will become a meaningful language for communication among all who are concerned about the mental health of infants and young children.

New Features of *DC:0–3R*

The Revision Task Force was charged with making minor revisions to *DC:0–3*, in recognition of the fact that any full-scale updating of the system will need to be based on evidence from clinical trials. Although we were always mindful of our circumscribed mandate, we made a number of changes in *DC:0–3R* in order to support clinical trials and clinical practice the field of early childhood mental health.

The new features of *DC:0–3R* can be grouped into three clusters: (1) the operationalization of diagnostic criteria; (2) new and revised rating scales, checklists, and guidelines; and (3) identification of areas of uncertainty that call for additional research.

The operationalization of diagnostic criteria

To operationalize means to define a concept or variable so that it can be measured or expressed quantitatively. Only if we can measure a phenomenon in a reliable way can we make progress toward the goal of defining disorders, implementing treatments, and demonstrating that our interventions work. In order to operationalize the number, pervasiveness, and duration of symptoms required to make a particular diagnosis, we drew on the RDC-PA and the clinical experience of infant mental health practitioners. As a result, a *DC:0–3R* description of a diagnostic category may specify, among other criteria, for example, that a child must exhibit: (1) at least three symptoms on a list; (2) in two or more settings; and (3) for at least 2 weeks.

See Sidebar 2 for a comparison of the treatment of Depression of Infancy and Early Childhood in *DC:0–3* and *DC:0–3R*. The *DC:0–3R* version illustrates the progress from broad general categories to more specific criteria, and

from wording that can be interpreted in various ways to terminology that tells the clinician precisely what symptoms to look for.

New and revised rating scales, checklists, and guidelines

DC:0–3 included several rating scales and checklists, but in some cases wording was unclear and formatting awkward. We made the following changes:

- **The Parent–Infant Relationship Global Assessment Scale (PIR-GAS)** is used in Axis II (Relationship Diagnostic Classification) to evaluate the quality of a caregiver–child relationship and identify relationship disorders. We expanded the range of the PIR-GAS and note that the clinician should base her ratings on both observed behavior and information about the parent and child's subjective experience. The clinician should also assess the intensity, frequency, and duration of difficulties in a relationship in order to classify the problem as a perturbation, a disturbance, or a disorder.
- Replacing *DC:0–3*'s Axis II relationship disorder categorizations is a new **Relationship Problems Checklist**. The checklist format gives the clinician an opportunity to indicate the extent to which a parent–infant relationship can be described with any of the criterion-based qualities of overinvolved/underinvolved, anxious/tense, or angry/hostile. For each relationship quality, the clinician gives a rating of "no evidence," "some evidence; needs further investigation," or "substantial evidence."
- Axis IV, **Psychosocial Stressors**, now includes a psychosocial and environmental checklist with items appropriate for infants and young children. Categories include: challenges to a child's primary support group; challenges in the social environment; educational/child care settings; housing challenges; economic challenges; occupational challenges; healthcare access challenges; health of the child; and legal/criminal justice challenges.
- Axis V, renamed **Emotional and Social Functioning,** maintains the focus on the infant and young child's organization of experience that characterized Axis V in *DC:0–3*. *DC:0–3R* introduces simplifications designed to enhance the use of this axis. We have tried to clarify descriptions of the six capacities for emotional and social functioning identified in *DC:0–3* and have given more prominence to the process of rating these capacities.
- **Guidelines for Prioritizing Diagnostic Classification and Planning Intervention** replace *DC:0–3*'s "Guidelines to selecting the appropriate diagnosis." Many users interpreted the *DC:0–3* guidelines as discouraging the designation of co-occurring (or "co-morbid") diagnostic classifications. Experts now agree that the designation of co-occurring diagnostic classifications is appropriate if criteria for *each* diagnostic classification are met. *DC:0–3R* provides guidelines for: (1) prioritizing diagnostic classifications on Axis I; and (2) identifying a primary diagnosis for purposes of intervention planning. For example, the guidelines stress the importance of giving priority to a diagnosis of Posttraumatic Stress Disorder (PTSD) because of the urgency of providing prompt, comprehensive intervention.

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Identification of areas of uncertainty

Revising the original version of a diagnostic classification system within a relatively brief time period requires making judgments about evidence, the integration of differing perspectives, and the usefulness of proposed conceptualizations for clinical trials and application. As noted in the original *DC:0–3*, moving forward with a diagnostic classification system involves an inevitable tension between offering descriptions of diagnostic categories that are based on preliminary consensus among experienced clinicians and waiting for data from systematic research.

A related tension exists between specifying criteria for subtypes of a disorder (for example, Feeding Behavior Disorder) and refraining from doing so. In the absence of clear evidence, should one specify descriptive criteria for subtypes in order to promote research and foster evolution of the system?

Within the category of Regulation Disorders of Sensory Processing (Regulatory Disorders in *DC:0–3*), the Revision Task Force endeavored to clarify subtypes in ways that made conceptual sense according to current clinical thinking. We made use of extensive feedback from our surveys of *DC:0–3* users and took advice from a specially convened group of occupational therapists and from other clinicians who had extensive experience using the *DC:0–3* classification of Regulatory Disorders. Although the *DC:0–3* characterization of Regulatory Disorders represented the consensus of the Diagnostic Classification Task Force at the time and was lauded by many users, we now found that experts disagreed about the persuasiveness of evidence offered in support of various subtypes, and about subtypes' clinical usefulness. As with other subtypes and classifications in *DC:0–3R*, only future

research from clinical trials can identify the classification categories that will prove useful over the long run. The Revision Task Force concluded that at this stage of our knowledge, *DC:0–3R* could neither provide detailed criteria for subtypes of Regulation Disorders of Sensory Processing nor specify the number of criteria needed for diagnosis. Instead, we provided criteria in rich descriptive form in the hope that future research will clarify this area.

Two Descriptions of Depression of Infancy and Early Childhood

From *DC:0–3* (ZERO TO THREE, 1994, p. 25)

This category is reserved for infants and young children who exhibit a pattern of depressed or irritable mood with diminished interest and/or pleasure in developmentally appropriate activities, diminished capacity to protest, excessive whining, and a diminished repertory of social interactions and initiative. These symptoms may be accompanied by disturbances in sleep or eating, including weight loss.

The symptoms must be present for a period of at least 2 weeks.

From *DC:0–3R* (ZERO TO THREE, 2005, pp. 25–26)

The criteria for depressive disorders listed below reflect a developmentally sensitive modification of the *DSM-IV-TR* (American Psychiatric Association, 2000) criteria. As is the case with anxiety disorders, defining and identifying depression in young children presents significant challenges, particularly because young children may not have the verbal or cognitive skills to describe their feelings or emotional experiences.

To diagnose a depressive disorder in a very young child, the clinician must observe **all four** of these general characteristics:

1. The disturbed affect and pattern of behavior should represent a change from the child's baseline mood and behavior.
2. The depressed/irritable mood or anhedonia must be persistent and, at least some of the time, uncoupled from sad or upsetting experiences (e.g., watching a sad television show, being punished). "Persistent" means present for most of the day, more days than not, over a period of at least 2 weeks.
3. Symptoms should be pervasive, occurring in more than one activity or setting and in more than one relationship. If depressive symptoms occur only within one relationship, the clinician should consider a diagnosis under Axis II: Relationship Classification.
4. Symptoms should be causing the child clear distress, impairing functioning, or impeding development.

Type I: Major Depression

A diagnosis of Major Depression requires that five of the following symptoms must be present **most of the day, more days than not, for at least 2 weeks** and must include **one of the first two symptoms:**

1. Depressed or irritable mood most of the day, more days than not, as indicated by either the child's direct expression (e.g., "I'm sad") or observations made by others (e.g., the child appears sad or is tearful).
2. Markedly diminished pleasure or interest in all, or almost all, activities, such as initiation of play and interaction with caregivers more days than not. May be indicated either by the child (e.g., "Nothing (or almost nothing) is fun") or through others' observations.
3. Significant weight loss or weight gain (e.g., a change of more than 5% of body weight in a month) or significant decrease or increase in appetite. An infant or very young child's failure to make expected weight gains can be a symptom of major depression.
4. Insomnia or hypersomnia.
5. Psychomotor agitation or retardation that is observable by others (not merely a child's subjective feelings of restlessness or being "slowed down").
6. Fatigue or loss of energy.
7. Evidence of feelings of worthlessness or inappropriate guilt in play (e.g., self-punitive actions and play) or in the child's direct expression.
8. Diminished ability to think or concentrate or indecisiveness (either by subjective account or as observed by others) for several days. In younger children, these symptoms may appear as difficulty in solving problems, responding to caregivers, and/or sustaining attention.
9. Recurrent allusions to or themes of death or suicide or attempts at self-harm. The child may demonstrate these symptoms through thoughts, activities, play, or potentially lethal behaviors.

Type II: Depressive Disorder NOS

The diagnosis of Type II: Depressive Disorder NOS requires the presence of **three or four of the nine symptoms** described for Type I: Major Depression above. Symptoms must be present for a **minimum of 2 weeks**. The diagnosis requires the presence of **at least one of the first two symptoms**.

The classification of Multisystem Developmental Disorder (MSDD) represents another area of uncertainty. In reviewing Disorders of Relating and Communicating in Axis I, we took account of considerable clinical research that had taken place since the publication of *DC:0–3*. Such research has demonstrated that Autistic Spectrum Disorders can be meaningfully identified in children as young as 2 years of age, thus making the *DSM–IV-TR* (American Psychiatric Association, 2000) classifications of Pervasive Developmental Disorder, Not Otherwise Specified (PDD-NOS) or Autism more applicable to very young children. Many users of *DC:0–3*, as well as experts in the identification and investigation of Autistic Spectrum Disorders, told the Revision Task Force that the MSDD diagnostic classification was no longer necessary. However, a substantial number of *DC:0–3* users commented on the usefulness of MSDD and argued for its continued inclusion. As a compromise, *DC:0–3R* includes MSDD as a diagnostic classification appropriate for children under 2 years of age. For children 2 years old and older, substantial evidence supports Pervasive Developmental Disorders as a useful framework for identifying and treating autistic spectrum disorders.

_DC:0–3R_ incorporates a decade's worth of multidisciplinary research and clinical experience with _DC:0–3_. Its purpose is to improve the usefulness and developmental appropriateness of the original _DC:0–3_ and to move toward the long-term goal of a developmentally based diagnostic classification system.

Learning to Use *DC:0–3R*

Under the leadership of Robert J. Harmon, Nancy Seibel, and Jean M. Thomas, ZERO TO THREE developed three levels of training in *DC:0–3R*, as well as a state-level Training of Trainers model. The levels include:

1. **Awareness Level**—This 1.5–3 hour session introduces infant–family practitioners, from a range of disciplines, and policy makers to the concepts, principles, practices, and theories of infant mental health. The interactive session includes lecture, discussion, and case examples. It provides an overview of *DC:0–3R* as an approach to understanding and diagnosing mental health and developmental disorders of early childhood.
2. **Introductory Level**—This 6-hour session offers an in-depth introduction to *DC:0–3R* for mental health clinicians and other therapists. Through lecture, video, case presentation, and discussion, faculty address infant mental health; principles of assessment, evaluation, and diagnosis of very young children with emotional problems; the axes and diagnostic classifications used in *DC:0–3R;* and the use of "crosswalks" between *DC:0–3R* and other classification systems, such as *DSM-IV-TR* (American Psychiatric Association, 2000) and *ICD-9* or *10* (World Health Organization, 1977, 1992). This session prepares participants to use *DC:0-3R* in practice, preferably with a colleague or as part of a team with access to reflective supervision.
3. **Advanced Level**—This 3-hour advanced, case-based seminar is for pairs of clinicians or teams of mental health professionals. Participants must have taken part in the introductory session and used the *DC:0–3R* system for at least several months. The seminar will offer an opportunity for participants to raise questions and clinical dilemmas that they have encountered in using *DC:0–3R*. Each team is responsible for a case presentation that will be discussed by the group.

ZERO TO THREE is working with several states to build a cadre of trainers prepared to teach *DC:0–3R* to professionals statewide. Our training-of-trainers model includes participation in Introductory and Advanced training in *DC:0–3R*, with follow-up on-site consultation, phone consultation, and co-facilitated training opportunities.

The Future of *DC:0–3R*

DC:0–3R's criteria for classification represent the best current thinking of the Revision Task Force and early childhood mental health researchers and clinicians worldwide. As research and clinical evidence grows, the *DC:0–3* classification system will change to reflect new knowledge. During the 2 years of its work together, the Revision Task Force began a list of important questions that demanded answers but were beyond our mission to address. Among them are:

- How can we evaluate and describe an infant or young child's functional adaptation to the world (including degrees of impairment), independent of diagnosis?
- How can developmentally appropriate, relatively normative, and transient levels of disruptive behaviors in children under 3 years old be distinguished from early-emerging symptoms of what will become the more differentiated patterns of disruptive behavior disorders of later childhood?
- Should Excessive Crying Disorder be included as a functional regulatory disorder, along with Sleeping Behavior and Feeding Behavior Disorders?
- Should a Family Axis be developed, circulated for comment, and pilot-tested? The Axis would encourage information-gathering about: (1) family history of

mental illness, (2) family structure and available supports, and (3) family culture. Knowledge of these aspects of family life is central to clinical assessment and treatment planning.

The future of *DC:0–3R* lies in its use in clinical application and research concerning the assessment of very young children's emotional and social functioning. The Revision Task Force and ZERO TO THREE invite members of the early childhood mental health community worldwide to study *DC:0–3R* and test its usefulness in clinical practice, research, and communication with colleagues.

Up-to-date information about publications, training, and communications from users of the system can be found at www.zerotothree.org/infantmentalhealth. Address inquiries and communications about *DC:O–3R* to Emily Fenichel (efenichel@zerotothree.org) and about training to Nancy Seibel (nseibel@zerotothree.org).

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