Handbook of Infant, Toddler, and Preschool Mental Health Assessment

Rebecca DelCarmen-Wiggins, PhD
Alice Carter, PhD,
Editors

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Preface

This volume is quite possibly the first published handbook on assessment of mental health in infants, toddlers, and young preschool children. As such, it signals that this young field is growing up. Despite rapid growth in recent years, there is not to our knowledge a comprehensive volume reviewing conceptual, methodological, and research advances on early identification, diagnosis, and assessment of disorders in this young age group that could be used for teaching, research, and clinical practice. It is our hope that offering this collection of chapters will facilitate conceptual and methodological integration, and provide an opportunity to disseminate some of the very exciting recent developments within the young child assessment field. Our goal is to promote further advances within the research community and to promote changes in best practice (i.e., adoption of new, empirically based methods of assessment) within the clinical community.

ISSUES AND ADVANCES THAT INFORM THIS BOOK

The impetus for compiling this handbook is derived from the following concerns or developments within the young child assessment field:

1. *Challenges in applying existing diagnostic approaches to young children.* There is a consensus that traditional diagnostic approaches, such as the *Diagnostic and Statistical Manual of Mental Disorders* (*DSM*) system, have not been shown to be reliable or valid for young children. In addition, they do not incorporate research on infants and young children that highlights the importance of developmental and relational issues in diagnostic formulations. Modifications to criteria for a variety of disorders including depressive, anxiety, posttraumatic stress, and disruptive behavior disorders in young children have been proposed and are currently under investigation.

2. *The need for early identification of risk and disorder for available programs and services.* Public policy and legislative efforts have led to new opportunities for programs and services that target this young population. In addition, a growing empirical literature on a variety of disorders in very young children, such as autism, suggests that early, appropriate intervention (possibly capitalizing on the neuroplasticity of the young brain) can achieve better outcomes than treatment commencing in the later years. Despite a consensus regarding the value of early intervention and prevention efforts, most psychiatric disorders are not easily diagnosed before 3 years of age and, with the excep-

tion of a few disorders (e.g., autism, ADHD), diagnostic tools for preschoolers are still in the development stage. Parents and researchers together are actively seeking earlier and more sensitive diagnostic assessment tools, given the close linkages between early diagnosis, treatment, and prognosis. It can also be argued that although the typical threshold for referral to services among adults and older children is diagnosis (i.e., the presence of sufficient symptoms to meet criteria for a disorder along with associated impairment), the infancy, toddler, and preschool periods need a different threshold for referral. Specifically, it would be wise to invest intervention dollars in children who may be subthreshold for diagnostic caseness, but who, in addition to a concerning number of symptoms, experience the additional threat to normative developmental progress of significant child, family, and community-level risk factors for psychopathology.

3. *New instrumentation*. Several new diagnostic and assessment approaches have been proposed for use with infants, toddlers, and young children. These remain largely underutilized, including assessments of child functioning (e.g., behavioral problems, competencies, and diagnostic symptoms) as well as parent or relationship functioning (e.g., the parent-child relationship and early relationship disturbances).

4. C*ontextual factors*. Though the study of context has long been important in developmental theory, there is now consensus within the young child assessment field that contextual factors, including relationship (see chapter 3) and culture (see chapter 2), need to be incorporated into our clinical understanding of psychopathology in young children.

5. *Regulation*. Another important theme to emerge recently in the young child assessment literature is the importance of assessing temperament and regulatory functioning. Some researchers and theoreticians now view many mental health problems in the first two years as closely tied to regulatory or sensory-related functioning. These problems may manifest in infants as sleep disturbances, eating difficulties, problems in organized play, or uncontrollable emotional outbursts (see chapter 13). This represents a shift in thinking with respect to the manner in which problems in young children are conceptualized and a recognition that psychopathology in young children may need a different framework than psychopathology in older children and adults. In particular, we believe that it is crucial to understand how various temperamental, regulatory, sensory, and neurophysiological factors may increase risk for or protect against mental health disorders. In addition, further study of normative and atypical courses of emotion and behavior regulation may aid in disentangling the role of temperament versus other nontemperamental regulatory factors that may combine to influence mental health outcomes. We believe that a greater understanding of developmental linkages between temperamental and regulatory domains will lead to a better characterization of early emerging core deficits of mental health disorders and the complex developmental pathways that lead to the development of disordered states. Moreover, better developmental characterization of mental health disorder phenotypes will aid in genetic studies that aim to identify susceptibility genes.

6. *Impairment*. The issue of impairment comes to the fore when considering diagnostic assessment of psychopathology in infants and young children. Documenting impairment or level of impaired functioning is an essential component of assigning a diagnosis to an individual. Within older children and adults, impairment is located within the individual, and individual functioning is assessed. The diagnostician must carefully verify not only that the individual meets the appropriate symptom criteria but also that the individual is unable to perform and adapt to expectable work, school, relational, and self-care activities and demands.

For infants and young children, this approach may not always work. At times, it may be possible to identify specific ways that a young child's social-emotional or behavioral difficulties interfere with (a) adaptation to developmentally appropriate demands or specific contexts (e.g., a child is expelled from several day care centers because his or her behavior is too challenging and is seen as atypical within the day care context), (b) the acquisition of new developmental capacities and skills (e.g., a child's tactile sensitivities or fears interfere with his or her exploration of toys

and fine motor skills begin to lag), (c) relationship and interpersonal functioning (e.g., a child's problems with impulsivity and attention lead to difficulties with peers), or (d) health (e.g., a child's inability to regulate arousal during feeding leads to significant weight loss or failure to thrive). At other times, however, clear markers of impaired functioning may not be present despite the presence of risk or disorder because parents and other caregivers are providing protective scaffolding (for example, appropriate structure, limits, regulatory strategies, and support) to minimize the impact of a problem. We believe that given the embedded nature of child behavior within the family context (along with the gradual shift from dependence to autonomy) in the first years of life, it is important to locate impairment not only within the very young child (i.e., as evidenced by failure to acquire developmentally expected competencies) but also within the family context, as evidenced by parental distress or a child's needs interfering with the parent's ability to maintain family routines (e.g., eating together as a family in a restaurant), household activities (e.g., making a phone call to family members or friends), or employment (e.g., stopping work or changing work settings because of difficulty obtaining appropriate child care). From a developmental perspective, therefore, it is important to evaluate the individual child's functioning as well as family functioning in determining level of impairment in the first few years.

Given the very small numbers of infants, toddlers, and preschoolers who are identified as having social-emotional and behavioral disturbances relative to the large number of children who enter school with significant mental health impairment, it is critical to enhance early identification and to develop new strategies to assess impairment and risk such that targeted interventions can be effectively employed to minimize suffering for very young children and their families and to decrease the number of children who, due to behavioral and social-emotional concerns, enter school without the necessary skills to adapt to the demands of the classroom setting.

7. *Next steps in diagnostic nosologies for very young children.* There is continued controversy about whether an independent diagnostic nosology is required for infants and toddlers or whether a downward extension or adaptation will be sufficient. It is important to place this controversy within the broader context of the growing debate concerning core issues of the validity of nosology of adult psychiatric disorders, which poses a unique challenge to the relatively new and emergent field of infant and young child mental health assessment. On the one hand, we appreciate the clinical utility of more seasoned older child, adolescent, and adult diagnostic approaches as vitally important, particularly as they allow for increased and effective communication for focused intervention. The success of the downward extension approach within the field of autism is evidence of the utility of this approach. On the other hand, mounting scientific criticism concerning central issues of validity, particularly for this young population, reinforces attempts to develop and utilize distinctive, theoretically derived, and empirically based diagnostic approaches for young children that address the greater role of relationship, temperamental, and regulatory influences. For this young field to develop more fully, we need to identify lessons learned from previous historic attempts at psychiatric nosology as well as to understand the unique conceptual contributions of the infant and young child assessment field. In so doing, we may not only provide fresh, developmentally based perspectives that can address the difficult questions of how to incorporate context, including relationships and culture, in the assessment and treatment of disorders in young children, but we may also have something to offer the broader scientific debate about psychiatric diagnosis in older children and adults.

ABOUT THE WORK REPRESENTED IN THIS VOLUME

For the chapters in this book, we include mostly work funded by the National Institute of Mental Health (NIMH). Therefore, most of the work presented here has undergone the scrutiny of the peer review system within NIMH as well as expert review when the proposal was submitted to Oxford University Press and again when the chapters were finalized for publication. Though

the field is young and some instruments still are not yet well utilized, researchers are making rapid advances in this important area. This is reflected in the increased number of applications submitted and funded by NIMH for diagnostic assessment in young children. We believe that the work presented here is state of the art in terms of both methodological and conceptual advances.

This book was written with several potential readers in mind. First, researchers concerned with advancing diagnostic assessment for infants and young children may use it as a review and a resource. Second, it is intended for professionals conducting clinical work with infants and young children, to bring to them empirically based approaches to identifying and assessing problems. Third, the book is for those in advanced training including psychiatry fellows, child psychiatrists, clinical psychology interns, and advanced students.

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We hope that the following chapters inform the future development of valid diagnostic approaches and lead to research advances in our understanding of the role of parenting and cultural context, regulatory functioning, and impairment in the assessment of mental disorders in infants and young children. More broadly, our hopes for this volume are that it may integrate empirical findings, introduce fresh concepts, and stimulate a rich, generative discussion that advances not only the field of young child assessment but mental health nosology more generally.

Contents

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Contributors

Thomas M. Achenbach, PhD, Department of Psychiatry, University of Vermont

Thomas F. Anders, MD, Department of Psychiatry, University of California, Davis

Adrian Angold, MD, Center for Developmental Epidemiology, Duke University Medical Center

Kathyrn E. Barnard, PhD, Department of Psychology, University of Washington

Jeanne Brooks-Gunn, PhD, Center for Young Children and Families, Teachers College, Columbia University

Alice S. Carter, PhD, University of Massachusetts, Boston, Department of Psychology

Anil Chacko, BA, Center for Children and Families, University of Buffalo

Irene Chatoor, MD, Department of Psychiatry, Children's National Medical Center, Washington, DC

Katarzyna Chawarska, PhD, Yale Child Study Center, Yale University School of Medicine

Michelle Christensen, PhD, University of Colorado Health Sciences Center, Division of American Indian and Alaska Native Programs

Roseanne Clark, PhD, Department of Psychiatry, University of Wisconsin Medical School

Barbara Danis, PhD, Preschool Behavior Problems Clinic, Department of Psychiatry, University of Chicago

Rebecca DelCarmen-Wiggins, PhD, Developmental Psychopathology and Prevention Research Branch, Division of Mental Disorders, Behavioral Research, and AIDS, National Institute of Mental Health

Helen Link Egger, MD, Developmental Epidemiology Center, Division of Child and Adolescent Psychiatry, Duke University Medical Center

Robert Emde, MD, Health Science Center, University of Colorado

Ruth Feldman, PhD, Department of Psychology, Bar-Ilan University

Candace Fleming, PhD, American Indian and Alaska Native Programs, University of Colorado Health Sciences Center

Nathan A. Fox, PhD, Department of Human Development, University of Maryland

Kathleen Cranley Gallagher, PhD, Early Childhood Intervention and Family Studies, University of North Carolina, Chapel Hill

Jody Ganiban, PhD, Department of Psychology, George Washington University

Walter S. Gilliam, PhD, Yale University Child Study Center

Beth L. Goodlin-Jones, PhD, Department of Psychiatry and Behavioral Sciences, University of California, Davis, School of Medicine

Magdalena Hernandez, Center of Children and Families, Columbia University

Lynne C. Huffman, MD, Department of Pediatrics and The Children's Mental Health Council, Stanford University School of Medicine

Miri Keren, MD, Geha Mental Health Center, Tel-Aviv University

Ami Klin, PhD, Yale Child Study Center, Yale University School of Medicine

Alicia F. Lieberman, PhD, Infant-Parent Program, San Francisco General Hospital

Joan L. Luby, MD, Department of Psychiatry, Washington University School of Medicine

Linda C. Mayes, MD, Yale Child Study Center, Yale University School of Medicine

Lisa A. McCabe, PhD, Cornell Early Childhood Program, Cornell University

Susan C. McDonough, PhD, School of Social Work, University of Michigan

Lucy Jane Miller, PhD, Department of Rehabilitation Medicine and Pediatrics, University of Colorado Health Sciences Center

Debra Moulton, PhD, Sensory Processing Research and Treatment (STAR) Center, Children's Hospital, Denver

Mary Nichols, PhD, Children's Health Council, Palo Alto, California

William E. Pelham, Jr., PhD, Center for Children and Families, State University of New York at Buffalo

Cindy P. Polak, BS, Department of Human Development, University of Maryland

Pia Rebello-Britto, PhD, National Center for Children and Families, Teachers College, Columbia University

Leslie A. Rescorla, PhD, Bryn Mawr College

JoAnn Robinson, PhD, Prevention Research Center, Denver

Emily Rubin, MS, CCC-SLP, Yale Child Study Center, Yale University School of Medicine and Communication Crossroads

Arnold Sameroff, PhD, Center for Human Growth and Development, University of Michigan

Michael S. Scheeringa, MD, Department of Psychiatry and Neurology, Tulane University Medical Center

Ronald Seifer, PhD, Bradley Hospital, Brown University

Cynthia A. Stifter, PhD, Department of Human Development and Family Studies, The Pennsylvania State University

Audrey Tluczek, PhD, Department of Psychiatry, University of Wisconsin Medical School and School of Nursing, Madison

Fred Volkmar, MD, Yale Child Study Center, Yale University School of Medicine

Lauren S. Wakschlag, PhD, Preschool Behavior Problems Clinic, Department of Psychiatry, University of Chicago

Susan L. Warren, MD, Center for Family Research, George Washington University

Serena Wieder, PhD, International Council of Developmental and Learning Disorders, Washington, DC

Crystal N. Wiggins, MS, Department of Psychology, The Pennsylvania State University

Brian T. Wymbs, MA, Center for Children and Families, State University of New York at Buffalo

Marina Zelenko, MD, Child and Adolescent Services, Kaiser Permanente Medical Center, Santa Clara, California

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1

Introduction

It is now widely recognized that the signs and symptoms of social, emotional, and behavioral disorders are apparent and measurable as early as infancy and toddlerhood, and that an early age of onset, without intervention, may have important clinical implications concerning prognosis. The prevalence estimates for mental health problems in young children are substantial and similar to those for older children, roughly 17 to 20%. Helping infants and very young children, along with their parents, overcome these early difficulties offers the compelling possibility of derailing disorders before they become entrenched and possibly treatment resistant. A mounting empirical literature suggests that early, appropriate intervention, possibly capitalizing on the neuroplasticity of the young brain, can achieve better outcomes than treatment commencing in the later years. In order to provide appropriate treatment or early intervention that is tailored to specific problems, valid and reliable diagnostic assessment tools for infants and young children are required.

Despite the growing consensus on the importance of early intervention, diagnostic assessment of psychopathology in infants and young children lags far behind work with older children and adults. The lack of readily available tools to assess mental health disturbances in the very early years has interfered with referrals to and the development of intervention services for children and families who are suffering. Researchers (for example, Angold and Egger, chapter 7) studying the assessment of disorders in infants and young children have suggested that their field is 30 years behind work with older children. Reasons for this lag include the following: (1) a general reliance on the pediatric adage, "It is just a stage; the child will grow out of it"; (2) an emphasis on treating severe symptoms; and (3) focusing on the here and now rather than viewing problems from a more developmental perspective with an emphasis on prevention.

This book is designed to address that gap. In particular, its purpose is to bridge clinical work and research and to advance research in the following areas:

- Developmentally and empirically based approaches to identifying and assessing disorders in infants and young children

- Validity of current diagnostic criteria for disorders that emerge during the infant, toddler, and preschool years
- New criteria or conceptualizations of dysfunction in the early years
- Ways to incorporate parental and cultural context into the assessment process
- The role of regulatory functioning in psychopathology in infants and young children
- The issue of impairment in making recommendations for assessment in infants and young children

Recently, methodologically sound research on the diagnostic assessment of disorders in early childhood has begun. Although preliminary, it provides a useful base for both young child clinical researchers and for practitioners. For example, in the last few years the National Institutes of Mental Health has funded studies examining the validity of diagnostic criteria across a variety of disorders in the preschool years, such as affective disorders, PTSD, and ADHD. Studies examining promising new assessment tools and instruments in this area have also been funded. Diagnostic interview scales, parent rating scales, and observational approaches are being successfully employed in the assessment of socioemotional functioning, emotion regulation, and clinical disorders in the early years. There is also preliminary evidence that incorporating relational assessments and impairment can increase the validity of our diagnostic work with young children.

As they look toward the future and begin to assess developmentally appropriate diagnostic approaches, researchers in the young child area are encouraged by the growing consensus in this field concerning the importance of relationship and cultural contexts, regulation, and impairment in understanding and assessing early problems.

ORGANIZATION OF THIS VOLUME

This book is arranged in seven parts. The first part includes three chapters highlighting the important aspects of a contextual assessment: development, culture, relationship, and ecology. The second part addresses the role of individual differences in temperament and regulation in assessing disorders in infants and young children. The third part examines the broader conceptual issues involved in diagnostic assessment in young children. The fourth addresses methodological issues involved in observation and developmental assessment. The fifth addresses problems in early state regulation, development, and disorders with an onset in infancy and toddlerhood. The sixth part contains chapters that focus on assessment of specific major disorders commonly seen in clinical practice with preschoolers. The goal of this substantial part is to advance diagnostic criteria of various disorders in preschool children. Each of the chapters in this important disorder-focused part is based on NIMH-funded work. The final part addresses applied issues and measurement across a variety of settings including community-based, primary care, and preschool/Head Start settings.

Our goals for this volume are to disseminate the empirical findings and promising conceptual models on assessment of mental disorders in infancy and early childhood, to bridge research and clinical work on early assessment, and to generate increased linkages among specialists working in different areas within the field to advance science. We hope that you will find the following chapters conceptually stimulating and clinically useful in your own assessment work with infants, toddlers, and preschoolers.

I

CONTEXTUAL FACTORS IN EARLY ASSESSMENT

For the infant or young child who has not yet achieved autonomy or self-regulation, emotional and behavioral patterns are inextricably woven into the immediate relationship context. Our appreciation of this relationship context has grown out of the many theories, traditions, and perspectives central to developmental psychopathology, including attachment, ethology, psychodynamic, family systems, and transactional ecological theories. As we continue to advance in our understanding of how contextual factors influence development, the parenting or caregiving context (at least for very young children) continues to emerge as a central construct.

In a groundbreaking chapter that addresses the role of culture in assessment, Michelle Christensen, Robert Emde, and Candace Fleming present an outline of eight defining features of culture and its influence. These guidelines provide the framework for their recommended revisions of the Outline for Cultural Formulation in the *DSM-IV*.

An illustrative case example is also presented. Their work not only highlights the importance of culture in assessment, but also makes the linkages between culture and child outcome via the parenting relationship. In discussing the eighth feature of cultural influence, they make the important point that culture is mediated through the parenting relationship. They go on to consider the far-reaching clinical implications of that influence for assessment of infants and young children.

The parental and relationship context in understanding mental health difficulties is now well recognized. Although relationship functioning is highlighted throughout this volume for a variety of mental health issues in young children, how best to include the relationship perspective in assessment practices continues to elude researchers and clinicians. Roseanne Clark, Audrey Tluczek, and Kathleen Cranley Gallagher present a comprehensive approach for incorporating the relationship and parenting context into the process of infant and young child assessment. They review the rich theoretical foundations and empirical support for employing a parent-child relationship paradigm when assessing the mental health of the infant or young child and describe structured clinical evaluation procedures and domains for assessment when evaluating parent-child relational

quality and determining relational diagnoses or attachment classifications. They propose that an assessment of the parent-child relationship should be the centerpiece of an infant/toddler mental health assessment and should consist of both objective observational assessment of parent-child interactions across contexts and a subjective interview assessment of the parent's experience of the child. Clark and colleagues address the importance of involving parents in the process of assessing their relationship with their child and the implications of this collaborative assessment approach for relationally focused treatment and research. The core relationship issues offered in this chapter represent fundamental principles upon which a developmentally based approach to assessment in infant and young child mental health can be successfully built.

Arnold Sameroff, Ronald Seifer, and Susan McDonough have long been proponents of examining the transactional processes that exist between the multiple layers of influence in child development. Given that the infant lives in the context of the family, the neighborhood and community, the peer group, and a variety of caregiving arrangements, they emphasize that it is important to assess all these subsystems of the child's ecology. In their work, they have been examining how environmental risk is predictive of mental health throughout childhood. To increase the specificity of assessment of risk and move toward a greater specification of environmental influence, they present an innovative way to produce and assess multiple-risk scores that are relevant to young children. The authors note the importance of measuring demographic features in any study of risk and raise the question of whether risk scales must be sample specific.

The authors in this introductory section present a number of approaches for integrating contextual factors into assessment procedures. They unanimously note the need for research and clinical approaches to assess the multiple influences on child development, particularly the parental relationship, in assessing infants and young children. Although the perspective is more broadly acknowledged, future research needs to incorporate these core contextual issues and the relationship perspective more systematically. This integration will benefit not only the infant/young child mental health field, but also mental health assessment more generally.

2

Cultural Perspectives for Assessing Infants and Young Children

Michelle Christensen
Robert Emde
Candace Fleming

Culture is acknowledged as a significant factor in the assessment of psychological functioning and treatment of mental disorders (American Psychiatric Association, 1994; American Psychological Association, 1993; U.S. Department of Health and Human Services, 1999). Regarding infant mental health, the *Diagnostic Classification of Mental Health and Developmental Disorders of Infancy and Early Childhood* (DC:0–3; Zero to Three, 1994) states that any intervention or treatment program should include an assessment of family functioning and cultural and community patterns in addition to developmental history, symptoms, and assessment of the child's current functioning.

According to the members of the work group charged with developing the Outline for Cultural Formulation in the *Diagnostic and Statistical Manual of Mental Disorders*, Fourth Edition (*DSM-IV*; American Psychiatric Association, 1994), there has been growing recognition that psychiatric diseases need to be understood not *only* as biological processes, but rather, in the context of an illness experience, which is in part determined by cultural interpretations of the disease (Good, 1996). Kleinman (1988) was one of the first authors to discuss the concepts of disease and illness in this way (Castillo, 1997). By considering disease in the context of an "illness experience," there is an acknowledgment that the experience of disease—that is, its symptoms, its remedy, and so on—is unique to a particular individual who is situated in a particular sociocultural context.

While the inclusion of the Outline for Cultural Formulation in *DSM-IV* has made a significant contribution to the assessment of adult psychological functioning in the context of culture (Manson, 1995), the field of infant mental health assessment has lagged behind (Yamamoto, 1997). This is not surprising, considering the newness of the field and the fact that appreciation of cultural factors in development in general has lagged behind other approaches (Shonkoff & Phillips, 2000; Super & Harkness, 1986). It is also not surprising that the need to understand culture has come increasingly into our awareness, given the changing demographics of the U.S. population. According to the U.S. Census Bureau (2000), minority and foreign-born groups are expected to constitute increasingly large segments of the total U.S. population over the next 50 years, while the current

majority of non-Hispanic Whites is expected to decrease from 72% of the total population in 1999 to 53% in 2050.

Despite current acknowledgment of the importance of culture in our work as psychologists, psychiatrists, and other mental health providers, the concept of culture has remained abstract and therefore difficult to apply in real-world situations. Certain advances, such as the inclusion of a cultural case formulation in Appendix I of *DSM-IV*, are conducive to making culture a more routine element in the assessment, diagnostic, and treatment process. However, as Garcia Coll and Magnuson (2000) highlight, academicians and clinicians alike have had what they call an uneasy relationship with culture as it influences the lives and well-being of young children. In this chapter, our goal is to discuss the relevance of culture for, and the influence of culture on, infant mental health and, more important, to provide a practical framework to aid in the oftentimes ambiguous task of taking culture into account in the assessment of young children's psychological functioning.

CULTURAL DEFINITION AND INFLUENCE: EIGHT GENERAL FEATURES THAT FORM A BACKGROUND FOR ASSESSMENT

Culture can be defined as meaning that is shared by a group of people. These shared values, assumptions, beliefs, and practices are transmitted across generations and are brought to life through the daily behavior and interactions of people within a group. Culture supports early development in varied ways, most often operating silently in the background through the mediation of parenting. The supportive aspects of culture are often not appreciated by clinicians, who typically become aware of cultural influences among peoples when they see differences (e.g., in practices, behavior, etc.) from their own cultural expectations. In addition to reviewing the particulars of cultural difference that contribute to development, we believe it is useful to identify some general features about cultural definition and influence.

Culture as Shared Meaning

First, it is useful to distinguish culture—as shared values, beliefs, and practices among members of a group—from the terms *ethnicity*, *race*, and *minority status*. Ethnicity refers to an identity that is assumed, and to some extent chosen, by individuals within a group (Lewis, 2000). Race, although there is controversy over the current usefulness of this term, generally refers to the genetically influenced physical appearance of individuals, while minority status is a descriptive population term often invoked for considerations of social policy. Following others, we advocate that culture is especially important to include in the assessment and treatment process (Betancourt & Lopez, 1993; Garcia Coll & Magnuson, 2000).

Culture Occurs in an Ecology

Second, culture occurs in a setting. As such, it is useful to bear in mind that culture not only occurs in an ecology but also contains adaptations to it. The importance of setting or ecology for culture, and its influence on human development, has been conceptualized in some detail by Bronfenbrenner (1977, 1979) and by Sameroff and Fiese (2000) and given instantiation in the separate studies of rural African caregiving practices by Super and Harkness (1982, 1986) and by LeVine and colleagues (1994). For example, infants' sleeping and feeding patterns are apt to be shorter but more frequent in a context where mothers engage in culturally supported daily routines that include the continuous carrying of their infants on their backs to soothe and quiet them. Similarly, the environmental demands of work for mothers in rural Africa, along with culturally derived expectations for childbearing and the availability of large family networks, are apt to be associated with routines in which infants and toddlers are cared for by siblings who are not much older. Thus, customs of child care such as how infants are carried and the type and amount of supervision infants receive are governed by assumptions about development espoused by cultures in particular environmental contexts (Harkness & Super, 1996). Furthermore, as Lewis (2000) points out, customs of child care influenced by

setting also include the ways in which parents respond to infant cues, determinations about the amount and type of stimulation (tactile, verbal, and social) an infant should receive, routines of infant care, and the teaching of skills valued in a particular culture (e.g., smiling, vocalizing, and play).

Culture Is Transactional

Third, culture is dynamic and transactional. Evolving history, with its changing norms, roles, and values, contributes to the dynamic and transactional nature of culture. Moreover, shared meaning changes in the midst of adaptations to technology, influences from other cultural groups, and influences from developing individuals. These factors represent important transactional processes in which culture is both influencing settings and people and is itself being influenced and changed.

Culture Is Experienced Subjectively

Fourth, culture is experienced subjectively by individuals. More specifically, culture guides early development by means of subjective experiences that are shared, that is, *intersubjectively* experienced, especially between caregivers and children (Stern, 1985). Culture not only influences the physical setting and context for parents and young children but also influences attitudes, expectations, and perceptions of safety and appropriate behavior. Parents share meaning in an intuitive manner with their children as they engage them in everyday learning activities. But parents also share meaning in such activities (i.e., engagement in intersubjectivity) in a special way. Contemporary thinking in the field of child development, following Vygotsky (1978), portrays the parent as providing a psychological scaffolding for the child's learning, pulling the child forward in development according to what is sensed as appropriate in a "zone of proximal development." There is an active process of "guided participation" or "apprenticeship" between adult and child, as Rogoff (1990) puts it. That such a process is reflective of cultural support and variation is indicated by the work of Rogoff, Mistry, Goncu, and Mosier (1993), who observed mothers and their toddlers in a rural Mayan village of Guatemala (San Pedro) and in an urban city of the United States (Salt Lake City, Utah). Guided participation of mothers in San Pedro occurred in a courtyard setting with a number of mothers watching a number of toddlers as mothers engaged in weaving and other tasks. While mothers in this setting provided fewer vocabulary lessons to their children and engaged in less praise than did mothers in Salt Lake City, San Pedro mothers were more available and ready to help any of the children, as opposed to just their own, if there were concerns of safety. Rogoff and Mosier (1993) interpreted these differences to be part of a more general cultural respect for autonomy in learning under these particular circumstances in San Pedro as well as more of an orientation to interdependence among San Pedro mothers (also see discussion in Emde & Spicer, 2000).

Culture Operates Silently and With Voices

Fifth, culture operates silently as well as with voices. Rather than being obvious or talked about, much of cultural influence involves procedural knowledge and mental activity. We have come to understand the importance of procedural knowledge as the form of knowledge that refers to information underlying a skill or set of behaviors but that does not need to be represented in conscious awareness in order for the skill or behavior to be exercised (Clyman, 1991; Cohen & Squire, 1980). Knowledge organized procedurally contrasts with knowledge that can be accessed in awareness via processes of recognition or recall (usually referred to as *declarative knowledge*). Most rules that guide behavior in everyday circumstances have been learned in the course of development through many participatory experiences and are organized procedurally. Common examples include the rules of grammar of a learned first language and the many rules that guide basic moral conduct such as turn taking and reciprocity in social interactions (Emde, Biringen, Clyman, & Oppenheim, 1991). Thus, while some knowledge about one's culture can be talked about and can be accessed consciously and declaratively, for

example in interviews, much culturally guided knowledge exerts its influence through internalized rules that govern routines and social interactions, silently, without reflection and without awareness. Anthropologists have long known that participant observation and immersion in a culture—often by someone from outside the culture—are needed to supplement interviews of key informants in order to access this form of knowledge. In a similar vein, anthropologists have known that cultural models contain rules that regulate behavior through values, attitudes, and beliefs that are largely assumed by members of a particular group, rather than being explicit or formalized (D'Andrade, 1992; Weisner, Matheson, & Bernheimer, 1996).

The cultural construct *amae*, introduced by Takeo Doi (1973, 1992), illustrates the above point. Amae refers to a form of intimacy in Japanese culture that is pervasive and typically operates outside of conscious awareness. It involves procedures wherein one monitors the feelings and sensitivities of another according to what feels right. While a prototypic form of amae is particularly prominent in the mother-infant relationship, it describes a process of behavioral organization that is motivational throughout life, guiding actions in many social circumstances, most notably when caring is involved (Doi, 1992; Emde, 1992). Amae carries with it a sense of dependency, reciprocity, and obligation, and, according to Doi, it operates "sweetly." Processes of amae guide a good deal of what outsiders see as the routines of courtesy, generosity, and mutuality in Japanese social interactions. Again we are reminded that much of Eastern cultural practice has emphasized mutuality in development and the overlapping connections between the person and the other, whereas much of Western practice and thought, in contrast, has tended to emphasize individuality in development and the separability of the person and the other. Interestingly, recent concepts from infancy research have emphasized the development of mutuality and connectedness as well (e.g., Emde et al., 1991; Sroufe, 1995; Stern, 1985). Clinical implications of amae for assessment have been discussed in a special section of Volume 13, Number 1 of the *Infant Mental Health Journal* (1992, pp. 4–42).

Culture Provides a View of Reality and Experience

Sixth, culture provides multiple views of reality and the world. In addition to everyday reality, most cultures support a variety of spiritual experiences that often contain alternative views of reality. These may be important for understanding variations in health behaviors in families with young children (e.g., related to diet, exercise, provisions for safety, and protections from toxins and abusive substances) as well as for understanding variations in opportunities for social connectedness and support. Thus, for example, Native American parents who participate in sweat lodges, ritual dancing, and related spiritual affirmation experiences may be protected from the risk of substance abuse, and hence may be more available for caring activities with their infants and toddlers. Similarly, Latino parents who participate in organized religious activities or other alternate belief systems about protection from evil spirits, curses, or illness may find support and benefit. The forms of play and types of stories that parents tell young children within a given culture also allow for alternative views of reality and, to varying degrees, allow for important "intermediate zones of experience" (Winnicott, 1971) in which child and parent can try out different cultural views, values, and worlds of belief and "make believe."

Cultural influences on general views of the world may also be important in clinical assessment of families with young children. That such influences may change in relation to time and context may make such assessments challenging but no less important. We can illustrate using a cultural dimension for guiding development already discussed, namely the view of individuality versus social connectedness or, in other words, the view of self in relation to others. Although Western views of self have typically been described as "self-contained" (Sampson, 1988) and "self-reliant" (Spence, 1985) in contrast to Eastern views of self as more other oriented (Doi, 1973; Shweder, 1991), there is now substantial appreciation in the West of the self as connected, social, and dialogical (Gilligan, 1982; Hermans, Kempen, & van Loon, 1992; Sampson, 1988).

Moreover, as one might expect, within North America there is now appreciation of significant variations on this cultural dimension. Many Latino families, for example, may feel that maintaining a network of family connections and respect is more important than personal achievement (Falicov, 1998). In a related vein, families also differ on cultural beliefs and practices concerning infant sleeping arrangements. Wolf, Lozoff, Latz, and Paludetto (1996) found that cultural differences in cosleeping practices were connected to different values about autonomy, independence, and interrelatedness. Japanese, Italian, and African American families were found to cosleep with their infants more regularly than a U.S. White sample, with the former groups emphasizing the importance of the child learning a sense of interdependence in family and other relationships in contrast to an emphasis on autonomy.

Culture Influences Expressions of Distress

Seventh, culture influences the ways individuals express distress and difficulty. The current version of the *Diagnostic and Statistical Manual of Mental Disorders* takes this aspect of culture into account by including a glossary of culture-bound syndromes. Descriptively, many of these syndromes involve the dysregulation of emotions and seem to be supported by cultural forms of belief in the power of strong emotions, such as in the syndrome of *ataques de nervios* in Puerto Rican and related groups. Expressions of grief and depression in some cultures (e.g., Asian) may occur in somatic forms such as gastrointestinal disturbances rather than emotional forms such as crying or mood changes (Kleinman & Good, 1986; Kleinman & Kleinman, 1986).

Culture Is Mediated Through the Parenting Relationship

The eighth general feature of cultural influence is at the center of clinical assessment. This feature acknowledges that in early development, culture is mediated through the parenting relationship. All of the above-mentioned influences occur via parenting. Moreover, the field of infant mental health makes explicit that understanding the caregiving relationship and evaluating its qualities and variations is essential for the prevention and treatment of disorder (Fraiberg, 1980; Fraiberg, Adelson, & Shapiro, 1975; Sameroff & Emde, 1989; Shonkoff & Phillips, 2000; Zero to Three, 1994). We have mentioned how cultural influences result in parent-mediated variations in infant feeding, sleeping, security, and soothing. We have also mentioned how cultural influences result in parent-mediated variations in closeness inclinations, caring practices, feeling states, and what is communicated. Next we consider some of these matters in terms of clinical assessment.

CURRENT INTEGRATION OF CULTURE AND CLINICAL ASSESSMENT

The Relationship Context

Perhaps more than in any other field of assessment, the assessment of infant mental health acknowledges the inextricability of the individual from the context in which he or she functions, placing a central focus on evaluating the parenting relationship. The relationship context as a focus for assessment has dual origins. One origin is clinical experience. It finds itself echoed in the oft-repeated clinical phrase of Winnicott (1971) "there is no such thing as a baby" (i.e., there is only baby with mother) and in the equally famous phrases of Fraiberg of "ghosts in the nursery" (Fraiberg et al., 1975) (characterizing the haunting effects of conflicted internalized relationships across generations) and "it's like having God on your side" (1980, p. 53) (when working in parent-infant psychotherapy while benefiting from seeing the rapid development of the infant). This clinical tradition of infant mental health has led, in a relatively short time, to the creation of parent-infant psychotherapy with both psychodynamic/systems approaches (Lieberman, Silverman, & Pawl, 2000) and interaction guidance/educational approaches (McDonough, 1995, 2000). Another origin of the focus on early relationships is the developmental sciences and considerations of mental disorder in infancy and early childhood.

A multidisciplinary study group of scientists and clinicians proposed that, based on current knowledge, all mental disorder in the earliest years should be evaluated and treated in the context of evaluating caregiving relationships (Sameroff & Emde, 1989). The task group proposed a scheme of relationship disturbances and disorder, which then became influential in the formation of a separately designated axis for this purpose later included in the new diagnostic classification system for ages 0–3 (see next section).

Cultural variation in the caregiving relationship is therefore a logical topic for us to consider in assessment. Before moving to our suggestions in this area, however, and specifically to our proposed modifications of the cultural formulation as it currently exists in *DSM-IV*, it is important to review our thoughts about diagnosis as a process and the schemes that are available in the current diagnostic classification systems.

The Diagnostic Process

It is useful to recognize that the diagnostic process consists of two aspects: (1) assessment of individuals and (2) classification of disorder. The assessment of individuals involves a variety of evaluations of symptoms, suffering, and functioning, and it is considered within the context of family relationships, culture, and stresses that are both biological and environmental. The classification of disorder, on the other hand, involves a way of ordering knowledge about symptom patterns and linking these patterns to what is known in general about etiology, prognosis, and treatment. Disorder classification may also provide a link to services. In other words, such classification allows for communication among professionals about general knowledge, and it is important to remind ourselves that we classify disorders, not individuals (Rutter & Gould, 1985).

The *DSM-IV* is used primarily for classification of disorder. It is also, however, a multiaxial system, with the first three axes dealing with disorder and the fourth and fifth axes dealing with individual assessment (psychosocial and environmental problems and global assessment of functioning). The International Classification of Mental and Behavioral Disorders (ICD-10; World Health Organization, 1992) is also multiaxial and similar in many respects to *DSM-IV*.[1] Both systems have evolved from initially being concerned with classification only to adding axes dealing with the assessment of individuals. It is therefore noteworthy that both systems, by being multiaxial in this way, have evolved to provide a guideline for clinical formulation. In the applications of *DSM-IV*, Axes IV and V have received little attention—although there are indications that in future schemes, increased attention will be paid to the assessment of stressors, adaptive functioning, and the degree of impairment. Along these lines, a substantial innovation of *DSM-IV*, in contrast to earlier *DSM* schemes, is the inclusion of an appendix suggesting a cultural formulation for assessment of disorder within individuals. The appendix includes an emphasis on assessing adaptive functioning, stressors, symptoms, and impairment in culturally relevant terms. Although not designed for children (let alone for early childhood), the formulation is appropriate for assessment of parents and is worth reviewing, prior to our suggested modifications.

The *DSM-IV* Approach

The Outline for Cultural Formulation consists of two parts. The first concerns individual assessment and contains a guideline for inquiry that highlights four areas: (1) cultural identity of the individual; (2) cultural explanations of the individual's illness; (3) cultural factors related to the psychosocial environment and levels of functioning; and (4) cultural elements of the relationship between the individual and the clinician. In addition to learning about the individual's cultural reference group and language use, it is important to understand the predominant idioms of distress, explanatory models for illness, and culturally relevant perceptions of social stressors, available supports, sources of care and interpretations of disability. The cultural formulation also acknowledges that differences in culture and social status between clinician and client can introduce challenges for diagnosis and treatment and therefore implicitly recommends that the clinician reflect on this in terms of awareness of his or her own cultural origins and perceptions. In such cases of

cultural difference between staff and clients, we recommend the use of cultural sensitivity discussions and workshops to supplement reflective supervision.

The second part of the appendix on cultural formulation makes suggestions for classification, by supplementing the regular *DSM-IV* disorders with a glossary of what are referred to as culture-bound syndromes. The term *culture-bound syndrome* is intended to refer to patterns of "locality-specific patterns of aberrant behavior and troubling experience" (American Psychiatric Association, 1994, p. 844) that often have local names and connote localized meanings of importance. The appendix points out that some of the syndromes may seem exotic or strange but that there are many subcultures and widely diverse immigrant groups in North America and that the glossary documents syndromes and idioms of distress that may be encountered in clinical practice among these groups.

Cultural Formulations With Children

As mentioned, the *DSM-IV* cultural formulation is clearly aimed at the assessment of adult functioning. As we move to a consideration of children, other schemes are important to review, as they pertain to context and culture. The DC:0–3 was developed in response to the need for classification of syndromes experienced in the early years that were not covered in the existing *DSM* system. Similar to the *DSM* scheme, it is multiaxial, with the first three axes dealing with classification of disorder and the fourth and fifth axes dealing with individual assessment (psychosocial stressors and functional emotional and developmental level). Axis I of DC:0–3 contains an array of regulatory and other disorders that represent particular syndromes for this age period. Axis II is innovative in classification and deals with relationship disorders between caregiver and child. That Axis II in DC:0–3 is useful is clearly indicated by a number of reports of trials which indicate that a substantial number of referrals are classified within this axis in a way that is meaningful for provision of services (Guedeney et al., 2003; Keren, Feldman, & Tyano, 2001). In setting forth a relationship disorder axis, DC:0–3 targets the evaluation of the child-caregiver relationship as central and goes a step further than *DSM-IV* in assessing context in that sense, but it does not provide a cultural formulation or guide for assessing cultural context.

Two contributions offer suggestions for cultural assessments of children. Novins et al. (1997) suggest adaptations to the *DSM-IV* cultural case formulation for use with culturally diverse children and adolescents. Additions to the *DSM-IV* outline are exemplified with four American Indian children (ages 6 years and older). Novins et al. suggest accounting for the developmental aspects of cultural identity, the cultural identity of the parents and/or other caregivers, the impact of a biracial heritage, and cultural aspects of the relationship between the parents and/or other caregivers and the therapist. In another effort to promote culturally relevant assessment of children and adolescents, Johnson-Powell (1997) proposes a "culturologic interview," and includes the following: country of origin, reason for migration, language use, kinship support, beliefs about causality, child-rearing practices, sex roles, a description of community, life, and home space, reasons for seeking help, description of help-seeking behavior, educational attainment, occupation, experiences with rejection, degree of acculturation, and degree of cultural conflict.

While Johnson-Powell's culturologic interview and Novins et al.'s adaptations to the *DSM-IV* Outline for Cultural Formulation offer useful starting points, both remain limited in their utility for use in clinical practice with infants and toddlers; the former by its lack of detail (as in the *DSM-IV* outline) and the latter because of its lack of attention to issues relevant to infancy and toddlerhood. Considering both the promise and the limitations of existing systems, we propose an outline that represents modifications to the *DSM-IV* outline, which extends features proposed by Novins et al. (1997) and Johnson-Powell (1997). As with the *DSM-IV* outline, its purpose is to provide a framework that will guide both the collection and structuring of culturally relevant information so that an assessment of infant and toddler mental health can be culturally situated, relevant, and useful.

A CULTURAL ASSESSMENT FRAMEWORK FOR USE WITH INFANTS AND TODDLERS

To date, we have no knowledge about the extent to which the existing *DSM-IV* Outline for Cultural Formulation is routinely implemented by clinicians. However, we regard it as a useful guideline to frame clinicians' thinking about culture and assessment. In this spirit, we present our proposed revision to the *DSM-IV* Outline for Cultural Formulation (see table 2.1) for use with infants and toddlers.

Proposed Revision to *DSM-IV*

Our revision heavily reflects the eighth general feature of cultural influence discussed previously—that culture is mediated through the parenting relationship. In general, we conceive of this revision as both an extension of previous work and also the beginning of an effort to make cultural assessment a formal part of current diagnostic schemes for infancy and early childhood (e.g., DC:0–3). As is implicit in current multiaxial schemes, we also view this revised formulation as a helpful guideline for clinical inquiry and formulation. Following a discussion of our proposed revisions, we conclude with a case example, utilizing the revised outline.

The *DSM-IV* Outline for Cultural Formulation contains five areas for inquiry, as mentioned previously. The first directs the clinician to describe the individual's cultural identity, noting the individual's ethnic or cultural reference group and the extent to which the individual is involved with both the culture of origin and the dominant culture. The individual's language ability, use, and preference are also noted here. For infants and toddlers, the parents' cultural reference group and degree of involvement with host and dominant culture can be noted. More important, the parents' intentions for raising the child with respect to the culture of origin and the dominant culture are discussed. Following Novins et al. (1997), we suggest including, where relevant, a discussion of issues of biculturality that may arise for an infant or toddler whose parents come from, and identify with, different cultural backgrounds. Finally, we suggest a discussion of generational issues, such as those that might arise as the infant or toddler grows older and may serve as a cultural mediator or negotiator for the parents (e.g., in terms of language, especially for immigrant groups).

The second area outlined in the *DSM-IV* Cultural Formulation addresses cultural explanations of an individual's illness. The unique ways in which the individual expresses distress are noted here, along with a discussion of how the symptomatic expression compares to normative behavior in the cultural reference group. Any cultural explanations for the individual's experience of distress are discussed, as well as the individual's past experience with and current preferences for care. For infants and toddlers, we suggest beginning with a discussion of who first noticed the child's symptoms of distress (e.g., the parents or someone outside the family, such as a doctor or day care provider) and the extent to which the parents or caregivers agree that the child's behavior is indicative of distress. This may be especially important in terms of help-seeking behavior, because if the parents do not also see a problem, they will be less motivated to seek services for their child. Following this can be a discussion of the parents' perceptions of the child's distress, how the child's behavior is viewed relative to other children's behavior in their cultural group, any cultural explanations for the child's distress, and the parents' experiences with and preferences for treatment. The extent to which others are expected to be involved in treatment can also be noted, acknowledging that for certain cultural groups, children are frequently cared for by an extended network of kin.

The third area outlined by the *DSM-IV* Cultural Formulation addresses cultural factors in the psychosocial environment that impact the expression, experience, and treatment of distress and disorder. Our suggested revision for this part of the outline is the most extensive and the most heavily influenced by our view that culture is mediated through the parenting relationship for infants and toddlers. In this section, we suggest addressing three domains: the child's life space and environment, the child's caregiving network, and parental beliefs about parenting and child development. The child's life space and environment refers largely to his or her physical life space in both the home and the larger community. This

Table 2.1 ***DSM-IV*** **Outline for Cultural Formulation Text and Revised Text for Use With Infants and Toddlers**

1. ***Cultural Identity of the Individual***

   Current *DSM-IV* Text

   "Note the individual's ethnic or cultural reference groups. For immigrants and ethnic minorities, note separately the degree of involvement with both the culture of origin and the host culture (where applicable). Also note language abilities, use and preference (including multilingualism)" (o, 843).

   Proposed Revised Text

   Cultural Identity of Child and Caregivers. Note the ethnic or cultural reference group for the child's parents and, if relevant, other significant caregivers. Note how the parents/caregivers intend to raise the child with respect to their own ethnic or cultural reference group and, in particular, whether there are potential issues of biculturality for the child. For immigrants and ethnic minority families, note the degree of involvement with both the culture of origin and the host culture, and whether they anticipate any generational issues with respect to the involvement of the child in the culture of origin and host culture. Note here parent/caregiver language abilities, use, and preference (including multilingualism) and what language(s) they intent to teach the child.

2. ***Cultural Explanations of the Individual's Illness***

   Current *DSM-IV* Text

   "The following may be identified: the predominant idioms of distress through which symptoms or the need for social support are communicated (e.g., "nerves," possessing spirits, somatic complaints, inexplicable misfortune), the meaning and perceived severity of the individual's symptoms in relation to norms of the cultural reference group, any local illness category used by the individual's family and community to identify the condition (see "Glossary of Culture-Bound Syndromes" below), the perceived causes or explanatory models that the individual and the reference group use to explain the illness, and current preferences for and past experiences with professional and popular sources of care" (p. 843).

   Proposed Revised Text

   Cultural Explanations of the Child's Presenting Problem. Note here who first noticed the problem (e.g., parent, other relative, daycare provider, physician), and if referred by someone else, the extent to which the parents/caregivers also see a problem. Identify what the parents/caregivers observed to be the signals of distress displayed by the infant/toddler (i.e., how did the parents/caregivers know there was a problem); the meaning and perceived severity of the infant's distress in relation to the parents'/caregivers' expectations for the behavior and/or development of other infants/toddlers in their community/cultural group; whether there are any local illness categories to describe the child's presenting problem; the parents'/caregivers' perceptions about the cause of, or explanatory models for, the child's presenting problem; and parents'/caregivers/ beliefs about treatment of the child's presenting problem (including previous experiences with Western and non-Western forms of treatment; current beliefs about and preferences for Western and non-Western forms of treatment; and beliefs about who should be involved in the treatment).

3. ***Cultural Factors Related to Psychosocial Environmental and Levels of Functioning***

   Current *DSM-IV* Text

   "Note culturally relevant interpretations of social stressors, available social supports, and levels of functioning and disability. This would include stresses in the local social environment and the role of religion and kin networks in providing emotional, instrumental, and information support" (p. 844).

   Proposed Revised Text

   Cultural Factors Related to the Child's Psychosocial and Caregiving Environment.

   A. Infant's Life Space and Environment. Note description of child's physical life space, including community factors (e.g., ethnic/racial composition, urbanicity, crime, and cohesion) and home factors (e.g., people living in the home, their relationship to one another and the child, and extent of crowding in the home), infant's sleeping arrangements, and parents'/caregivers' culturally relevant interpretations of social supports and stressors (e.g., role of religion, community, and kin networks).

   B. Infant's Caregiving Network. Note here the significant caregivers in the child's life, including the role and extent of involvement of primary (e.g., mother, father) and secondary (e.g., grandparents, siblings, aunts/uncles) caregivers. Note significant continuities and disruptions in the child's caregiving network (e.g., child's mobility between caregivers and the extent to which this mobility is fluid, predictable, and consistent versus the extent to which this mobility is unpredictable, inconsistent, and/or disrupted) and the extent to which these continuities or disruptions are normative within local culture.

(*continued*)

Table 2.1 Continued

C. Parents'/Caregivers' Beliefs About Parenting and Child Development. Note here any beliefs about parenting and child development not noted elsewhere, such as: ceremonial practices (e.g., naming), beliefs about gender roles, disciplinary practices, goals and aspirations for child, cosmological views related to children and child development, sources parents/caregivers turn to for advice about parenting, beliefs about parenting/caregiving role, etc.

4. ***Cultural Elements of the Relationship Between the Individual and the Clinician***

Current *DSM-IV* Text

"Indicate differences in culture and social status between the individual and the clinician and problems that these differences may cause in diagnosis and treatment (e.g., difficulty in communicating in the individual's first language, in eliciting symptoms or understanding their cultural significance, in negotiating an appropriate relationship or level of intimacy, in determining whether a behavior is normative or pathological" (p. 844).

Proposed Revised Text

Cultural Elements of the Relationship Between the Parents/Caregivers and the Clinician. Indicate differences in culture and social status between the child's parents/caregivers and the clinician and any problems these differences may cause in diagnosis and treatment (e.g., differences in understanding the child's distress, communication difficulties due to language differences, communication styles such as issues of privacy or understandings about the involvement of others such as extended kin in the diagnosis and treatment process). Also note how the parents'/caregivers' past experience with clinicians or treatment/service systems impacts the current clinical relationship.

5. ***Overall Cultural Assessment for Diagnosis and Care***

Current *DSM-IV* Text

"The formulation concludes with a discussion of how cultural considerations specifically influence comprehensive diagnosis and care" (p. 844).

Proposed Revised Text

Overall Cultural Assessment for Child's Diagnosis and Care. The formulation concludes with a discussion of how cultural considerations specifically influence comprehensive diagnosis and care of the child.

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includes issues such as individuals in the home and their relationship to one another, and community factors such as racial composition and crime. Parental interpretations of social stress and social support within this physical environment are also addressed here. The child's caregiving network is especially critical for placing the child and his or her distress in context. This domain should inventory the significant caregivers in the child's life, acknowledging, as stated earlier, the importance of the entire network of both kin and nonkin caregivers involved in raising a child. The child's experience within this network of caregivers should also be described—such as the child's mobility within the network, noting in particular both continuities and disruptions within this network of care. The final domain addresses parents'/caregivers' beliefs about parenting and child development not discussed elsewhere—such as any ceremonial practices, beliefs about gender roles, and disciplinary practices. Also noted here are parents' goals and aspirations for their child, which can suggest a positive point for intervention as it provides the clinician with an understanding of potential strengths within the family.

The fourth area outlined by the *DSM-IV* Cultural Formulation address cultural elements of the relationship between the individual and the clinician. Our revision here largely reflects a reframing from the individual perspective to the parents'/caregivers' perspective. In this section, the clinician is directed to identify cultural differences between the clinician and the child's parents that may impede the clinical relationship—because of difficulties in either communication (e.g., language) or understanding (e.g., different interpretations of the child's distress). In addition, once identified, the clinician must reflect on the significance of these differences for diagnosis and treatment of the child. The fifth and final

part of the *DSM-IV* Cultural Formulation calls for an overall cultural assessment for diagnosis and care that is based on the preceding four sections. We made no revision to this section, except to frame the overall assessment in terms of diagnosis and care of the child.

CLINICAL PRESENTATION AND CASE DESCRIPTION

Presented here is a hypothetical case of an American Indian toddler, intended to demonstrate the utility of the cultural formulation presented above.

Background

Reason for Referral

Thomas was a 15-month-old American Indian boy referred for a psychological evaluation by his pediatrician. Thomas was asthmatic and had been seen regularly by the same pediatrician since birth. Thomas's mother brought him in because he was having difficulty sleeping and was increasingly fussy about what he ate. She thought these difficulties might be due to the new medication prescribed by the pediatrician. During the office visit, the pediatrician noted Thomas's lethargy, relative lack of social engagement, and an apparent language delay. Because the pediatrician could not account for the changes in Thomas's sleeping and eating medically, and because of the additional behavioral concerns noted during the office visit, it was recommended that Thomas's mother seek a psychological evaluation for Thomas.

Developmental History

Thomas's mother described a normal pregnancy and birth, without complications. She described, however, feelings of ambivalence about the pregnancy and about the idea of having a third child after her other children were grown and in school. The ambivalence also arose out of the fact that Thomas's father left the family when Thomas's mother became pregnant and that before he left, he had been physically abusive with her. Thomas's mother had just started school and worried that the pregnancy and having an infant to care for would interfere with her progress in school. She considered several options in order to continue school uninterrupted—including having Thomas live with a classmate for a year until she was finished with school, or having Thomas live with relatives on the reservation. She ultimately arranged for subsidized day care through social services.

Since birth, Thomas had spent a great deal of time with his day care provider, who cared for Thomas in her home. Throughout his first year of life, Thomas would spend weeks at a time with his day care provider, without seeing his mother. At most, Thomas would spend weekends with his mother, having spent the entire week, including nights, with the day care provider. Several months prior to the evaluation, Thomas's mother finished school and decided to sharply curtail his time with the day care provider because she not only had more time to spend with him, but because she was also concerned that he was becoming "too attached" to the day care provider and needed to spend more time with his family. The clinician was impressed with the likelihood of attachment problems between Thomas and his mother, and was concerned about the consequences of a disrupted attachment relationship for symptoms of regulation and affect.

Cultural Identity of Child and Caregivers

Thomas's mother was American Indian and had grown up on a Northern Plains reservation. She maintained strong ties with her tribal community. Even though she had moved away ten years previously, she returned to the reservation frequently to visit family and to attend powwows and other community gatherings, such as ceremonies. She enrolled Thomas as a member of her tribe when he was born. She intended to introduce Thomas to his American Indian culture by having him dance at powwows when he was old enough, by having him spend time with extended family on the reservation, and by having a naming ceremony. Thomas's father was Mexican American. Thomas's mother acknowledged his Mexican American heritage by giving Thomas his father's last name, and hoped that one day he would know his father's side of the family and learn

about his Mexican heritage. Thomas's mother spoke English as her first language but knew some of her tribal language and would occasionally speak to Thomas in their native language. She hoped that Thomas would learn more of the tribal language than she had, by spending time with family elders on the reservation.

Cultural Explanations of the Child's Presenting Problems

Thomas was referred for a psychological evaluation by his pediatrician subsequent to the pediatrician noticing Thomas's lethargy, relative lack of engagement with his physical and social world, and apparent delays in language acquisition. At home, Thomas's mother noticed a change in his behavior, observing in particular that he was sleeping more and was more "fussy" about eating. Though Thomas's mother was the first to notice the changes in his sleeping and eating, she noticed little of the lethargy, lack of engagement, and language delay noted by the pediatrician. She believed that what the pediatrician observed was, in actuality, evidence of Thomas's easy and nondemanding nature. In her family and home community, she said that children were taught to learn through quiet observation of their surroundings and by listening to adults and elders. Thomas's quiet nature, she believed, was evidence that he was a "respectful" child—a quality highly valued in her reservation community. When asked what she thought the effect of Thomas's separation from his day care provider might be, Thomas's mother stated that she had been around many different adults as a child, and that whatever reaction Thomas might have would pass because he was "strong, and would grow out of it." She believed in general that facing some challenges was good for a child's character. Furthermore, she respected Thomas's ability to "be on his own," to respond as needed to what he faced in life.

Cultural Factors Related to the Child's Psychosocial and Caregiving Environment

Infant's Life Space and Environment

Thomas was living in a three-bedroom apartment with his mother and two older half siblings, in a low-income urban housing complex designed specifically for families with parents who were either working or in school full-time. Parents were also required to volunteer for one of the complex's programs, such as evening child care or tutoring other children. The complex was situated in a racially diverse community; however, there were few other American Indian families nearby. Thomas's older siblings had their own bedrooms, while Thomas shared a room and a bed with his mother. Thomas's mother valued this sleeping time with Thomas, and said that it made her feel closer to him. During times of hardship, her relatives would stay with the family. Most recently, Thomas's maternal uncle came from the reservation to escape legal trouble. However, he was causing problems for Thomas's family because of his disruptive behavior and because his residence there was in violation of the complex rules, jeopardizing the entire family's ability to remain in the apartment. Thomas's mother struggled with her sense of duty to her extended family versus her duty to her own family, because these duties often pulled her in opposite directions. Growing up on the reservation, and as the oldest daughter in her family, Thomas's mother was raised with a sense of obligation to help family members in their times of need. This was a heavily ingrained value, and when she considered asking her brother to leave, she felt conflicted and feared being judged negatively by other family members, especially her mother. She worried that the stress she felt about this situation made her more impatient and irritable with her own children.

Infant's Caregiving Network

Thomas's day care provider had cared for him most of the time since he was born. This woman took care of Thomas in her home, and would keep him for weeks at a time, during which he did not see his mother. Thomas's mother trusted this woman and readily agreed to let Thomas stay for extended periods of time because she felt her time was already consumed with work, school, and her other two children. As mentioned, she was so busy when Thomas was born that she considered letting a classmate take Thomas to live with her until she was finished with school. She decided against this, however, when subsidized

day care became available. Thomas was also cared for by a maternal aunt who lived nearby, who would occasionally keep him over weekends. Thomas's older siblings provided some care for Thomas; however, the pediatrician expressed concern about their ability to care for him, having observed them handling him roughly several times during office visits. Just prior to being referred for an evaluation, Thomas's mother decided to put him in the child care facility located in the complex where they lived. She did this because her child care subsidy had been eliminated, the location was more convenient, and also because she wanted to have Thomas with her on a regular basis. At the time of referral, Thomas's mother had made no arrangements for him to see his previous day care provider. Thomas's mother stated that during her childhood she was often cared for by people other than her biological mother, staying variously with her grandparents, her aunt, and a family friend. She also stated that when she was growing up, little distinction was made between cousins and siblings, or between aunts and uncles and parents. Additionally, close family friends were often considered family and at times were ceremonially adopted into the family—rendering their relationship the same as if they were biologically related. Thus, the fact that Thomas was variously cared for by herself, the day care provider, and her sister was not unlike her own experience growing up. In fact, she saw it as a positive experience that Thomas had a close relationship with three "mothers."

Caregiver Beliefs About Parenting and Child Development

When observed with Thomas, Thomas's mother seemed to engage in a hands-off style of parenting. She stated that this reflected a general respect for the fact that her children were autonomous and separate individuals, free to learn about the world through exploration and direct experience. She believed it was her duty to tell her children something once, but that it was up to them to follow that guidance after that—learning "the hard way" if they chose not to heed her advice. Her greatest aspiration for Thomas was that he would one day go to college, have his own family, and lead a drug- and alcohol-free life. She also hoped that he would be respectful and strong. Her belief that children were largely autonomous and separate individuals who needed to find their own way in life stemmed in part from what she said was a tribal belief that children, before birth, had been taught many things about life by the spirits, and also chose their families based on what they needed to accomplish on their path here on earth. Thomas's mother said her family elders had taught her these things about children, and that when she needed advice about parenting she turned to these elders as well as to other elders in her home community.

Cultural Elements of the Relationship Between the Parents or Caregivers and the Clinician

In Thomas's mother's tribe, discussing problems from the past is believed to give them new energy in one's present life. Thus, there are prohibitions against speaking of past problems lest they be brought to life again. In collecting a family history, which involved the discussion of some past trauma that Thomas's mother experienced (e.g., domestic violence), additional care was taken to gather only the most pertinent information in this regard. When asked about previous experiences with therapy, Thomas's mother said that she had some mistrust of psychologists because she had heard stories that if they did not agree with how a mother was raising her children, they would take her children away. She also remembered how, in her reservation community, word would get out if one was seeing a mental health specialist. She was thus concerned about confidentiality. She and the clinician espoused different views of attachment relationships and Thomas's strength to endure the challenges he faced on his own. This was an area in which the clinician needed to bring her understanding and expertise about child development to bear in a way that respected the mother's cultural beliefs but also served the needs of the child, who seemed clearly to be reacting to a disruption in his network of attachment relationships.

Overall Cultural Assessment for the Child's Diagnosis and Care

The foremost issue in Thomas's case was to support his mother in her culturally derived belief

that an extended network of kin (whether biological or "fictive") would benefit both her and her child. The challenge, however, was to help her understand the importance of continuity in this network of care and the relevance of Thomas's attachment to individuals in this caregiving network. The other challenge was to help Thomas's mother find ways that she could maintain her respect for his "being on his own" but also intervene and provide stimulating engagement for Thomas.

Cultural Case Formulation: Overview

The case presented above is intended to highlight several issues in conducting a mental health assessment of an infant or a toddler that is not only culturally sensitive but, more important, is culturally relevant and meaningful to the point that it enhances the care that is delivered. First and foremost, cultural assessment places the presenting concern within the larger cultural context that provides for greater understanding of the disorder and also suggests points for interventions. The case formulation presented above also points out that for clinicians, there are several important issues to consider in conducting a cultural case formulation, often involving the balancing of two apparently opposite poles. First, clinicians must balance cultural sensitivity on the one hand with useful concepts from Western psychological practice on the other. In Thomas's case, the clinician needed to be sensitive to the fact that Thomas's mother believed that her son's mobility within his network of caregivers not only made him "stronger" but provided him with the advantage of having several "mothers." To the clinician, however, it seemed clear that Thomas was having an emotional reaction to his curtailed involvement with one of the attachment figures within this network of care, which made sense from the perspective of attachment theory. The challenge, as stated in the overall assessment, was to help Thomas's mother understand the importance of continuity in this network of care and the relevance of his attachment to individuals in this caregiving network, while still respecting the fact that she saw this as an experience that would strengthen his character.

The case also highlights that, on the one hand, cultural assessment requires a general working knowledge about the process of assessment, while on the other, it requires specific knowledge about a given culture. General knowledge about process involves the "how" of assessment—that is, how one approaches a situation of cultural differences in a way that transcends the particulars of any one cultural group. General knowledge about process involves not only a basic acknowledgment and respect for the relevance of culture but also the utilization of such tools as the *DSM-IV* Outline for Cultural Formulation, which can be applied to the spectrum of cultural groups that one might encounter in practice. In order to address the relevance of culture to a particular case, however, one must also possess specific knowledge about the cultural group from which the child and his or her family comes. However, this specific cultural knowledge must be held loosely, as parents may or may not espouse those particular beliefs, which also points to the fact that not all parental beliefs are culturally supported—and that there will always be individual differences in the understanding of broader cultural constructs (which speaks to culture's dynamic, transactional, and to some extent subjective nature).

CONCLUSION

The undertaking of cultural sensitivity is not an insignificant exercise in the field of mental health. As Good (1996) warns, the danger of cross-cultural misunderstanding in the psychiatric process means that "at stake is not only the integrity of psychiatry's claims to knowledge as a science of the human mind but also, more importantly, the care of many of the most disadvantaged members of American society—psychiatric patients who are recent immigrants, members of minority populations, or persons who are poor and living on the margins of our society" (p. 349). Good further points out that such misunderstandings can have deleterious consequences for those who are misunderstood—such as inappropriate intervention, the withholding of effective interventions, or even greater social injustices.

In this chapter, we presented an outline of eight general features of culture that provide a background for understanding the role of culture in the assessment of infants and toddlers. Those

eight features define culture as shared meaning, distinct from ethnicity, race, and minority status, as occurring in a setting or ecology, as dynamic and transactional, as experienced subjectively, as operating silently as well as with voices, as providing multiple views of reality and the world, as influencing the ways in which individuals express distress, and, for infants and toddlers in particular, as mediated through the parenting relationship.

We distinguished the classification of disorder from the assessment of the individual, and the role of current systems such as *DSM-IV* and DC: 0–3 in these pursuits. Both *DSM-IV* and DC:0–3 are multiaxial systems, which allow for the classification of disorder and the assessment of the individual. By including a specific relationship axis, DC:0–3 acknowledges that to understand the infant, one must understand the context of his or her development and experience. In this chapter, we argue that to understand the infant, it is also necessary to understand the larger cultural context in which the infant's development, and development in relationship, takes place. As a cultural tool, *DSM-IV* has made a significant contribution to the assessment of the individual with the inclusion of the Outline for Cultural Formulation; the thrust of this chapter is to adapt this outline for use with infants and toddlers. By presenting a cultural case formulation based on these revisions, we hope to demonstrate the relevance of culture for infant mental health assessment as well as to highlight the challenge for clinicians to apply general knowledge about the classification of disorder in the process of assessing a particular individual who is situated in a particular sociocultural context.

Note

1. We focus on *DSM-IV* rather than ICD-10 in our subsequent discussion because of its inclusion of the Outline for Cultural Formulation in its appendix and our proposed modification of it.

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3

Assessment of Parent-Child Early Relational Disturbances

Roseanne Clark
Audrey Tluczek
Kathleen Cranley Gallagher

The parent-child relationship provides the primary context for the development of the child's sense of self and self in relation to others (Stern, 1985, 2002; Winnicott, 1965), that is, the child's beliefs about what can be expected in relationships (Bowlby, 1982; Bretherton, 1985; Main, Kaplan, & Cassidy, 1985). Lieberman and Zeanah (1995) underscore the importance of the early mother-child relationship when they suggest that "the infant-mother relationship has the power to promote mental health or serve as the genesis of psychopathology in the young child" (p. 571). Understanding the quality of the parent-infant relationship within which the infant or young child is developing plays an important role in the assessment of social and emotional functioning and in formulating a diagnostic profile for infants and young children. Cicchetti (1987) asserts that "disorders in infancy are best conceptualized as relational psychopathologies, that is, as consequences of dysfunction in the parent-child environment system" (p. 837). The Committee on the Family of the Group for Advancement of Psychiatry (1995) has argued that, in general, important and common relationship conditions can exist independent of severe individual psychopathology, and that these conditions should be described in relational terms, with specific diagnostic criteria. Furthermore, the Practice Parameters for the Psychiatric Assessment of Infants and Toddlers developed by the American Academy of Child and Adolescent Psychiatry (1997) recommend a "developmental, relational, and multidimensional" approach to assessment of psychiatric disturbances in infants and toddlers. More recently, a research agenda for the proposed *Diagnostic and Statistical Manual of Mental Disorders*, Fifth Edition calls for a three-part approach to assessing relationship disorders including: "1) standardized procedures for evoking and observing interactions within the dyad; 2) questionnaires for each member to delineate his or her individual perceptions of the relationship; and 3) a structured clinical interview to supplement questionnaires and observations and integrate additional clinical information" (First et al., 2002, p. 171).

In the field of infant mental health, the parent-infant relationship is often the focus of therapeutic work (Clark, Paulson, & Conlin, 1993;

Fraiberg, Adelson, & Shapiro, 1980; Lieberman, 1985). Thus, it is important to conceptualize primary relationships as entities to be assessed and, when indicated, diagnosed. Including assessment of the parent-child relationship as part of the evaluation process can inform and focus intervention approaches (Sameroff & Emde, 1989).

Parent-child relationship problems are characterized by perceptions, attitudes, behaviors, and affects of either the parent, the child, or both that result in disturbed parent-child interactions. If disturbances in the parent-child relationship interfere with the functioning of the child or parent and continue over a period of time, a diagnosis of a relationship disorder may be warranted. An assessment of the affective and behavioral quality of the parent-child interaction can reveal significant relationship difficulties. If the relational disturbance has a long duration and/or high intensity, the disturbance may be evidenced by the parents' perceptions of the child or the meaning they ascribe to their child or their child's behavior and can affect the nature of parental involvement with the child (Zero to Three: National Center for Clinical Infant Programs [Zero to Three], 1994).

This chapter reviews the theoretical foundations and empirical support for employing a parent-child relationship paradigm when assessing the mental health of an infant or toddler. It describes domains of functioning for assessing the parent, child, and dyad that may contribute to relational disturbances. Although "parent" is used throughout the chapter, another significant caregiver who holds a parenting role may be substituted as needed, such as a grandparent or foster parent. This chapter also describes structured evaluation procedures for evaluating parent-child relationships, cultural considerations, and relational diagnoses for infants and young children and implications for treatment. Finally, considerations for future research are recommended, linking assessment research to practice.

CONCEPTUAL AND THEORETICAL FOUNDATIONS

Using a relational approach to assessment integrates theoretical application of developmental and psychiatric disciplines (Sameroff & Emde, 1989). Foundations for assessing child mental health at the parent-child relational level can be supported by several compatible theoretical paradigms that share prioritization of the importance of early experience and context in examining development. Foundational contributions of the following perspectives are reviewed: attachment/ethological theory, psychodynamic/object relations theory, social learning theory, family systems theory, and multiple systems theories, including bioecological and transactional approaches.

Attachment/Ethological Theory

John Bowlby (1982) conceptualized the parent-child relationship as an *attachment behavioral system* that represents the foundations of the child's psychological development. Bowlby (1969) observed that infants who did not form securely attached, intimate relationships with a primary caregiver often developed psychological and behavioral problems. Drawing on ethological theory, Bowlby posited that infants produce behaviors to elicit protective and sustaining behavior from caregivers . Infants cry when hungry and coo to attract attention. Later, babies maintain proximity to their parents and turn to parents frequently for assistance and approval, as well as for confirmation of safety. When a parent responds quickly and appropriately to the child's cues, the child learns to rely on the support of the parent. This "secure attachment" allows the child to develop a sense of efficacy, as the child feels safe to explore the world.

According to attachment theory, the child constructs "internal working models," (Bretherton, 1985) or mental and emotional representations of these early parent-child interactions. The child projects qualities of the parent-child relationship onto other relationships. Beliefs about the self, about the relationship, and about the world are categorized, much as other cognitive and emotional data might be. For example, the child may internalize "I am lovable" or conversely "I am not lovable" as a result of these interactions. These internalizations have been linked with developing social cognition and social competence (Sroufe, 1979, 1988). Indicators of relationship quality are found in the behavior of the child, the

caregiver, and the dyad, and in narratives describing these relationships (Hesse, 1999).

Psychodynamic/Object Relations Theory

Freudian psychoanalytic theory provides a perspective for understanding how an individual's developmental trajectory, including personality structure, may be shaped by the quality of the early parent-child relationships one experiences. This theory posits that the seeds of personality are sewn during children's early interactions with their parents and suggests that unresolved intrapsychic conflicts that arise from how early stages of child development are negotiated or experienced can lead to neurotic symptoms in adulthood. Anna Freud (1970) described the quality of the early mother-infant relationship as paramount to the child's subsequent psychological development. When a mother consistently reads her infant's cues and sensitively responds to her child's physical and emotional needs, providing an "auxiliary ego" for the young child, her infant feels satisfied. With the infant's needs gratified, the infant turns his or her emotional interests from the self to the proximal environment, which includes the mother. When the infant initiates expressions of affection toward the mother and she responds in kind, the pair form an emotional bond. These early relational patterns characterized by emotional reciprocity become the template for the young child's future relationships and are likely to foster a healthy progression along developmental lines through subsequent developmental stages (Freud, 1963). In contrast, the "rejecting mother," described as being incapable of or unwilling to identify and respond to her infant's needs, has been associated with subsequent developmental psychopathology in the child.

Spitz (1965), Mahler (1975), Winnicott (1968), and others have suggested that the abilities of the human being to establish healthy social relations are acquired early in the mother-child relationship. Winnicott (1965) described the parent-child relationship as a psychological "holding environment" for the developing child. The assumption is made that if this relationship is disturbed, the child will lack the adaptive abilities necessary to effectively interact with the environment. A sense of effectance and competence is the result of the ongoing experience of interacting with an empathic, consistent, and responsive caregiver who helps the child to understand and structure his or her world.

Object relations theory represents a more contemporary view of psychodynamic theory. The "object" of the infant's desire is the mother. This early relationship becomes the template for future relationships. Mahler (1968), through extensive observations of infants, toddlers, and mothers, proposed stages of early development in which the relationship between the infant and the mother progresses from an undifferentiated state during the first few weeks of the infant's life to a close symbiotic relationship, to attempts at separation and rapprochement or an exploration of the environment and touching base with the parent for "emotional refueling," to a psychological state of individuation when the child is about 3 years old. According to this model, the parent's feelings of rejection, ambivalence, and inability to help the toddler to complete this early developmental task can contribute to borderline or narcissistic personality organization, in which the individual lacks a consolidated sense of self as separate from others. Winnicott (1970) emphasized the importance of "mutuality" in the early parent-infant relationship as "setting the emotional tone of interpersonal experiences and their intrapsychic coloring throughout life" (p. 245) and suggested that the child who experiences inconsistent or unpredictable care becomes "a reaction to impingements from the environment."

Social Learning Theory

Bandura (1977) theorized that social behaviors are learned either through direct experience with subsequent reinforcement of those behaviors or through observing others modeling certain behaviors that are rewarded. Behaviors that are contingently rewarded continue while behaviors that are ignored cease to be performed. The parent-child relationship becomes the primary environmental influence shaping the child's behavior. Thus, for example, the toddler whose parents tend to respond to him primarily when he is hitting his younger brother is likely to continue this negative behavior. Although the parent's reprimands may seem like a negative consequence, for

the child this is still experienced as parental attention.

Bandura (1989) later incorporated the concept of self-efficacy as a motivational factor in the development of behavioral patterns. Children who believe that they are capable of performing certain tasks are more likely to attempt those tasks and perform them successfully. This sense of efficacy may be derived from previous experience in which the behaviors have been reinforced by parental encouragement or a history of successfully accomplished tasks.

Based upon the tenets of social learning theory, Patterson (1982) elucidated a pattern of "coercive" parent-child interactions that lead to the development of conduct disorders in children and antisocial behavior in adulthood. This model consists of a pattern of escalating negative interactions between the child and parent associated with the parent's attempt to set limits, a particularly salient issue during toddlerhood. For example, a parent gives the child a directive to do or not to do something; the child attempts to avoid the directive by engaging in negative behavior such as noncompliance or tantrums; the parent responds with criticism or threats; the child returns with an increase in the negative behavior; the parent increases the threats. This interaction often ends in the child receiving physical punishment. The parent in this scenario unwittingly reinforces the child's negative behavior.

Another social learning theory of parenting and its influence on child development is that of noted that warm parental support incorporates behaviors that convey supportive presence, acceptance, positive affect, sensitivity, and responsiveness to the child's needs and are generally thought to enhance children's positive social and emotional development.

Family Systems Theory

Family systems theories, such as structural family therapy (Minuchin, 1974; Minuchin & Fishman, 1981), offer a framework for assessing parent-child interactions. According to this theory, a family consists of parental and child subsystems that function interdependently as a single unit. The parental subsystem possesses the responsibility of caring for and raising those within the child subsystem. Within a healthy system, parents establish family rules and behavioral expectations that maintain clear boundaries between the parental and child subsystems in a way that meets the socioemotional needs of all members. Pathology occurs when there is a disturbance in the family system. For example, when a parent's capacity to meet the needs of the children is compromised by physical or mental illness, one of the children, usually the oldest child, may assume parental responsibilities, which may result in ambiguous boundaries or cross-generational alliances, as well as conflicts within and/or across subsystems. This is observable even in 2- or 3-year-olds who become focused on their parents' emotional states. Thus, observations of the whole family interacting during an evaluation may inform the clinician about patterns of interactions that preclude the optimal functioning of the family system.

Multiple Systems Theories

Contemporary theories have extended consideration of the child's developmental milieu to include multiple synergistic systems. Transactional systems theory (Sameroff, 1975) and bioecological systems theory are two complementary models that support a relational approach to clinical assessment and treatment in infant mental health. In transactional theory, development depends on the complex interdependent interactions of the child, parent, and environment over time. Development is dynamic, and children's mental and emotional health depend upon multiple factors, including nutrition, responsive caregiving, parental mental health, safety of neighborhoods, and quality schooling (Sameroff, 1975).

Similarly, Bronfenbrenner elaborate on the interaction of the individual child with multiple environmental systems. In bioecological systems theory, nested hierarchical systems both influence and are influenced by the developing child. However, it is the proximal processes, or the daily interactions of life, that bear the most importance for development. For the infant, daily activities with the parent are most influential. Bronfenbrenner contends that the quality of these proximal processes matters more than any individual contribution of the child (e.g., temperament, medical condition) or parent (e.g., pathol-

ogy, education) alone. The degree to which the infant and parent can contribute to and participate in high-quality proximal processes predicts the adjustment of the child and dyad.

Reasons for Looking at Relationships

In the context of normal development, the parent-child relationship plays a critical role in the infant's emergent behavioral and emotional regulation (Cohn & Tronick, 1989; Emde, 1989; Field, 1997; Schore, 2001). Recent research integrating neurobiology and attachment suggests that the infant brain develops in response to regulating social interactions with a caregiver, engaging in a circular feedback system of increasingly complex interactions (Schore, 2001). These developing regulatory processes are influential in the infant's developing attachment (Cassidy & Berlin, 1994; George & Solomon, 1996) and subsequent sense of self and social competence outside of the parent-child relationship.

An early caregiving environment characterized by physical safety, satisfaction of physiological needs, empathic responsiveness, mutual enjoyment, learning opportunities, and age-appropriate limit setting helps the child develop a consolidated sense of self and prepares the child for future social interactions (Sameroff & Emde, 1989). A supportive parent-child relationship has been found to serve as a buffer for children living in stressful urban environments (Kilmer, Cowen, & Wyman, 2001). A parent-child relationship that fails to meet the child's needs may place the child at risk for developmental delays, emotional dysregulation, behavior problems, and psychopathology later in life. For example, Carlson (1998) found that disturbances in the early parent-child relationship, specifically disorganized attachment behavior identified in infants ages 12 or 18 months, were associated with behavior problems and psychopathology during middle childhood and the adolescent years. Lyons-Ruth, Easterbrooks, and Cibelli (1997) reported that infants who demonstrated disorganized insecure attachment behaviors at 18 months had externalizing behavior problems at age 7 years, while infants with avoidant insecure attachment behaviors showed internalizing behaviors at age 7 years. Research has also shown that interventions directed toward at-risk parent-child relationships can decrease maternal depression, improve the child's cognitive development and emotional regulation (Cohen, Lojkasek, Muir, & Parker, 2002), and improve mothers' perceptions of their infants' adaptability and reinforcement value, as well as increasing maternal positive affect and verbalization with infants (Clark, Tluczek, & Wenzel, 2003).

CONTRIBUTIONS OF PARENT

Nurturing Parenting

Empirical studies of parenting and attachment theory underscore the importance of examining the context within which the child is developing when evaluating the young child's mental health. The quality of the parent-child relationship or *optimal parental care* provides for the infant's physical and emotional needs as well as sensorimotor stimulation and physiological and emotional regulation (Ainsworth, 1969; Clarke-Stewart, 1973). The mother's ability to demonstrate affection has been linked to enhanced infant development and involvement with mother and other caretakers (Stern et al., 1969). Maternal contingent reinforcement of an infant's signals has been found to be important to the development of the infant's sense of effectance and competence (Ainsworth & Bell, 1975). From her study of infant-mother interaction in the home, Clarke-Stewart (1973) described quality maternal care, which results in optimal, secure attachment, as socially responsive and affectionate but not necessarily excessively physical. Apparently, while holding and physical contact can be very important in the early months of life, this type of contact can become restrictive as the child matures (Clarke-Stewart, 1973). Maternal attention must be paid to the infant's changing developmental needs, such as readiness and need for autonomy. Sander (1962) suggests that the manner in which these developmental issues are negotiated is extremely important in determining the continuing nature of the relationship.

From her observation in the home and experimental studies in the lab, Ainsworth (1969) suggested the following five variables as most impor-

tant to a high-quality parent-infant relationship: (1) responding sensitively and empathically to the infant's signals; (2) providing frequent physical contact; (3) allowing the infant freedom to explore; (4) helping the infant derive a sense of consequence of his or her actions; and (5) engaging in mutually enjoyable and reciprocal activities. Through these early interactions, not only does the mother teach the child about the self and the self in relation to others, but also the quality of this early interaction allows for optimal development in capacities for organization (Sroufe, 1979), linguistic and problem-solving skills (Bruner, 1974; Epstein & Evans, 1979; Vygotsky, 1978), and cognitive abilities (Clarke-Stewart, 1973).

In addition to the mother's provision of nurturant, responsive care, developmental psychologists such as Bruner (1975) and Vygotsky (1978) view the adult's role as important for communicating and translating the culture for the young child. The structure, modeling, and focused joint attention with the child allows the child to first observe and then internalize the adult's approaches, communication, and problem-solving strategies. This process of *scaffolding* leads to the growth and development of higher mental processes and attentional abilities. Through focusing, encouraging, and assisting, parents provide a "zone of proximal development" in which young children can do more than is possible independently, thus helping them learn what they can do (Vygotsky, 1978).

Disturbed Parenting

The grave effects of maternal deprivation or disturbed parenting on a child's personality and intellect are well documented (Bowlby, 1951; Rutter, 1974; Spitz, 1965). Children of parents with psychiatric disorders may experience a type of deprivation. Psychiatric hospitalizations require long separations between mothers and young children, and psychotic symptoms may also serve to separate mother and child.

Several factors that may influence a parent's contribution to the early parent-child relationship are the parent's expectations, values, and attitudes toward the infant's or child's needs, the parent's own history of being cared for, and perception of the self as a parent (Sameroff, 1975). These are further influenced by the parent's personality and level of cognitive development. If a mother is under pressure of urgent and unsatisfied needs of her own, she will tend to behave inconsistently, being influenced by fluctuating moods or needs (Bromwich, 1976). The mother who is functioning at a lower cognitive level, either due to genetic endowment, environmental deprivation, or psychotic delusions may not be able to perceive her child as a separate individual (Sameroff, 1975). She is not able to attribute a level of complexity to the child's behavior. Sameroff speculates that "the cognitive level from which the mother viewed the child was another complicating factor in the manner in which early differences get translated into later deviancies" (p. 289). For example, the cognitively impaired mother who approaches her infant from a sensorimotor perspective might demand that her own physical needs be met. Beckwith (1976) suggests that if the mother's needs for success or effectance are not met, either because the infant is not alert due to prematurity or a medical condition or because the infant has a challenging temperament and is difficult to comfort, the mother may become distant and negativistic. Because she may feel rejected, she may turn around and reject her child. This process has been implicated in nonorganic failure to thrive and child neglect and abuse.

Numerous studies have documented adverse effects of maternal depression on mother-infant interactions, although the mechanisms are still in need of theoretical and empirical elucidation (Goodman & Gotlib, 1999). Women who are depressed have been characterized as either withdrawn or rough, insensitive, and intrusive in their handling and care of their infants (Field, 1997). Depressed mothers have been found to more often mirror the negative affective expressions or behaviors of their infants than their positive affective states (Field, Healy, Goldstein, & Guthertz, 1990). Maternal depression disrupts the process of mutual regulation, including mother-infant interaction and intersubjective experiences that contribute to the child's social-emotional and internal working models, thereby leaving the child vulnerable to emotional and behavioral dysregulation (Tronick & Weinberg, 1997). Maternal depression also has been found to be a risk factor for delays in cognitive development, and it in-

creases risk for subsequent major depression and behavioral problems (Beardslee, Bemporad, Keller & Klerman, 1983; Cummings & Davies, 1994; Weissman et al., 1987). Infants of depressed mothers have been found to exhibit more dysregulated behavior and to be more difficult to read (Field, 1997). Cohn and Tronick (1989) noted that infants as young as 3 months exhibited heightened distress levels, increased protests, and gaze aversion in response to observations of their mother's still-faced simulated depression. Maternal depression has been associated with insecure attachments in 1-year-old infants (Lyons-Ruth, Zoll, Connell, & Grunebaum, 1986), cognitive-linguistic delays in preschool children (NICHD Early Child Care Research Network, 1999), and depressive mood and behavioral problems in young children (Radke-Yarrow, Nottelmann, Martinez, Fox, & Belmont, 1992). However, the quality of mother-child interactions, specifically maternal sensitivity, was found to mediate the association between chronicity of maternal depressive symptoms and child outcomes (NICHD Early Child Care Research Network, 1999).

More recently, a meta-analysis of six studies examining the effects of maternal depression on infant-mother attachment concluded that maternal depression was significantly associated with insecure infant-mother attachment (Martins & Gaffan, 2000). Lyons-Ruth and colleagues (2002) identified two specific patterns of behavior among depressed mothers interacting with their infants that seem to be associated with disorganized attachment behaviors in infant-mother interactions. Some mothers display "hostile, self-referential" interactions characterized by rough or intrusive handling of the infant, while other mothers show a "helpless, fearful" pattern marked by withdrawn or less involved interactions with their infants.

CONTRIBUTIONS OF CHILD

Temperament

Thomas, Chess, and Birch (1968) suggest that constitutional variability in children has tremendous influence on parents' attitudes and caretaking styles. Infants' arousal level, rhythm, response threshold, capacities, and weaknesses play important roles in shaping parents' perceptions about and feelings toward their infant. The parent and the child influence each other's ability or desire to relate. Therefore, problems in the early parent-infant relationship may develop when there is a mismatch in the goodness of fit between parent and child. For example, an active infant with a high need for stimulation may become frustrated and irritable in the care of a parent whose rhythm or tempo is much slower.

An infant's temperament, specifically mood, emotional reactivity, and behavioral regulation, all impact the quality of the child's participation in the parent-child relationship Crockenberg, 1981). The term "difficult" was coined by Chess and Thomas to describe a cluster of child temperament characteristics that challenged caregivers. Infants who exhibit these difficult behaviors were more likely to (1) elicit less sensitive parenting and (2) require more sophisticated parenting skills. Therefore, infants requiring the most skilled parenting may, in fact, elicit parenting that fails to meet their greater needs.

The interaction of child temperament and parenting style has been examined in studies of parental limit-setting. Kochanska (1997) reported that fearful toddlers tended to develop better social conscience over time when mothers used gentle discipline (psychological and de-emphasizing power) as compared with children whose mothers used negative discipline (coercive and/or angry). On the other hand, Arcus (2001) in her work with Kagan found that inhibited children had more favorable outcomes when parents used stronger forms of limit setting. Parents who report that their children are temperamentally fearful or reactive to limit setting also describe the parenting process as less pleasurable (Leve, 2001). Thus, certain infant temperament characteristics are associated with risk for relational disturbance.

Gender may affect the parent's responses to the infant. Six-month-old boys have been found to be more emotionally reactive (expressing both more positive and negative affect) than girls. Girls tend to show more curiosity and capacity for self-soothing than boys (Weinberg & Tronick, 1992). Mother-son dyadic interactions have been found to be more organized than mother-daugh-

ter interactions (Tronick & Cohn, 1989). However, boys may be more vulnerable than girls to the negative consequences associated with maternal depression on cognitive development (Sharp et al., 1995).

Medical Conditions

Children with chronic illnesses are two to three times more likely to experience emotional maladjustment or behavioral disturbances than their healthy peers (Northam, 1997; Wallander & Varni, 1998), and the risk for psychopathology seems to increase with the severity of the disability (Cadman, Boyle, Szatmari, & Offord, 1987). A series of studies have implicated chronic illness as a potential risk factor for parent-child relationship disturbances and subsequent emotional and behavioral problems in childhood. The findings showed that children diagnosed in infancy with congenital heart disease and cystic fibrosis demonstrated higher rates of insecure attachments at 12 to 18 months as compared with a healthy comparison group (Goldberg et al., 1990). Insecure-avoidant attachment behaviors in preschool children with cystic fibrosis were associated with poor nutritional status and poor growth (Simmons, Goldberg, Washington, Fischer-Fay, & Maclusky, 1995). Other researchers (Carson & Schauer, 1992) have documented that mothers of children with asthma tended to view their children as more demanding, less reinforcing, and less acceptable than mothers who had healthy children. The mothers of children with asthma also reported higher levels of parenting stress and tended to demonstrate more rejecting, overprotective, or overindulgent parenting styles as compared with mothers in the control sample, underscoring the potential risk to the parent-child relationship when a serious illness is diagnosed.

Premature birth has been recognized as a risk to the quality of the parent-child relationship for over 40 years (Kennell & Rolnick, 1960; Klaus & Kennell, 1970; Klaus et al., 1972; Leve, Scaramella, & Fagot, 2001). Several pathways accounting for these relational problems have been proposed. Infants who are born prematurely have been found to have a higher incidence of attentional problems and difficult temperaments than peers who were born at term (Chapieski & Evankovich, 1997). It appears as though multiple risk factors (e.g., negative emotionality and health problems) may increase the likelihood that an infant will experience lower quality parent-child interactions (Fiese, Peohlmann, Irwin, Gordon, & Curry-Bleggi, 2001). More recently there has been recognition that parent-child attachment is influenced by a complex interaction of both parent and child variables. Poehlmann and Fiese (2001) reported that the premature birth of a child was found to be a moderating factor for maternal depressive symptoms and the quality of the mother-infant relationship. Premature infant birth in combination with maternal depression was predictive of insecure attachment behaviors in infants at 12 months. Other research (Cox, Hopkins, & Hans, 2000) has shown that the mother's representations of her infant were more predictive of the presence of secure infant attachment behaviors at 19 months than the child's health history, which included prematurity and intracranial hemorrhage. However, the presence of neurological impairments in infants was associated with a specific insecure attachment, that is, disorganized attachment, in children.

ASSESSMENT OF THE PARENT-CHILD RELATIONSHIP: BEST PRACTICES

The American Academy of Child and Adolescent Psychiatry (1997) Practice Parameters for the Assessment of Infants and Toddlers recommend that the psychiatric evaluation of children under 3 years of age include an assessment of the parent-child relationship. The goal of this assessment is to obtain a comprehensive picture of the parent-child relationship within its sociocultural context. The findings from such an assessment can assist the clinician in formulating an intervention plan and in evaluating progress during the therapeutic process. Sources of information should include the parents and other primary caregivers, the child, the extended family when indicated, day care providers, and the pediatrician. If the family is involved in other services, such as social services or mental health services, information should also be obtained from these collateral sources. The University of Wisconsin Parent-

Infant and Early Childhood Clinic's relational assessment model involves a diagnostic evaluation that uses a multimodal approach and actively involves the parents through interviews, observations, and parent report assessment instruments. Observations of parent-child interactions are conducted across developmentally salient situations. Assessment procedures are structured to address particular domains appropriate to the child's level of development. For example, infants need emotionally available parents who are capable of reading their cues and responding in a sensitive and timely fashion (Ainsworth, 1969; Stern, 2002), whereas toddlers need caregiving that is respectful of their emerging autonomy and provides cognitive and emotional scaffolding, clear expectations, consistent limit setting, and assistance in managing transitions and with affective and behavioral regulation. Note that an observation of interactions should be considered to be just "one snapshot in time" while the parent-child relationship represents the child's and parent's "sense and quality of connectedness" over time and across settings (Clark, 1985). The parent's mood and parenting capacities, the family's stress, and the family's access to and need of social supports and resources should also be evaluated as part of the parent-child relationship assessment.

Interview With Parents

Developing a therapeutic alliance with the parents is critical to the assessment process. Taking a collaborative approach with parents throughout the assessment may build such an alliance. At the onset of the interview, parents should be asked about their concerns about their child and what they would like to get out of the assessment. By empathically listening to parents' experiences of their child and their struggles in parenting, the clinician can begin a parallel therapeutic process with the parents that may have a positive effect on their relationship with their child. Several elements of the parent interview that are particularly salient to an assessment of the parent-child relationship include the following:

1. Demystify the assessment process by explaining the multimodal nature of the assessment procedures and the parents' significant role in the assessment process.
2. Ask parents what information and assistance they would like to receive from the assessment.
3. Provide a safe, comfortable, developmentally appropriate environment for children and parents. Ideally, all members of the family household as defined by the parents should attend the initial evaluation. Having the whole family present provides the clinician information about family dynamics, including sibling relationships and cross-generational alliances.
4. Assess the parents' optimal parenting capacities across several developmentally salient situations (e.g., routine tasks of daily living such as feeding, limit-setting, play, separation/reunion).
5. Involve the parents in assessing their child's regulatory capacities and behaviors and their capacity to see their child as a separate individual by observing the child together and discussing what you and they are observing.
6. Learn the parents' perspectives and meaning of the child and his or her behaviors by asking parents to describe their child and their impressions about the source or cause of the presenting problem.
7. Include a perinatal history about the pregnancy, labor, and delivery. This time represents the critical beginnings of the child's relationship with each parent. An unplanned or symptomatic pregnancy or a complicated labor or delivery may have profound implications for the parent-child relationship. Ask open-ended questions (e.g., "What was the pregnancy like for you?") to allow parents to share those aspects of the experience that are important to them.
8. Involve parents in assessing their relationship by reviewing a videotape of the parent and child interacting together. Help them focus on strengths as well as on reading their child's cues. "Wonder along with" the parents about who their child reminds them of in general and when the problem behavior is present. This information may help to elucidate parents' projections of negative intentionality attributed to their child.

9. Assess the sociocultural context of the parent-child relationship, respecting and appreciating the family's beliefs and values. Recognize the parents as the experts in their personal sociocultural environment and ask them to educate you about their life experiences and worldviews. Seek additional consultation from cultural experts to address the clinician's cultural knowledge deficits or biases.
10. Provide parents feedback about the assessment findings with a caring attitude, void of judgment about the parents or their parenting style. This approach will facilitate a therapeutic joining with the parents vital to the development of a collaborative treatment plan.

Observations of Parent-Child Interactions

When conducting an assessment using observational methods to assess the quality of the parent-child relationship, there are several key points to remember:

1. Note the intensity, frequency, and duration of the affect and behavior between parent and child. This information may differentiate normal interactions from pathological interactions and assist the clinician in determining the seriousness of a relationship problem. For example, the DC:0–3 Axis II system uses this information to classify the relationship problem as "a perturbation, a disturbance or a disorder" (Anders, 1989, p. 134).
2. Assess the quality of interaction within the context of the situation. For example, differentiate parental directives or conversation related to structured tasks from those intended to join with or engage the child in a mutually enjoyable social interaction.
3. Consider parents' responses relative to the child's age and developmental level. Examples of reading cues and responding sensitively include a mother who adjusts the way she holds her infant after noticing the child's discomfort in a particular position or the father who responds to his toddler tugging at his arm by touching, talking to, or picking up his child.
4. When the child engages in negative testing or oppositional behavior, note whether the parent responds to the child in a way that suggests he or she experiences the child's behavior as resistant or "bad."
5. Note whether the rapidity and regularity with which the parent responds to the child helps the child feel that his or her actions have an effect on the parent.
6. Differentiate a genuine sense of "connectedness" from "going through the motions." An emotionally connected parent is aware of and involved with the child even when not actively interacting with the child. The parent is attentive to the child, subtly monitoring the child with an empathic awareness of the child's emotional state. Connectedness may also include seeing the child as a separate individual.
7. Assess the parent's capacity to reflect the child's affect and/or behavior through echoing (with infants), gazing, confirmation of affect, behavior, approval, encouragement, and praise, as well as labeling of the child's internal feeling states. This process of "mirroring" represents the parent's emotional availability and affective attunement to the infant or young child.
8. Assess the parent's capacity for "scaffolding" by looking at the amount and way in which the parent gains, helps to focus, and sustains the child's attention to the relevant aspects of the situation. Scaffolding is a process in which parents recognize their child's developmental capacities and provide a physical and socioemotional environment that gives the child an opportunity to expand his or her capacities. Just as a metal scaffold allows construction workers to build taller buildings, parents' emotional and cognitive scaffolding helps their child reach higher levels of cognitive, social, and motor skills as well as emotional and behavioral regulation. Scaffolding with a younger infant may be manifested by protective caregiving. With an older child, this process may include assistance such as teaching, demonstrating, stating expectations clearly, and setting limits with a sensitivity to the child's affective and cognitive status.
9. After the observations, ask the parents how typical the interaction was. If the parents indicate that it was different from

usual, inquire about how it was different and what attributions parents make about the differences. For example, parents may state that the child was much more cooperative than usual and that they rarely have the opportunity to play with their child one on one. Such information informs the diagnostic process and the planning for therapeutic intervention.

10. Observe from the child's perspective as well. Ask the question, "If I were this child, what would I see/experience when I look up at my mother or father?"

A systematic approach to assessing parent-child interactions is central to identifying the areas of strength as well as areas of concern that may contribute to disturbances in the parent-child dyad. Researchers (e.g., Ainsworth, Blehar, & Waters, 1978; Barnard, 1979; Clark 1985, 1999) have identified specific characteristics of the child, the parent, and the parent-child interaction that deserve attention during a relational assessment. The Parent-Child Early Relational Assessment (PCERA), a method that incorporates both an objective assessment of strengths and areas of concern across situations and a subjective component that involves parents in assessing their relationship with their child and the meaning of their child's behavior through video replay interview, is described below. This is followed by descriptions of several other empirically validated methods for assessing the quality of the parent-child relationship. See table 3.1 for an overview of these instruments.

PARENT-CHILD EARLY RELATIONAL ASSESSMENT

The PCERA (Clark, 1985) attempts to capture the child's experience of the parent, the parent's experience of the child, the affective and behavioral characteristics that each bring to the interaction, and the quality or tone of the relationship. The PCERA may be used as part of an initial diagnostic evaluation to formulate relationship issues and focus intervention efforts, for monitoring progress in therapy and to assess outcomes in treatment efficacy studies. The quality of the parent-child relationship is assessed from videotaped observations of the child interacting with the parent during four 5-minute segments that include feeding, structured task, free play, and separation/reunion (Clark, 1985, 1999; Farran, Clark, & Ray, 1990). The rating scales are based on empirical developmental studies and attachment, psychodynamic, and Soviet cognitive-linguistic theories and informed by clinical observations of those aspects of functioning seen as important for differentiating parents experiencing difficulty in parenting from well-functioning parents (Ainsworth, 1969; Clarke-Stewart, 1973; Musick, Clark, & Cohler, 1981; Sander, 1964; Vygotsky, 1978). The PCERA identifies areas of strength and areas of concern in the parent, the child, and the dyad. Relational profiles may be developed for use in focusing clinical intervention efforts, program evaluation, and research with families at risk for early relational disturbances.

Ratings are made on a 5-point Likert scale for 29 domains of parental functioning, 30 domains of child functioning, and 8 of dyadic functioning, described in table 3.2. The amount, duration, and intensity of affect and behavior exhibited by the parent, the child, and the dyad are rated:

1. Items assess aspects of parental behavior and affect including parental positive and negative affect, mood, sensitivity and contingent responsivity to child's cues, flexibility/rigidity, and capacity to structure and mediate the environment, genuine connectedness, mirroring, and creativity/resourcefulness.
2. Child items include positive and negative affect, somber/serious mood, irritability, social initiative and responsiveness, interest/gaze aversion, assertion/aggressivity, persistence, impulsivity, and emotional regulation, important aspects of infant functioning vulnerable to stress and family functioning.
3. Dyadic items include mutual enjoyment, tension, reciprocity, and joint attention.

The parent, child, and dyadic scales were initially developed on an NIMH-funded clinical intervention project studying maternal psychiatric disorders and the quality of the mother-child relationship (Musick et al., 1981). The PCERA has been further developed for use with normative and other at-risk populations (Clark et al., 1993).

Table 3.1 Parent-Child Relationship Assessment Instruments

Instrument	Age	Domains	Reliability/Validity	Comments
Parent-Child Early Relational Assessment (Clark, 1985)	Birth to 5 years old	Observations *Parent Subscales:* Positive affective involvement and verbalization Negative affect and behavior Scaffolding, sensitivity, and consistency *Infant Subscales:* Positive affect, communicative and social skills Quality of play, interest, and attentional skills Dysregulation and irritability *Parent-Child Dyad Subscales:* Mutuality and reciprocity Disorganization and tension *Video Replay and Interview:* Meaning of child and child's behavior Parent's perception of self in parenting role	High interrater reliability Good face validity Good construct validity Discriminates high-risk from normative dyads	Theoretically and empirically derived scales rated from videotaped observations and parent interview using video replay to identify areas of strength and concern for treatment planning and evaluations Widely used for research and clinical purposes
Still-Face Paradigm (Tronick et al., 1978)	<12 months	Parent-child interactions are characterized by initiation of interaction, mutual orientation, greetings, exchange of affect, and mutual disengagement through behavioral observations *Parent:* Vocalizations, head and body position, quality of handling infant, direction of gaze and facial expression *Infant:* Vocalizations, direction of gaze, head orientation and position, facial expression, amount of movement, blinks and tongue placement	High interrater reliability and some predictive validity for attachment security at 12 months	Research paradigm useful in studies of clinical and normative infants

Nursing Child Assessment Satellite Training NCAST Teaching and Feeding Scales (Barnard, 1979)	Infancy (including premature infants) through 3 years	*Mother:* Sensitivity to the child's cures Response to the child's distress Fostering social-emotional growth Fostering cognitive growth *Child:* Clarity of cues Responsiveness to caregiver	Good reliability Good validity Discriminates high-risk from normative dyads Parent total score has predictive validity for child IQ at 3–5 years	Ratings of home observations widely used for clinical and research purposes
Home Observation for Measurement of the Environment (Caldwell & Bradley, 1978)	Birth to 3 years	*Mother:* Responsivity Acceptance Organization of the infant's physical environment and provision of appropriate play materials Involvement with the infant Opportunities for variety in the infant's daily stimulation	Good concurrent and predictive validity with Stanford-Binet and Illinois Test of Psycholinguistic Abilities at 3 years	Administered in the child's home at a time when the child is awake and present
Emotional Availability Scales (Biringen, 2000; Biringen et al., 1998)	Infancy/early childhood	*Parent:* Sensitivity Structuring Nonintrusiveness Nonhostility *Child:* Responsiveness to the parent Involvement of the parent	Good reliability Very good concurrent and predictive validity associated with attachment security and child development	Grounded in attachment and emotional availability theories; although primarily used in research, may be useful for assessing intervention programs
Clinical Problem-Solving Procedure (Crowell & Feldman, 1988)	24–54 months (with modifications as young as 12 months, see Zeanah et al., 2000)	*Parent:* Emotional availability Nurturance/empathic responsiveness Protection Comforting/response to distress Teaching Play Discipline/limit setting Instrumental care/structure/routines	Good reliability. Parents should be interviewed in order to establish ecological validity	9 episodes—well suited for clinical use

(*continued*)

Table 3.1 Continued

Instrument	Age	Domains	Reliability/Validity	Comments
		Infant: Emotion regulation Security/trust/self-esteem Vigilance/self-protection/safety Comfort seeking Learning/curiosity/mastery Play/imagination Self-control/cooperation Self-regulation/predictability		
Strange Situation (Ainsworth et al., 1978)	11–20 months	Attachment security of infant with parent/caregiver: Secure Anxious-resistant Anxious-avoidant Disorganized	High reliability, stability, and predictive validity with U.S., Western European mothers	Grounded in Attachment theory Better suited for research than clinical purposes Research paradigm that is well suited for studies of attachment security in clinical and normative populations
Parenting Stress Index (Abidin, 1986)	1 month to 12 years	*Parent Domain:* Competence Isolation Attachment Health Role Restriction Depression Spouse Life Stress *Child Domain:* Distractibility/hyperactivity Adaptability Reinforces parent Demandingness Mood Acceptability	Good internal consistency for child domain subscales and parent domain subscales Good test-retest reliability for child domain, parent domain subscales, and total stress score Good construct validity Discriminates high-risk from normative dyads	Self-report paper-and-pencil instrument used clinically and in research

Working Model of the Child Interview (Zeanah & Barton, 1989)	Infant and toddlers	Richness of perception Openness to change Coherence Intensity of involvement Caregiving sensitivity Acceptance/rejection Infant difficulty Fear of loss Affective tone Narrative organization	Concurrent and predictive validity with Strange/Situation, infant attachment behavior and quality of mother-infant interaction	Grounded in Attachment theory Well suited to research and clinical purposes
Insightfulness Assessment (IA; Koren-Karie et al., 2002; Oppenheim, Koren-Karie, & Sagi, 2001; Oppenheim & Koren-Karie, 2002)	Infants, toddlers, preschoolers	*Parent Domain:* Insight into child's motives Openness Complexity in description of child Maintenance of focus on child Richness of description of child Coherence of thought Acceptance Anger Worry Separateness from child	Growing evidence of concurrent validity and reliability	Well suited to research and clinical purposes
Adult Attachment Interview (George et al., 1996)	Adult	Narrative/adjectives re early relationships with parents, rated: Secure/autonomous Dismissive Preoccupied Unresolved/disorganized	Associated with child attachment behavior; predictive validity has been established AAI scores correspond with their infants' attachment classification in the Strange situation	Semi-structured interview used for research purposes Maybe promising as a clinical tool

Table 3.2 Parent-Child Early Relational Assessment

Domains	Behavioral Observations	Indicators of Strengths in Relationship	Indicators of Areas of Concern in Relationship
Parent Domains			
Expressed affect and mood	Pervasive and sustained emotional state inferred by quality, intensity, and durations of: Facial expressions Behavior Tone of voice Content of verbalizations Posture	Warm, kind, and loving voice Cheerful and lively expression of positive affect Relaxed demeanor Expressions of affectionate exchanges (such as touching, smiling, or hugging)	Depressed mood (flat or constricted range in affect, withdrawn, few or sluggish movements, little energy, expressed helplessness or hopelessness, self-absorption, negative perceptions or preoccupations of rejection, anhedonia, and/or little interest in activities or interactions) Anxious mood (worried facial expression, heightened motor activity, agitation, vigilance, verbal expressions of anxiety, and/or an edgy or staccato tone of voice) Hypomania Voice may be flat, lacking in emotion or warmth *or* may be angry or hostile, including shouting
Expressed attitude toward child	Content, intensity, duration, and frequency of verbalizations to the child: Tone of voice Facial expressions Parent's actions	Encouraging statements to child Taking delight in being with child Positive and accepting attitude toward child	Harsh tone of voice, critical comments, cynical and/or taunting remarks that communicate displeasure and disapproval of the child and/or his or her behavior Negative attributions about child Rejecting behavior (turning away, harsh or abrupt-sounding voice or behaviors, and scowls, frowns, or other negative facial expressions)
Affective and behavioral involvement with child	Parent's physical contact Visual contact with the child Verbalizations and social initiatives Contingent responsivity Capacity to structure and mediate the environment Capacity to read child's cues Sense of connectedness Capacity to mirror child's emotional experience	Frequent gentle touching child Gazing at the child with genuine regard Frequent and meaningful verbalizations and social initiatives Imitating and expanding infants' vocalizations or the young child's verbalizations Questioning and answering the child, elaborating on the child's verbalizations, and commenting on the child's activities Using "motherese" cadence to regulate the mood state of young infants Initiating vocalizations, making faces, gesturing or playing with child	Little physical contact or rough, restraining touch Little or no verbalization or social initiation Blank stare at child Does not typically respond to child's cues, or does so inappropriately Ineffective at structuring child's environment Distant, uninterested in child Emotionally unavailable

		Making conversation relevant to the child's interests Prompting social play with child Responding quickly and appropriately to the child's cues Responding positively to child's positive age-appropriate behavior Ignoring or redirecting negative behavior Providing structure for child, helping the child to focus and sustain attention Involved and interested in child Engaged and connected Emotionally available to the child Mirroring and labeling the child's emotional state Helping child focus and sustaining attention Protective caregiving Uses scaffolding to expand child's capacities	
Parenting style	Manner in which the parent looks, touches, talks, holds, initiates, and responds to the child including: Flexibility Creativity Resourcefulness Intrusiveness Consistency, predictability In clinical populations, evidence of behavioral disturbance	Flexible, spontaneous, and creative Following the child's lead Adapting to the changing circumstances Respecting child's autonomy Consistent and predictable Behavior is contextually and developmentally appropriate	Rigid, inflexible and shows little creativity Intrusive and controlling Inconsistent Behavior is extremely inappropriate, possibly indicative of psychopathology
Infant/Child Domains			
Mood/affect	The child's overall range, intensity, and duration of affective expressions, not just toward the parent, and range from positive to negative expressions	Expresses enthusiastic/cheerful affect easily and regularly Characteristically happy and relaxed Smiles, laughter, or positive excitement, playful Very young infants may brighten their eyes, smile, coo, wave their arms and legs, and increase their respiratory rate	Withdrawn or disinterested, or appears depressed Anxious or fearful Jumpiness, watchfulness, hesitancy, rocking, motor tension Thumb-sucking, baby talk, stuttering, nervous laughter, persistent questioning Irritable, crying, whining, scowling, tantrums

(*continued*)