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12. Assessing the Emotional and Social Functioning of Infants and Young Children*

STANLEY I. GREENSPAN

Traditional approaches to assessing children's development have tended to focus on one component or another of development, rather than producing a profile of an integrated, functioning, whole child. For example, we have tended to assess separately a child's language functioning, motor functioning, sensory functioning, different aspects of cognition, and various domains of adaptive, social, and emotional functioning. Moreover, to measure these components of development, we have used structured tests that bear little relation to the child's everyday, functional world and that, as a result, fail to reveal most children's highest capacities. Not surprisingly, the intervention recommendations that flow from such fragmented, piecemeal assessments are also fragmented and do not suggest specific, individualized types of developmental experiences, involving both children and their caregivers, that will foster further growth.

In contrast to structured, piecemeal assessment approaches, this chapter suggests a functional developmental approach that assesses the whole child's core functional capacities in his or her most important everyday interactions with key caregivers. The Functional Emotional Assessment Scale (FEAS) assesses the

*This chapter is an adaptation of material in *Infancy and Early Childhood: The Practice of Clinical Assessment and Intervention with Emotional and Developmental Challenges* (Stanley I. Greenspan, International Universities Press, Madison, CT, 1992).

child's social, emotional, cognitive, and communicative capacities in the context of interactions with key caregivers. It is derived from an integrated understanding of the social, emotional, and cognitive development of infants and young children (Greenspan, 1979, 1989). This approach looks at such core capacities as the child's capacity for self-regulation, engagement, intentional communication, forming a complex sense of self, elaborating symbols and representations, and creating logical bridges or differentiations within his or her emerging symbolic world ("emotional thinking"). It postulates a number of levels of development. For each level, the scale describes expected primary emotional capacities; the range of sensorimotor capacities; and related motor, sensory, language, and cognitive capacities. The scale also addresses infants' constitutionally- and maturationally-based capacities, as well as patterns of caregiving that may facilitate or undermine the child's development.

FEAS recognizes that the world of the infant or young child is a world of feelings and relationships. It is in the context of relationships with important caregivers that babies and toddlers develop—and demonstrate—their cognitive, motor, and language skills, as well as intentionality and motivation. Spontaneous interactions between young children and their familiar caregivers reveal core functional interactive capacities (as well as cognitive, motor, and language skills). These capacities are the glue that holds the child's development together.

The assessment of an infant's or young child's core emotional and social capacities provides families and clinicians with a rich, nuanced profile of how a very young child experiences his or her physical and human environment, the ways in which the child uses his or her own resources and the support of caregivers to engage with the world, and the challenges that confront the child. Perhaps most importantly, insights from this assessment approach suggest specific, individualized intervention approaches that will reinforce a child's and family's unique strengths and will help them work effectively to overcome developmental challenges.

Functional Assessments and Structured Testing

The assessment of a young child's emotional and social functioning through observation of unstructured interactions with

all the child's important caregivers and with the clinician takes time, care, and skill. My colleagues and I are constantly asked to compare the results of our approach to the results achieved through use of formal, structured assessment instruments. Three issues seem central to this discussion: (a) accuracy; (b) the consequences of error; and (c) cost.

Accuracy

A formal test approach looks at what an infant can and cannot do in relationship to a defined set of stimuli or test procedures, which, at best, can only be approximations of a child's ordinary experience. Currently available formal tests of young children's development were, for the most part, developed and standardized with infants and young children who were not evidencing atypical or challenging developmental patterns. Formal tests are not designed to elicit a child's (especially a challenging child's) unique abilities and potential. Yet it is precisely the child with special needs who requires early assessment and intervention. And it is precisely the young child with special needs who may have the most difficulty paying attention, relating, and conforming to the most basic expectations of formal tests. Skilled examiners who are aware of these issues may use the challenging infant's general behavior in the formal assessment situation as an indicator of his or her abilities, substituting an informed clinical opinion for a formal score or profile. The less experienced examiner, however, may simply score the challenging child's performance on the test items in their standard presentation (leading, often, to what one parent described as "Johnny's 'can't do' reports") and attempt to derive conclusions from the numerical score. In either case, the formal testing situation is not the best context within which to observe the true functional capacities of any infant or young child.

The consequences of error

Misleading and incorrectly interpreted formal test data often lead to inappropriate recommendations for intervention. The wrong placement can lead to actual deterioration in the development of some children with delays or atypical patterns, hardly a desirable outcome for initiatives designed to offer early identification of these delays or patterns and appropriate intervention. Unfortunately, as states and communities are attempting to

assess more and more infants and young children in need of appropriate special services and offer services to them, the number of incorrect service recommendations may be increasing. Recently, more and more parents of toddlers and preschoolers have been coming to me for consultation after being offered inappropriate services and educational placements based on misdiagnoses derived from misleading standardized test scores. A complete clinical, relationship-focused functional evaluation of such children often reveals abilities six or seven months ahead, developmentally, of those reflected in standardized test results. Since many of these children are below 2 years of age, the difference is quite significant.

Cost

Often, time can be saved and resources conserved by using formal structured assessments very selectively to explore questions about specific areas of functioning that have not been answered by the clinical functional assessment. More importantly, an assessment approach that builds on a foundation of careful observation of the infant or young child with his or her family and other important caregivers is likely to avoid errors in educational placement and service recommendations, which waste community resources and unconscionably deplete children's and families' strength, energy, and developmental potential.

Goals of the Functional Emotional Assessment Scale

The Functional Emotional Assessment Scale offers a method of systematizing the clinical functional assessment of the infant and young child. It focuses on the infant's core emotional and social capacities at each stage in his or her development. It also outlines the related motor, sensory, language, and cognitive capacities that go along with each of the core emotional and social capacities. While it is always tempting to use rating scales to simplify complex clinical judgments, it should be clear that the goal of the FEAS is to assist clinicians in systematizing and fine-tuning clinical judgments, and in incorporating judgments about functional emotional capacities into research protocols. The scale points out critical areas for further clinical inquiry.

The scale is designed to help clinicians organize and interpret their observations of free, unstructured interactions between the infant or young child and his caregiver(s), as well as interactions between the child and the clinician. These unstructured interactions are invited when the clinician simply asks the caregiver to interact or play with the infant or child as he or she might at home. If further suggestions are needed, phrases such as "Just the way you like to interact with each other," "The way you like to enjoy each other," "The way you like to be together," and so on may be useful. If necessary, the clinician offers a series of semistructured interactive opportunities to the infant or child to help elicit his or her core competencies. (Examples of such interactive opportunities will be described later in this chapter.) These free, unstructured, and, if necessary, semistructured interactions are close to the infant's natural way of interacting with his or her world. They can be observed both in the office and at home and can be repeated as many times as necessary in order to gain a true picture of the child's and caregiver's capacities. It is often very helpful to see the infant or young child and his caregiver(s) interacting on at least two or more separate occasions. In reaching an overall clinical judgment, one must also take into account historical data and caregivers' reports of the child's current functioning.

The Functional Emotional Assessment Scale addresses six areas:

1. *Primary emotional capacities.* Evidence of the child's attainment of the primary emotional capacities characteristic of the developmental level corresponding to his or her chronological age suggests whether or not a child has progressed to his or her age-expected functional emotional developmental capacity.
2. *Emotional range—sensorimotor (including speech).* This area focuses on the range of sensory and motor equipment, including motor gestures, touch, and speech, that the infant or child is able to employ in mastering his or her primary functional emotional capacities. Older children will need sensory, motor, and speech capacities to support higher-level functional and conceptual abilities.
3. *Emotional range—affective.* This area focuses on the different affective themes (e.g., dependency, aggression) that the child can organize at his or her age-expected developmental level (e.g., one child can use words and pretend play in relationship to the theme of dependency, while another child can only use play and words to express aggression).

4. *Associated motor, sensory, language, and cognitive capacities.* This area comprises selected developmental items not already covered in the primary emotional capacities. (However, many capacities that would traditionally be assessed within the cognitive domain are addressed in the assessment of functional emotional capacity.)

5. *General infant tendencies.* These are constitutionally- and maturationally-based capacities.

6. *Overall caregiver tendencies.* These are caregiving patterns that facilitate or undermine the child's development.

Each of these capacities can be rated as "not present," "fleetingly present," "intermittently present," "present most of the time," or "present consistently under all circumstances."

When using the Functional Emotional Assessment Scale, the clinician should first assess the age-expected primary emotional capacities of the infant or young child. He or she should then assess all the prior primary emotional capacities which, one hopes, were mastered at earlier ages but continue as part of the child's basic capacities. The clinician should then assess sensorimotor emotional range and affective emotional range. If, in both categories, the infant or young child evidences an optimal emotional range for his age level, the clinician need not assess developmentally earlier categories of emotional range. On the other hand, if the infant or young child evidences constrictions in his or her emotional range, the clinician should keep assessing the developmentally earlier categories of emotional range (either sensorimotor or affective, or both) to see if the infant or young child was ever able to establish a broad, flexible emotional range in the sensorimotor or affective areas. The clinician should next observe how the child functions in terms of motor, sensory, language, and cognitive capacities to see if these are consistent with, behind, or advanced for the child's functional emotional capacities. Next, the clinician should assess the infant's constitutional tendencies and the caregivers' capacities.

The clinician arrives at a number of judgments regarding the infant's capacities, including (a) the developmental level, in terms of primary functional emotional capacities; (b) the sensorimotor range; and (c) the affective range. He or she gains an understanding of contributions from the infant's constitutional and maturational tendencies and the caregiving patterns. The clinician will determine if a child is at or below the age-expected functional emotional development, as well as how well earlier functional emotional capacities have been mastered. The clinician will also gain an impression of the infant's emotional range.

The clinical interpretation of the child's profile must be a clinical judgment based on the child's overall adaptation. A child who is at a developmental level lower than expected with regard to functional emotional capacities but has an optimal emotional range at that level is not necessarily at greater risk than a child who is at his or her age-expected functional emotional developmental level but has a constricted sensorimotor and affective range. For example, a child whose developmental momentum was temporarily delayed by a medical illness but who is now developing at an appropriate rate in all areas may be at less risk than a child who is already chronically constricted in his or her emotional range. In other words, a 2-and-a-half-year-old who operates in all areas like a well-functioning 2-year-old may be at less risk than a 2-and-a-half-year-old who talks and engages in some pretend play, but avoids pleasure and only deals with dependency through physical touch and impulsive behavior.

In general, one first determines the child's developmental level in terms of primary functional emotional capacities. This provides a sense of where the child is developmentally. Then one determines how flexible or wide-ranging his or her adaptive and coping capacities are at that level (i.e., sensorimotor and affective emotional range). If one wants to see how stable the child's capacities are, one looks at the ratings themselves. Lots of "fleetingly present" or "intermittently present" ratings suggest unstable capacities. "Present most of the time" or "present consistently under all circumstances" ratings suggest stable capacities.

The clinician may then look at the associated sensory, motor, language, and cognitive items to see which areas are ahead, at, or behind the functional emotional capacities. For example, a child's fine motor and motor planning capacities may be behind, while receptive language and cognition are advanced. If this child is also constricted in his or her emotional range, especially in dealing with aggression, one may wonder if the lag in fine motor and motor planning is contributing to this constriction (i.e., a lack of security in the fine control of the motor system). Another child may evidence lags in primary functional emotional capacities and the affective emotional range but be advanced in the motor, sensory, language, and cognitive areas. Here, one

may wonder whether the child's interactive opportunities with caregivers are fully supporting his or her development.

After one gains a sense of the child's developmental levels in different areas, one should look at the infant's constitutional and maturational patterns (e.g., oversensitivity or undersensitivity to touch or sound) and caregiving patterns.

The goal of the Functional Emotional Assessment Scale is to describe functional emotional capacities as systematically as motor, sensory, language, and cognitive capacities have been described. The scale is designed to help clinicians organize their observations in order to arrive at appropriate clinical judgments and, most importantly, to use their understanding to recognize the types of experiences an infant and his caregivers require. The FEAS enables the clinician to (a) foster further growth at each stage of the child's emotional development; (b) work with the child's unique constitutional and maturational patterns; (c) help family members and caregivers understand their own responses and patterns of interaction with the child; and (d) address and overcome lags, constrictions, and deficits in the child's emotional development, as well as associated symptoms.

The Functional Emotional Assessment Scale

This section presents the Functional Emotional Assessment Scale, to be used with infants and young children from 3 months to 48 months of age. The capacities to be observed (or elicited) are listed in terms of the six stages of emotional development. Each set of capacities, while usually first in evidence at a certain period in infancy or early childhood, continues as the child grows. The child's current level, as well as the levels he or she may have already mastered, should be observed.

Regulation and interest in the world

By 3 months, the infant can be calm; recovers from crying with comforting; is able to be alert; looks at one when talked to; and brightens up when provided with appropriate visual, auditory, and/or tactile experiences.

Primary emotional capacities

1. Shows an interest in the world by looking (brightening) at sights or listening to (turning toward) sounds. Can pay attention to a visual or auditory stimulus for three or more seconds.
2. Can remain calm and focused for two or more minutes at a time, as evidenced by looking around, sucking, cooperating in cuddling (e.g., molding with caregiver), or other age-appropriate activities.

Emotional range—sensorimotor

1. Looks at interesting sights for three or more seconds (brightens or turns toward sights).
2. Listens to interesting sounds for three or more seconds (brightens or turns toward interesting sounds).
3. In response to touch (light or firm), relaxes, smiles, vocalizes, or looks.
4. In response to caregiver's moving of infant's arms and/or legs, relaxes, smiles, vocalizes, or looks at caregiver or own limbs.
5. Tolerates and/or shows pleasure (e.g., smiles) in gentle horizontal and vertical movement in space (e.g., caregiver moving infant up and down and from side to side).
6. Tolerates or evidences pleasure in routine smells (e.g., a fruit odor such as lemon, an after-shave lotion, or perfume).
7. When held firmly, relaxes or evidences pleasure.
8. When rhythmically rocked, relaxes or evidences pleasure.
9. Recovers from distress with help from caregiver (e.g., holding, rocking) within twenty minutes.

Emotional range—affective

1. Shows an interest in caregiver by looking, listening, or evidencing curiosity and pleasure (as compared to being interested only in inanimate objects or in nothing).
2. Shows interest through looking, listening, or signs of pleasure when caregiver makes happy, joyful facial expressions, or laughs.
3. Shows interest when caregiver is assertive and reaches out by means of his or her facial expressions and vocal tones (caregiver saying, in a regular tone of voice, "What a wonderful nose and mouth and little chin you have!"; "Will you hold this rattle? You can do it! You can do it!").

Selected associated motor, sensory, language, and cognitive capacities not included above

1. *Motor:* (a) holds head upright on own; (b) lifts head by leaning on elbows while on stomach; (c) keeps hands open 75 per-

cent of the time; (d) rolls from side to back or stomach to back; (e) reaches for rattle or other toy; (f) and manipulates rattle or other toy.

2. *Sensory:* (a) follows objects in horizontal plane (e.g., light); (b) follows objects in vertical plane; (c) responds to a variety of sounds; and (d) tolerates deep pressure-type touch.
3. *Language:* (a) watches lips and mouth of speaker; and (b) vocalizes with at least one type of sound.
4. *Cognitive:* (same as sensory and language).

Forming relationships (attachments)

By 5 months, the infant evidences positive loving affect toward the primary caregiver and other key caregivers, and looks and/or smiles spontaneously and responds to their facial expressions, voices, or touch with signs of pleasure, such as smiling, relaxing, and "cooing."

Primary emotional capacities

1. Responds to social overtures with an emotional response, such as a smile or other indication of pleasure, a frown or other facial expression, vocalizations, arm or leg movements, or postural shifts.
2. Responds to social overtures with an emotional response of pleasure (e.g., smile, joyful vocalizations).

Emotional range—sensorimotor

Shows emotional interest or pleasure in caregiver's:

1. Vocalizations (indicate which type works best—high or low pitch; loud, medium, or soft tone).
2. Facial expressions.
3. Touch (indicate part of body—back, abdomen, face, arms, or legs—and type of touch—light or firm—that works best).
4. Gentle moving of the infant's arms or legs.
5. Moving of infant horizontally or vertically in space (indicate rhythm that works best, e.g., fast, slow).

Emotional range—affective

1. Evidences a relaxed sense of security and/or comfort when held or rocked.
2. Evidences signs of pleasure (e.g., smiles, happy sounds) when either talked to, held, looked at, moved around, touched, or all of the above.
3. Evidences a curious, assertive interest in caregiver (e.g., looks at and studies caregiver's face).
4. Anticipates with curiosity or excitement the presentation of an interesting object that has been presented a moment earlier (e.g., a smiling, vocalizing caregiver making interesting sounds leads to anticipatory looks and facial expressions).
5. Evidences signs of discomfort, lack of pleasure, or sadness when, during interactive play, caregiver is unresponsive for 30 to 60 seconds (e.g., while playing, caregiver stops interacting and is silent and still-faced).
6. Evidences anger or protest when frustrated (e.g., angry cry or facial expression).
7. Within 15 minutes, can recover from distress assisted by caregiver's social overtures, such as vocalizing and making interesting facial expressions.

Selected associated motor, sensory, language, and cognitive capacities not included above

1. *Motor:* (a) pushes up on extended arms; (b) shifts weight on hands and knees; (c) readies body for lifting while being picked up; (d) can reach for a toy; (e) can roll from back to front; (f) sits with support; (g) can cooperate in being pulled to a sitting position; (h) can bring hands together; (i) can grasp objects voluntarily; and (j) can hold rattle.
2. *Sensory:* (a) reacts to paper on face; (b) looks toward sound; and (c) tolerates roughhouse play.
3. *Language:* (a) regularly localizes source of voice with accuracy; (b) vocalizes two different sounds; and (c) vocalizes to caregiver's facial expressions and sounds.
4. *Cognitive:* (a) can focus or pay attention for 30 seconds or longer; (b) looks and scans for objects and faces; (c) smiles at face in mirror; (d) looks toward object that goes out of visual range; (e) looks at own hand; and (f) manipulates toys, such as a rattle or ring, and plays with them.

Intentional two-way communication

By 9 months, the infant is able to interact in a purposeful (i.e., intentional, reciprocal, cause-and-effect) manner, and is able to initiate signals and respond purposefully to another person's signals. The infant uses multiple sensory modalities, the motor system, and a range of emotions in these intentional interactions.

Primary emotional capacities

1. Responds to caregiver's gestures with intentional gestures of his or her own (when caregiver reaches out to pick up infant, infant may reach up with his or her own arms; a flirtatious caregiver vocalization may beget a playful look and a series of vocalizations).
2. Initiates intentional interactions (e.g., spontaneously reaches for caregiver's nose, hair, or mouth; uses hand movements to indicate wish for a certain toy or to be picked up).

Emotional range—sensorimotor

Responds intentionally to caregiver's:

1. Vocalizations.
2. Facial expressions.
3. Touch (e.g., holds caregiver's hand when being touched or tickled).
4. Moving of infant around in space.

Emotional range—affective

Uses gestures to initiate:

1. Closeness. The infant reaches out to be picked up or hugs back when hugged.
2. Pleasure and excitement. The infant can be playful and can smile and vocalize joyfully while putting finger in caregiver's mouth or taking rattle out of caregiver's mouth and putting it in own mouth.
3. Assertive exploratory behavior. The infant touches and explores caregiver's hair.
4. Protest or anger. The infant pushes undesired food off table with an angry look and screams intentionally when desired toy is not brought to him or her.
5. Fearful behavior. Infant turns away and looks scared or cries when a stranger approaches too quickly.
6. Infant can recover from distress within 10 minutes by being involved in social interactions.

Selected associated motor, sensory, language, and cognitive capacities not included above

1. *Motor:* (a) can sit with good balance; (b) can hold toes while sitting; (c) while sitting, can reach up in air for objects; (d) can go from lying on back to sitting; (e) can go from sitting to stomach position; (f) creeps or crawls on stomach or hands; (g) holds block or toy using thumb and finger; (h) can scoop a Cheerio or small object into palm; (i) bangs hands or toy while playing; and (j) transfers objects from hand to hand.
2. *Sensory:* (a) will feel textures and explore them; (b) notices when toy or object is put on different parts of body (stomach or foot) (e.g., looks at or touches textured toy); (c) not sensitive to loud noises (e.g., vacuum cleaner, toilet flushing, or dog barking); (d) not sensitive to bright lights; and (e) enjoys movement in space.
3. *Language:* (a) responds to name and/or some simple directions (e.g., "No"); (b) vocalizes different sounds from front of mouth (e.g., "Ba" or "Ma" or "Da") and causes sounds to convey intentions or emotions, such as pleasure or satisfaction; (c) responds to different sounds with different vocalizations of own or with selective behaviors; and (d) can imitate a few sounds (e.g., a "raspberry" or tongue click)
4. *Cognitive:* (a) can focus on toy or person for one minute or longer; (b) explores and examines new toy; (c) makes sounds or creates visual or tactile sensations with toy (e.g., cause-and-effect playing); (d) can discriminate between different people as evidenced by different responses; (e) looks for toy that has fallen to floor; and (f) can pull on part of an object (e.g., a corner of a piece of cloth) to get the object closer.

Complex sense of self I: Behavioral organization

By 13 months, the infant begins to develop a complex sense of self by organizing behavior and emotion. The toddler sequences a number of gestures together and responds consistently to a caregiver's gestures, thereby forming chains of interaction (i.e., opens and closes a number of sequential circles of communication). The toddler also manifests a wide range of organized, socially meaningful behaviors and feelings dealing with warmth, pleasure, assertion, exploration, protest, and anger.

Primary emotional capacities

The infant strings together three or more circles of communication (interaction) as part of a complex pattern of communication. Each circle or unit of communication begins with an infant behavior and ends with the infant building on and responding to the caregiver's response. For example, an infant looks at a toy

and reaches for it, opening a circle of communication; the caregiver points to the toy, gestures, and vocalizes, "This one?" The infant then nods, makes a purposeful sound, and reaches further for the toy, closing the circle of communication. As the infant explores the toy and exchanges vocalizations, motor gestures, or facial expressions with the caregiver, additional circles of communication are opened and closed.

Emotional range—sensorimotor

The infant can organize three or more circles of communication (with a responsive caregiver):

1. Using vocalization.
2. Using facial expressions.
3. Involving reciprocal touching.
4. Involving movement in space (e.g., rough-and-tumble play).
5. Using motor patterns (e.g., chase games, searching for objects, handing objects back and forth).

Emotional range—affective

With caregiver support (i.e., responsive empathetic reading of infant's types of communication and responding to them), the infant can organize three or more circles of communication around:

1. Negotiating closeness. Gives caregiver a hug and, as caregiver hugs back in response, nuzzles and relaxes.
2. Pleasure and excitement. Infant and caregiver play together with an exciting toy or with caregiver's hair or toes, or infant's toes.
3. Assertive explorations. Infant and caregiver examine new toys and explore the house.
4. Cautious or fearful behavior. Infant hides behind caregiver when in a new setting; negotiates degrees of protection needed with caregiver.
5. Angry behavior. Infant can gesture angrily back and forth.
6. Infant can recover from distress and remain organized while distressed by entering into complex gestural negotiation for what he or she wants (e.g., banging on door to go outside and play).

Selected associated motor, sensory, language, and cognitive capacities not included above

1. *Motor:* (a) walks on own or by holding onto furniture; (b) can squat while playing; (c) can throw a ball forward; (d) can feed self finger foods; (e) can stack two cubes; and (f) can organize one-step motor planning, such as pushing, catching, or throwing a ball.
2. *Sensory:* (a) infant explores and tolerates different textures with hands and mouth (e.g., willing to explore different foods); (b) infant is comfortable climbing and exploring off of the floor (e.g., on couch, table top); (c) infant is not sensitive to bright lights; and (d) infant is not sensitive to loud noises (e.g., vacuum cleaner).
3. *Language:* (a) understands simple words like "shoe" or "kiss!"; (b) uses sounds or a few words for specific objects; and (c) jabbers.
4. *Cognitive:* (a) can focus and pay attention while playing on own for five or more minutes; (b) copies simple gestures like "Bye-bye" or "No"; (c) can find toy under caregiver's hand; (d) will try to imitate a scribble; and (e) explores how toy works and figures out simple relationships, such as pulling a string to make a sound.

Complex sense of self II: Behavioral elaboration

By 18 months, the infant elaborates sequences of interaction which convey basic emotional themes.

Primary emotional capacities

1. Comprehends and communicates, via gestures, basic emotional themes as evidenced by the ability, with a responsive caregiver, to open and close 10 or more consecutive circles of communication (e.g., taking caregiver's hand and walking toward refrigerator, vocalizing, pointing, responding to caregiver's questioning gestures with more vocalizing and pointing, finally getting caregiver to refrigerator, getting caregiver to open door, pointing to desired food).
2. Imitates or copies another person's behavior and then uses this newly learned behavior intentionally to convey an emotional theme (e.g., putting on Daddy's hat and walking around the house with a big smile, clearly waiting for an admiring laugh).

Emotional range—sensorimotor

Elaborates complex interactions (i.e., 10 or more consecutive circles of communication) using:

1. Vocalizations and/or words.
2. Facial expressions.
3. Reciprocal touching and/or holding.
4. Movement in space (rough-and-tumble play).
5. Large motor activity (e.g., chase games, climbing games).
6. Communication across space (e.g., while playing with pots, infant vocalizes to caregiver from across room; caregiver vocalizes back; infant continues playing and vocalizing without needing to come over and touch caregiver).

Emotional range—affective

1. Elaborates complex interactions (10 consecutive circles of communication) dealing with the emotional themes of:

   a. Closeness and dependency. Uses facial expressions, motor gestures, and vocalizations to reach out for a hug, kiss, or cuddle. Can be coy and charming, or even provocative, if necessary, in order to be close. Can also use imitation to feel close (e.g., talks on play telephone while Mom talks on telephone with a friend).

   b. Pleasure and excitement. Can share a joke with another toddler, or with an adult. For example, when the toddler drops some food accidentally and it makes a funny sound ("Splat!") or a mark on the floor, the toddler may giggle and look toward the other person to share in the pleasure. Making funny faces or sounds, or imitating the behavior of adults or other toddlers may be a basis for giggles and pleasure.

   c. Assertiveness and exploration, including relative independence. Can now explore more independently and can balance dependence with independence. Uses ability to communicate across space to feel close to caregiver while playing on own (e.g., may go into another room, or to a far corner of the same room, to look for a toy while periodically looking at or vocalizing to the caregiver). May also come over to touch base with caregiver and venture out again.

   d. Cautious or fearful behavior. Can now, via vocalizations, motor gestures, or a few words, tell caregiver exactly how to be protective in a new situation (e.g., hides behind caregiver but pushes caregiver toward a toy or toward new people as though to run interference), or says, "No," and hides behind caregiver.

   e. Anger. Can hit, pinch, yell, bang, scream, or lie on the floor as part of an organized pattern well under toddler's control. Can also give the angry cold shoulder to a wayward caregiver. Can sometimes use an angry gesture, look, or vocalization instead of hitting, screaming, or pinching.

   f. Limit setting. Can respond to caregiver limits communicated through gradually louder vocal gestures, serious-looking facial expressions, and body postures, as well as to simple phrases such as "No, stop that!" "Leave it alone!" and "Come here!" For example, with the above type of limit setting, the toddler puts telephone down and returns to caregiver.

2. Can use imitation to deal with and recover from distress (e.g., toddler may bang hands on floor and yell after being yelled at).

Selected associated motor, sensory, language, and cognitive capacities not included above

1. *Motor:* (a) can plan motor pattern involving two or more steps (e.g., can bounce balloon and try to catch it); (b) tries to imitate scribble or scribbles on own; (c) holds crayon or pencil adaptively; (d) puts items in cup or toys in box; (e) builds tower with two or three blocks; (f) can put pegs in pegboard; (g) can put round block in round opening on board; and (h) can take off socks.
2. *Sensory:* (a) enjoys or tolerates various types of touch (e.g., cuddling, roughhousing, touching different types of clothing, brushing teeth or hair); (b) is comfortable with loud sounds; (c) is comfortable with bright lights; and (d) is comfortable with movement in space.
3. *Language:* (a) comprehends some simple questions, and carries out directions (e.g., with a ball); (b) imitates simple words; and (c) uses words to make needs known.
4. *Cognitive:* (a) uses objects functionally (e.g., vocalizes on toy telephone, combs hair with toy comb); (b) searches for desired toy or hidden object in more than one place; (c) can play on own in focused manner for 15 or more minutes; (d) imitates behaviors just seen or seen a few minutes earlier; (e) recog-

nizes family pictures; and (f) can use stick or other object to get another object.

Emotional ideas I: Representational capacity

By 24 months, the child creates mental representations of feelings and ideas which can be expressed symbolically (e.g., through pretend play and words).

Primary emotional capacities

1. Can construct, in collaboration with caregiver, simple pretend play patterns of at least one "idea" (e.g., dolls hugging or feeding the doll).
2. Can use words or other symbolic means (e.g., selecting or drawing a series of pictures, creating a sequence of motor gestures) to communicate a need, wish, intention, or feeling (e.g., "Want that." "Me toy." "Hungry!" "Mad!").

Emotional range—sensorimotor

Can communicate symbolically about intentions, wishes, needs, or feelings with:

1. Words.
2. Complex gestures and facial expressions (e.g., making angry facial expressions in an exaggerated manner).
3. Touching (e.g., lots of hugging or roughhousing as part of pretend drama where child is the "daddy").
4. Motor movement (e.g., showing caregiver what to do).

Emotional range—affective

Can use pretend play or words employing at least one idea to communicate themes dealing with:

1. Closeness or dependency (e.g., as dolls are feeding each other, child says, "Want Mommy").
2. Pleasure and excitement (e.g., child makes funny faces like clown on television and laughs).
3. Assertiveness and exploration (e.g., cars are racing, child looks at a real car in wonderment and asks, "Car?").
4. Cautious or fearful behavior (e.g., says, "Scared").
5. Anger (e.g., as dolls are fighting or hitting, says, "Me mad").
6. Limit setting (e.g., child says to self, "No hit").
7. Can use pretend play and/or words to recover from and deal with tantrum or distress (e.g., after a few minutes, tantrumming child uses words and sounds to argue with caregiver).

Selected associated motor, sensory, language, and cognitive capacities not included above

1. *Motor:* (a) catches large ball from a few feet away using arms and hands; (b) jumps with both feet off ground; (c) balances momentarily on one foot; (d) walks up stairs, two feet on each step at a time; (e) can run; (f) can stack more than four blocks; and (g) can both scribble and make a single stroke with a crayon or pencil.
2. *Sensory:* (a) enjoys or tolerates various types of touch (e.g., cuddling, roughhousing, touching different types of clothing, brushing teeth or hair); (b) is comfortable with loud sounds; (c) is comfortable with bright lights; and (d) is comfortable with movement in space.
3. *Language:* (a) understands simple questions ("Is Mommy home?"); (b) uses simple two-word sentences ("More milk," "Go bye-bye"); (c) can name some objects in a picture; and (d) begins to use some pronouns.
4. *Cognitive:* (a) can focus or pay attention for 30 minutes or more; (b) can do pretend play on own; (c) can search for favorite toy in place where it was the day before; (d) can do simple shape puzzles (two to three shapes); (e) can line up objects in a design (e.g., a train of blocks); (f) can point to body parts of doll; and (g) can put round and square blocks in correct places on board.

Emotional ideas II: Representational elaboration

By 30 months, the child, in both make-believe play and symbolic communication, can elaborate on a number of ideas that go beyond basic needs (e.g., "Want juice") and can deal with more complex intentions, wishes, or feelings (e.g., themes of closeness or dependency, separation, exploration, assertiveness, anger, self pride, showing off).

Primary emotional capacities

1. Creates pretend drama with two or more ideas (trucks are crashing and then they pick up loads of rocks, or dolls are hugging and then have a tea party). Ideas need not be related or logically connected to one another.
2. Uses symbolic communication (e.g., words, pictures, motor

patterns) to convey two or more ideas at a time that express complex intentions, wishes, or feelings (e.g., "Daddy play with car," "No sleep, play"). Ideas need not be logically connected to one another.

Emotional range—sensorimotor

Can communicate symbolically about intentions, wishes, or feelings with:

1. Words.
2. Complex gestures and facial expressions (e.g., acting tired and needy).
3. Touch (e.g., lots of hugging or roughhousing as seen on television).
4. Can participate in simple spatial and motor games with rules (e.g., taking turns throwing a ball).

Emotional range—affective

Can use pretend play or other symbolic communication (e.g., words) to communicate themes containing two or more ideas dealing with:

1. Closeness or dependency (e.g., dolls say "Hug me," child says, "Give you kiss").
2. Pleasure and excitement (e.g., making funny words and laughing).
3. Assertiveness and exploration (e.g., pretend airplane zooms around room).
4. Cautious or fearful behavior (e.g., pretend drama where baby doll is scared of loud noise).
5. Anger (e.g., soldiers shoot pretend guns at one another).
6. Limit setting (e.g., dolls follow rules at tea party, "Must sit").
7. Use of pretend play to recover from and deal with distress (e.g., plays out eating the cookie he could not get in reality).

Selected associated motor, sensory, language, and cognitive capacities not included above

1. *Motor:* (a) walks up and down stairs; (b) throws ball; (c) stands on one foot; (d) can walk on tiptoe; (e) draws line with crayon or pencil; (f) can turn knob; (g) can remove cap; (h) can fold paper; and (i) can make a tower of eight or more blocks.
2. *Sensory:* (a) enjoys or tolerates various types of touch (e.g., cuddling, roughhousing, touching different types of clothing, brushing teeth or hair); (b) is comfortable with loud sounds; (c) is comfortable with bright lights; and (d) is comfortable with movement in space.
3. *Language:* (a) understands sentences with two or more ideas (e.g., "You can have a cookie when we get home."); (b) understands directions with two or more ideas; (c) organizes sentences with two or more ideas (e.g., "Want apple and banana"); and (d) refers to self using a pronoun.
4. *Cognitive:* (a) can point to some pictures from a verbal description; (b) can name objects in a picture; (c) can make a train of blocks after seeing one in a picture; and (d) can repeat two or more numbers.

Emotional thinking

By 36 months, ideas dealing with complex intentions, wishes, and feelings in pretend play or other types of symbolic communication are logically tied to one another. The child can differentiate between what is real and what is not, and switches back and forth between fantasy and reality with little difficulty.

Primary emotional capacities

1. Pretend play, however unrealistic, involves two or more ideas that are logically tied to one another (e.g., "The car is visiting the moon [and gets there] by flying fast."). In addition, the child can build on an adult's pretend play idea (i.e., close a circle of communication). For example, the child is cooking soup and when an adult asks, "What is in it?" the child says, "Rocks and dirt" or "Ants and spiders."
2. Symbolic communication involves two or more ideas that are logically connected and grounded in reality: "No go to sleep." "Want to watch television." "Why?" asks the adult. "Because not tired." The child can close symbolic circles of communication (e.g., child says, "Want to go outside." Adult asks, "What will you do?" Child replies, "Play.").

Emotional range—sensorimotor

Logically connecting two or more ideas, can communicate symbolically concerning intentions, wishes, needs, or feelings using the following:

1. Words.

2. Complex gestures and facial expressions (e.g., pretending to be an angry dog or cat).
3. Touch (e.g., lots of hugging or roughhousing as part of pretend drama where child is the "daddy").
4. Spatial and motor games with rules that child can organize (e.g., takes turns going up small incline, or holds hands with others and goes around in a circle).

Emotional range—affective

Can use pretend play or words to communicate themes containing two or more logically connected ideas dealing with the following:

1. Closeness or dependency (e.g., doll gets hurt and mommy doll fixes it).
2. Pleasure and excitement (e.g., says "bathroom words" like "doody" and laughs).
3. Assertiveness and exploration (e.g., good soldiers search for missing princess).
4. Cautious or fearful behavior (e.g., scary monster scares baby doll).
5. Anger (e.g., good soldiers fight bad ones).
6. Limit setting (e.g., soldiers can only hit bad guys because of the "rules").
7. Use of pretend play to recover from anger (e.g., plays out eating the cookie he could not get in reality).

Selected associated motor, sensory, language, and cognitive capacities not included above

1. *Motor:* (a) walks upstairs alternating feet; (b) catches big ball; (c) kicks big ball; (d) jumps forward; (e) hops; (f) copies circle; (g) cuts paper; and (h) can unbutton buttons.
2. *Sensory:* (a) enjoys or tolerates various types of touch (e.g., cuddling, roughhousing, touching different types of clothing, brushing teeth or hair); (b) is comfortable with loud sounds; (c) is comfortable with bright lights; and (d) is comfortable with movement in space.
3. *Language:* (a) understands and constructs logical bridges between ideas with full sentences; (b) uses "but" and "because"; (c) answers "what," "who," "where," and "what are you doing" questions; (d) comprehends actions/verbs; (e) uses plurals; and (f) uses two prepositions.
4. *Cognitive:* (a) engages in pretend play that has logical structure (i.e., pretend ideas are connected); (b) perceives spatial designs as complex and interrelated (i.e., a house made of blocks has connected rooms); (c) identifies "big" and "little" as part of developing a quantitative perspective; and (d) can identify objects by their function as part of developing abstract groupings.

Forty-two to 48 months

By 42 to 48 months, the child is capable of elaborate, complex, pretend play and symbolic types of communication dealing with complex intentions, wishes, or feelings. The play or direct communication is characterized by three or more ideas that are logically connected and that reflect an understanding of causality, time, and space.

Primary emotional capacities

1. Elaborates on complex, partially planned pretend play with three or more logically connected ideas dealing with intentions, wishes, or feelings. The planned quality (e.g., a special car is used) and "how," "why," or "when" elaborations give depth to the drama (e.g., child sets up castle with an evil queen who captured the princess—"Why did she capture the princess?" "Because the princess was more beautiful." "When did she capture her?" "Yesterday." "How will the princess get out?" "You ask too many questions.").
2. Participates in reality-based, circle-closing symbolic conversation using three or more ideas dealing with intentions, wishes, or feelings. In a reality-based dialogue, the child can deal with causality. ("Why did you hit your brother?" "Because he took my toy." "Any other reason?" "He took my cookie.")
3. Distinguishes reality from fantasy (e.g., "That's only pretend." "That's a dream. It's not real.").
4. Uses concepts of time and space to deal with intentions, wishes, or feelings. Caregiver: "Where should we look for the toy you can't find?" Child: "Let's look in my room. I was playing with it there." Caregiver: "When do you want the cookies?" Child: "Now." Caregiver: "Not now; maybe in five minutes." Child: "No. Want it now!" Caregiver: "You can have the cookie in one, two, or five minutes." Child: "Okay. One minute."

Emotional range—sensorimotor

The child is able to use elaborate, complex, logically connected ideas (three or more) and communicate using:

1. Words.
2. Complex gestures and facial expressions (e.g., giving someone a dirty look, observing to see if they react, and giving them an even angrier look if they haven't apologized, and soon!).
3. Touch (e.g., giving caregiver a back rub, looking longingly into her eyes and smiling, and then asking for a new toy).
4. Spatial and motor games with rules that child can organize (e.g., can partially play baseball or basketball).

Emotional range—affective

The child is able to use elaborate, complex, logically connected ideas (three or more) when dealing with:

1. Closeness or dependency (e.g., doll gets hurt and mommy doll fixes it, and doll goes to party and meets prince).
2. Pleasure and excitement (e.g., says "bathroom words" like "doody" and laughs, and then goes and says words to caregiver, looking for her to laugh or get mad).
3. Assertiveness and exploration (e.g., good soldiers search for missing princess and find her, but have to battle with evil soldiers to save her).
4. Cautious or fearful behavior (e.g., scary monster scares baby doll, who hides under covers and then gets up and hits monster).
5. Anger (e.g., good soldiers fight bad ones and use secret bombs and rockets to defeat enemy).
6. Limit setting. Child can now set limits for himself or herself by reasoning about consequences (e.g., using ideas causally and in time framework: "If I am bad now, I will be punished later."). Even though he or she does not always follow them, child now is able to understand rules in terms of limits. Child can also form abstract principles. "You shouldn't be mean to them."
7. Separation and loss. Child can now picture Mom at home while he or she is at school, or in waiting room while he or she is in office, and can relate some feelings of sadness and loss (e.g., "She is in the waiting room. I miss her a little, but I am having fun.").

Selected associated motor, sensory, language, and cognitive capacities not included above

1. *Motor:* (a) skips; (b) hops; (c) rides tricycle; (d) catches ball; (e) bounces ball; (f) shows hand preference; (g) copies cross; (h) strings beads; and (i) cuts across a line.
2. *Sensory*: (a) enjoys or tolerates various types of touch (e.g., cuddling, roughhousing, touching different types of clothing, brushing teeth or hair); (b) is comfortable with loud sounds; (c) is comfortable with bright lights; and (d) is comfortable with movement in space.
3. *Language*: (a) comprehends complex "why" questions, such as "Why do we need a house?"; (b) can express ideas reflecting an understanding of relative degrees of feeling expressing wish or intention: "I am only a little mad."; (c) can repeat a five- to ten-word sentence; and (d) can repeat four to seven numbers.
4. *Cognitive:* (a) can point to pictures that show an object with attributes that are first described verbally (e.g., "What do you eat with?" "What makes food?"); (b) can deal with concepts of quantity (e.g., "Which is biggest?" "Which box has more marbles in it?"); (c) can identify similarities and differences among shapes and verbal concepts (e.g., triangle and rectangle, or people and animals); and (d) can recall and comprehend experiences from recent past.

General tendencies (regulatory patterns): All ages

1. The infant is able to be calm and/or calm down, and not be excessively irritable, clinging, active, or panicked.
2. The infant is able to calm down and take an interest in sights, sounds, and people, and is not excessively withdrawn, apathetic, or unresponsive.
3. The infant is able to focus his or her attention and not be excessively distractible.
4. The infant enjoys a range of sounds—high and low pitched, loud and soft—and different rhythms, and is not upset or confused by sounds.
5. The infant enjoys various sights, including reasonably bright lights, visual designs, facial gestures, and moving objects, and is not upset or confused by various sights.

6. The infant enjoys being touched (on face, arms, legs, stomach, trunk, and back), as well as bathed and clothed, and is not bothered by things touching his or her skin.
7. The infant enjoys movement in space (being held and moved up and down and from side to side), does not get upset with movement, and does not crave excessive movement.
8. The infant is able to maintain motor tone and carry out age-appropriate motor planning sequences (e.g., put fist in mouth, reach for object).
9. The infant enjoys a range of age-appropriate foods and is not bothered (e.g., with abdominal pains, skin rashes, irritability, or other symptoms) by any age-appropriate, healthy food as part of a balanced diet.
10. The infant is comfortable and asymptomatic around household odors and materials, and is not bothered by ordinary levels of household odors, such as cleaning materials, paint, oil or gas fumes, pesticides, plastics, composite woods (e.g., plywood), or synthetic fabrics (e.g., polyester).

If the rating is less than "present at all times under all circumstances" for any of the above, also rate the items below.

1. Infant tends to be hypersensitive or overly sensitive to:
   a. Touch (light or heavy).
   b. Sound (high pitch, low pitch, or loud).
   c. Sights (bright lights).
   d. His own movement in space (e.g., being moved horizontally or vertically).
   e. Smells (e.g., ordinary household odors, perfumes).
2. Infant tends to be hyposensitive, or undersensitive (i.e., does not respond to sensations and may crave them) to:
   a. Touch.
   b. Sound.
   c. Sights.
   d. Movement in space.
   e. Smells.

(Note that an infant may have a mixture of hypersensitivities and hyposensitivities.)

3. Infant tends to have difficulty processing, organizing (making sense of), or sequencing:
   a. Sounds (e.g., 3-year-old having difficulty following two simple directions, such as "Take the glass, and put it in the sink.").
   b. Sights (e.g., 3-year-old having difficulty identifying or copying a design like a circle).
   c. His or her own motor pattern (e.g., tying shoes).

General caregiver patterns (obtained through history and/or direct observation)

An infant or young child may have several important caregivers, including parents, other family members, and regular child care providers. If possible, the clinician should talk with each important caregiver and observe him or her in interaction with the child, noting the amount of time the caregiver spends with the child (e.g., father, three hours a day; primary child care provider, eight hours a day weekdays).

The following patterns tend to facilitate development:

1. *Caregiver tends to comfort the infant,* especially when he or she is upset, by methods such as relaxed, gentle, or firm holding, or rhythmic vocal or visual contact.
2. *Caregiver tends to find appropriate levels of stimulation to interest the infant in the world* by being interesting, alert, and responsive, including offering appropriate levels of sound, sights, and touch (including the caregiver's face) and appropriate items such as games and toys.
3. *Caregiver tends to pleasurably engage the infant in a relationship* through actions such as looking, vocalizing, and gentle touching.
4. *Caregiver tends to read and respond to the infant's emotional signals and needs in most emotional areas* (e.g., responds to desire for closeness as well as child's need to be assertive, explorative, and independent).
5. *Caregiver tends to encourage the infant to move forward in development:*
   a. The caregiver helps the baby to crawl, vocalize, and gesture by actively responding to the infant's initiative and encouragement (rather than overanticipating the infant's needs and doing everything for him or her).
   b. The caregiver helps the toddler make the shift from proximal, physical dependency (e.g., being held) to feeling more

secure while being independent (e.g., keeps in verbal and visual contact with the toddler as he or she builds a tower on the other side of the room).

c. The caregiver helps the 2- to 3-year-old child shift from motor discharge and gestural ways of relating to the use of ideas through encouraging pretend play (imagination) and language around emotional themes (e.g., gets down on the floor and plays out dolls hugging each other, dolls separating from each other, or soldiers fighting with each other).

d. The caregiver helps the 3- to 4-year-old take responsibility for behavior and deal with reality, rather than "giving in all the time," infantilizing, or being overly punitive.

The caregiver characteristics described above cover a number of developmentally based adaptive patterns. If, in considering these patterns, the clinician observes that they are not observable most of the time, it may be useful to observe interaction to determine if, and under what circumstances, the caregiver tends to be:

1. Overly stimulating.
2. Withdrawn or unavailable.
3. Lacking pleasure, enthusiasm, or zest.
4. Random or chaotic in reading or responding to signals (e.g., vocalizes and interacts, but without regard for infant's signals, by pinching, poking, or "revving baby up").
5. Fragmented and/or insensitive to context (e.g., responds to one part of infant's communication but misses the "bigger pattern," as when caregiver gets excessively upset and hugs active toddler who accidentally banged his or her leg while trying to run and obviously wants to keep exploring the room).
6. Overly rigid and controlling. Tries to get the child to conform to rigid agenda (e.g., insists that toddler only play with a toy one way).
7. Concrete in reading or responding to communication (e.g., unable to tune into symbolic level in pretend play or in dialogue, and, instead, keeps communication at behavioral and gestural levels. For example, a child is pretending with a toy telephone that he will not talk to his mother. The mother perceives this as a literal sign of rejection and refuses to "play any more.").
8. Illogical in reading or responding to infant's communication (e.g., caregiver is so flooded with emotion that he or she misreads what is communicated. A 3-and-a-half-year-old says, "I am scared of the monster, but I know it is just make-believe." The caregiver explains, "Monsters will never get into the room because the door has a big lock on it, and monsters can be nice, too. You know you shouldn't play with these toys anyhow, and how did you get that scratch on your hand?").
9. Avoidant of selected emotional area(s) (e.g., in pretend play, parent ignores child's interest in aggression and always ignores separation themes). The clinician should consider which of the following emotional areas seem to be troublesome: (a) security and safety; (b) dependency; (c) pleasure and excitement; (d) assertiveness and exploration; (e) aggression; (f) love; (g) empathy; and (h) limit setting.
10. Unstable in the face of intense emotion (e.g., caregiver can facilitate development only if emotions are not too intense. If strong emotions are expressed, the caregiver's behavior tends to become chaotic, unpredictable, withdrawn, or overly rigid).

Suggestions for eliciting the infant's emotional and developmental capacities

To learn about the infant's emotional and developmental capacities, observe 15 to 20 minutes or more of free interaction between the infant and caregiver, followed, as needed, by free interaction between the infant and clinician. If the infant or child does not evidence age-expected patterns, the clinician or caregiver may attempt to elicit age-appropriate developmental capacities using some of the suggestions described below. These suggestions are intended only to help get things going. Follow the child's lead to keep the interactions "cooking."

The capacities to be elicited are listed in terms of the six stages of emotional development. Each set of capacities, while usually first in evidence at a certain period in infancy or early childhood, continues as the child grows. The child's current level, as well as the levels he or she may have already mastered, should be observed. When the suggestions below refer only to the age at which a child first masters a particular capacity, the clinician should improvise a way to support that capacity in an older child (e.g., wooing an older child into a relationship with smiles and play rather than with smiles and sounds).

Capacities related to regulation and interest in the world

1. Paying attention.
2. Being calm.
3. Experiencing sensation through each sensory modality without being hypersensitive or hyposensitive.
4. Organizing motor movements.

To elicit these capacities, hold baby or put baby in infant seat with mother or father near. Offer baby opportunity to look at caregiver or clinician as one of them offers different types of sensations:

1. *Sights:* Beginning with a six- to eight-foot distance, make funny faces and gradually move closer (no closer than two to three feet). Hold your position for 30 seconds or more, at what appears to be optimal distance, moving slowly a little to the left, and then a little to the right. Then gradually move away. If baby does not clearly look at you for five seconds or more, repeat exercise while shining a light (use a flashlight) on your face. If there is still no response, try again, putting a colorful toy in your mouth (e.g., a rattle).
2. *Sounds:* Experiment with different sounds, beginning with a soft, medium pitch and going higher and lower in pitch (while still soft). Increase loudness two times. Vary pitch at each higher sound level and note if and when baby looks at you for five or more seconds. To be sure baby is looking at you, move a little to the left or right and see if baby follows your voice with his or her eyes.
3. *Touch:* Stroke baby's arms, legs, feet, hands, back, top of head, and, if possible, face and lips with (a) light touch (such as a feathery tickle); (b) medium gentle touch; and (c) gentle firm pressure (a little squeeze or gentle rhythmic massage). Note reactions: no reaction; positive reaction (e.g., pleasure or attentiveness is increased); or negative reaction (e.g., pulling hand away, crying or making sounds suggesting discomfort).
4. *Smell:* If mother wears a cologne or perfume, you can put a little on your finger and put it under baby's nose. Alternatively, use a little lemon juice. Observe calm, pleasurable, focused, or indifferent response versus crying or pulling away.
5. *Movement in space:* While firmly holding baby, gently and slowly move him or her up and down and from side to side, and then slowly spin around with baby. Gradually increase speed and vigor of each type of movement, but stop and slow down as soon as infant gives any sign of lack of pleasure. Note what types of movement are pleasurable or aversive. Observe if baby craves vigorous movement.
6. *Motor patterns:* As caregiver or clinician holds infant, observe if muscle tone is loose (low) (e.g., infant does not cooperate in the cuddle) or tight (high) so that infant feels overly stiff. See if age-expected motor milestones are being mastered. Make up games in which the infant will be expected to hold up his or her head, turn toward an adult's voice, reach for a toy, and, later on, crawl toward a favorite rattle, to elicit age-appropriate movements. See if baby can plan sequences of movements, such as putting hand in own mouth or systematically examining a new toy. Mom's, Dad's, or the clinician's hair, nose, or hand can be a "toy" as well.

(Note that many of the above capacities can be observed in the free play of the older infant, toddler, or young child.)

Ability to relate to others

1. Taking an interest in another person through looking, listening, or moving toward them.
2. Evidencing pleasure in relating to another person through smiles, a joyful look, or just a sense of warm comfort.
3. Seeking out warmth and pleasure with another person through communicating a wish for closeness (e.g., reaching up for a cuddle or jumping into parent's lap, or snuggling warmly).

To elicit these capacities, position yourself near baby (who may be in parent's lap, in infant seat, or on floor). Begin to flirt with and woo baby with interesting facial expressions; warm, inviting sounds; and inviting motor gestures, such as moving face from side to side or back and forth. Be patient and start from eight to ten feet away and move in slowly. If baby seems cautious or concerned, stop moving in and move back and forth, keeping your warm, cooing, funny face, vocalizations, and head movements going. Experiment with the different vocal tones. Also, feel free to put funny toys in your mouth or on your head. Observe if the infant is evidencing signs of relating (e.g., a smile, vocalizations, rhythmic arm and leg movements, reaching out to you and flirting, or just being coy).

For an older child, any type of play may serve as a vehicle for wooing the child with your voice, smiles, touch, or gestural exchanges. Always move in toward the child very slowly, warmly, and sensitively.

Ability for intentional communication and interaction

1. Initiating gestures (e.g., smiles, vocalizations, and deliberate motor movements, such as pointing, reaching out to be picked up, covering face).
2. Responding to caregiver's gestures with gestures (e.g., closing or completing a circle of communication by, for example, exchanging one toy for another or searching for the desired toy, or squeezing Dad's nose after it goes "toot").

To elicit these capacities, place yourself in front of baby on the floor with baby up on all fours, lying on stomach, or sitting. Make sure you are three to six feet away at ground level. Create opportunities for interaction. Put a brightly colored squeezable ball in your hand and offer it to baby. If baby takes it and examines it, hold your hand out and see if he or she will give it back. Support your action with words, "Can I have it back?" Use lots of facial gestures (such as nodding) and animated hand gestures which say, "Give it to me." If baby holds on to it, offer another toy in exchange. If baby will not give up the toy, gently take it out of his or her hand, and slowly hide it under your hand and see if baby takes it back. If baby will not take the toy, try putting the toy in your mouth and move close enough so that he or she can reach it. If necessary, try repeatedly with different toys. While interacting, respond to baby's sounds, facial expressions, or motor gestures with sounds and gestures of your own.

You may substitute other activities for the above as long as you create interactive opportunities (e.g., a peekaboo game).

Ability for complex interaction and communication

Initiating and responding in a chain of purposeful interactions requires the opening and closing of many circles of communication in a row. Circles of communication, using gestures, are employed to negotiate basic emotional themes such as closeness, anger, curiosity, exploration, and independence.

To elicit this capacity, begin playing with a real or toy telephone and pretend to talk to someone. See if the child comes over and copies what you are doing or tries to babble on the phone in his or her own way. If the child takes the phone, ask for it back saying, "I want to talk," and see if he or she lets you talk for awhile, and so on. If the child will not give it back to you, flirt with the child, offer an exchange, and, if necessary, gently take it and see if he or she vocalizes or gestures to get it back, or just grabs it back. If the child takes the phone, pick up another phone and see if the child will "talk" with you phone-to-phone.

If the phone will not get the child's attention, put on a silly hat and see if he or she will take it off your head and use it. If the child takes the hat, try to get it back using the methods described above to try to get the phone back.

If neither of the above work, walk around on all fours, pretending to be a horsey, and see if the child rides you. If you make noises, does the child also make them?

If none of these ideas work, follow the strategies described under the heading "Ability for intentional communication and interaction." Feel free to improvise and support complex interactions in other ways as well. The goal is to see if the toddler can close a number of circles of communication in a row.

Strategies for assessing young children's symbolic and representational capacities through observation of free play interaction are discussed by Serena Wieder in her chapter in this volume. This section has described only a few semistructured ways of helping a child demonstrate his or her emotional and developmental capacities. These suggestions should only be used if free play is unsuccessful in eliciting the child's capacities. They only start the process. The clinician or caregiver needs to follow the child's lead and keep the action moving. A judgment can then be made about the child's various emotional and developmental capacities. The above play activities may also be useful in helping the infant or young child practice his or her emerging functional capacities. Clinicians, educators, and caregivers should consider these activities to be examples of the types of activities that help an infant or young child explore his or her relationship with them in a way that supports developmental progress.

A Developmental Approach to Therapy

A careful assessment of an infant's or young child's level of emotional development within the context of his or her important relationships allows the clinician and family to think about the specific types of developmental experience that will be most helpful to this individual child and family. A therapeutic effort

may involve paying attention to the infant's unique constitutional and maturational patterns, caregiver-infant patterns of interaction, and/or the family's feelings and past experiences. Whatever therapeutic approach or combination of approaches is decided upon, however, intervention should not only provide general support, but should also provide highly specific types of experiences, which can only be determined through an understanding of the developmental level—and developmental needs—of the individual child and his or her unique world.

The principles of the developmental approach (to therapy) include the following:

1. Opportunities must be created that assist the child in learning basic developmental capacities. The capacities that learning opportunities must foster include (a) the ability to focus and pay attention; (b) the ability to engage warmly and trustingly with others; (c) the ability to communicate intentionally with both simple and more complex gestures. The gestural level must progress to the point where it can be used to negotiate the basic themes of life, such as dependency, aggression, approval or disapproval, and rejection; (d) the ability to represent or symbolize intentions and feelings, as seen in pretend play or in the functional use of language; and (e) the ability to organize and differentiate represented experience in order to distinguish reality from fantasy, the self from nonself, or one feeling from another feeling, and the temporal and spatial characteristics of representations. Creating learning opportunities to support these core developmental capacities is perhaps the single most important goal of a developmental approach to therapy.
2. The capacities must be supported in *a stable and broad-ranging manner.* At each developmental level, and for each capacity, the child may or may not master age-appropriate emotions and themes at that level (such as warmth, dependency, pleasure, excitement, assertiveness, anger, curiosity, self-limit setting, and, for older children, empathy and more stable forms of love). For example, the child may master two-way communication in terms of dependency, but not assertiveness, curiosity, or aggression. Similarly, the child may master a developmental capacity in a stable way so that it tends to survive even under types of stress, such as a mild physical ailment, a brief separation from a parent, or a strong emotional feeling. Alternatively, even a brief period of stress may undermine a capacity so that the child loses it. The goal is to create opportunities to learn the key developmental capacities in a stable, wide-ranging manner that encompasses age-appropriate themes and emotions.
3. Developmental capacities depend on the relationships that caregivers (including therapists and educators) have with infants and young children. Developmental approaches to therapy should foster attention and engagement, two-way communication, and the formation of representational or symbolic capacities.
4. In order to create learning opportunities that foster key developmental capacities, it is important to take into account two contributing factors—the constitutional and maturational aspects of the child's development and the interactive and family aspects of the child's experience. Included are (a) the infant or child-caregiver interaction patterns; (b) the family dynamics; (c) the infant's or child's own constitutional and maturational patterns, including hyposensitivity and hypersensitivity, sensory processing, affective patterns, motor tone, and motor planning; and (d) the infant's or child's own way of organizing experiences. This last category includes the child's physiological, behavioral, or gestural level, and, after age 18 months, his or her representational level, as well as the emergence of conflicts between different tendencies, such as conflicts between the child's assertive and aggressive side and the child's interest in safety, security, and dependency.

According to the developmental approach to therapy with children, the main goal, as indicated, is to facilitate the learning of core developmental capacities. When working with the various contributing factors and when preventing and treating developmental defects and constrictions in order to facilitate these capacities, one needs to understand how each infant and child is unique—the individual differences in the child's maturational and constitutional capacities, the family dynamics, and the interaction patterns between the child and his caregivers. Of course, each family member has his or her own personal dynamics that relate to family experiences while growing up. Therefore, as one works with the core developmental capacities, one is also working with the unique physical and interactive characteristics of the infant or child and his or her family. Thus, a key difference between the developmental approach and more

traditional approaches to therapy with children is the degree to which one actively promotes the attainment of core developmental capacities and attempts to overcome various delays or disorders in these capacities.

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13. Climbing the "Symbolic Ladder": Assessing Young Children's Symbolic and Representational Capacities through Observation of Free Play Interaction

SERENA WIEDER

The most challenging aspect of using observation of free play interaction to assess a child's overall developmental level is keeping track of multiple lines of development simultaneously. The most important, rewarding, and unique part of such an assessment is the comprehensive, integrated view it provides of the child's day-to-day experiences, the ways in which individual differences affect functioning, and the child's ability to organize the emotions, sensations, and ideas coming from his or her interactions. Unstructured interaction reflects how well the child is able, spontaneously and simultaneously, to use developmental capacities to communicate, relate, and share ideas, themes, and feelings with someone. The young child does this first by pretending to perform "real" actions and then by representing feelings, relationships, ideas, and problem-solving in symbolic ways. These symbolic and representational abilities are essential for development.

Stanley Greenspan's chapter on the Functional Emotional Assessment Scale in this volume presents a framework for assessing young children along multiple lines of development and in terms of the essential processes that organize and integrate experience at different developmental levels. The present chapter will complement his discussion of this developmental framework by focusing on the assessment of symbolic and representational capacities as they are observed in free play interaction. It will