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II

The Clinical Application of the Functional Emotional Assessment Scale

2

The Clinical Applications of the FEAS

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In addition to helping clinicians and researchers understand early development, the functional emotional developmental capacities described in Chapter 1 can be used to guide and systematize clinical observations. Developmentally based clinical observations, in turn, can enrich approaches to assessment and intervention.

To facilitate this process, we developed a clinical and research version of the Functional Emotional Assessment Scale (FEAS). The clinical version was developed first. It operationalizes the functional emotional developmental capacities described in Chapter 1 into clinically useful categories. The research version of the FEAS operationalizes the functional emotional developmental capacities into specific behaviors that can be reliably rated and validated and, therefore, used for a variety of research purposes. The research version, including reliability and validity studies and rating guidelines, is presented in Chapters 4, 5, 6, and 7.

The clinical version is presented in this chapter. It is an update of Chapter 9 in *Infancy and Early Childhood: The Practice of Clinical Assessment and Intervention with Emotional and Developmental Challenges* (Greenspan, 1992). This clinical approach to assessment emphasizes understanding the infant and young child's emotional and social function-

ing in the context of relationships with his or her caregivers and family. The emotional capacities of the infant and young child relate to the infant's ability to deal with his or her real world. This approach to the infant and young child's functioning can be contrasted to a formal structured test approach. The formal test approach looks at what an infant can and cannot do in relationship to a defined set of stimuli or test procedures.

In assessing infants and young children, especially those with atypical or challenging developmental patterns, the formal structured test approach covers only a small part of the infant's real capacities. Many formal tests were, for the most part, developed and standardized with infants and young children who were not evidencing unusual challenges or special needs. In addition, many formal tests are not geared toward bringing out a challenging child's unique ability and potential. Many infants and young children have difficulty in attending, relating, and conforming to the tests' most basic expectations. Skilled examiners aware of these factors may use only the challenging infant or child's general behavior around the test situation as an indicator of his or her abilities. The less experienced examiner often mistakenly attempts to derive and draw conclusions from a limited range of performance behaviors. In either case, the test situation is often not the best context within which to observe the full range of an infant or child's functional developmental capacities.

Incorrect and misleading formal test data often lead to incorrect recommendations for services and educational placements and programs. A delayed or atypical child may regress with the wrong placement, hardly a desirable outcome for such a laudable goal as early identification and appropriate early intervention. Unfortunately, as states and communities have been attempting to assess and offer services to more and more infants and young children in need of appropriate special services, the problem of incorrect service recommendations may be becoming greater. Recently, we have been seeing more and more toddlers and preschoolers who have been misdiagnosed and offered incorrect services and educational placements based on misleading early evaluations. Sometimes, test results have been six to seven months off in comparison to more complete clinical evaluation. Since many of these children have been under the age of 2, the error is quite significant.

All evaluations of infants, young children, and their families must begin with a clinical assessment of the infant and/or young child's functional capacities as described earlier. Specific structured tests, however reliable, valid, and easy to administer, must only be used to build on

the overall clinical functional assessment. Often time can be saved and resources conserved by only using formal structured assessments selectively, for example, when there are critical questions that have not been answered by the clinical assessment. More importantly, however, errors in educational placement and service recommendations will be minimized with an approach that has as its foundation a clinical functional developmental assessment of the infant, young child, and his or her caregivers and family.

This chapter presents a method of systematizing the clinical functional developmental 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. The data from which the clinician will make judgments are derived from a free, unstructured interaction between the infant or child and his or her caregiver, as well as the clinician. These unstructured interactions are started by simply asking the caregiver to interact or play with the infant or child as he/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, a series of semistructured interactive opportunities are offered to the infant or child to help elicit their core competencies. (These interactive opportunities, which can be suggested to caregivers or carried out by the clinician or both, 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 world. They can be done 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 infant/young child and caregiver's capacities. It is often very helpful to see the infant/young child and his caregiver(s) interacting on at least two separate occasions. In reaching an overall clinical judgment, one must also include historical data and caregiver reports of current functioning. Although this scale was developed to systematize the observable clinical data part of the evaluation, the clinician may also use it to systematize historical and/or current functioning data and integrated judgments using all sources of data.

The scale that follows can be used in two ways. It can be used descriptively to profile the infant and young child's emotional, social, and related developmental capacities. It can also be used to clinically rate each

capacity on a 0 to 4 scale. However, the reader should be aware that the clinical version of the FEAS is intended to systematize clinical thinking. The research version of the FEAS, which is presented in Chapters 4, 5, 6, and 7, should be used for research purposes. The reliability and validity studies on the FEAS, presented in these later chapters, were conducted on the research version.

Rating Scale:

0 = Capacity not present
1 = Capacity fleetingly present
2 = Capacity intermittently present
3 = Capacity present most of the time
4 = Capacity present all the time in all circumstances
N/A = Not applicable, because there was no opportunity to observe the presence or absence of this capacity

For each item the child may receive an N/A, 0, 1, 2, 3, or 4 rating. These ratings can then be added together. Adding together each item observed at the 4 level can derive a potential score. This is the child's potential age-expected capacity. The score attained can be put over the possible score and a percentage derived.

Whereas this procedure can be carried out for each area of functioning, only the Primary Functional Emotional and Emotional Range categories may be described quantitatively. The other categories should only be used in a qualitative descriptive manner. The areas of functioning that will comprise the scale are as follows:

- *Primary Emotional Capacities:* The attainment of primary emotional capacities at each developmental level determines if a child has progressed to his/her age-expected functional emotional developmental capacity. When a primary functional emotional capacity is not present it suggests the infant has not achieved his/her age-expected developmental level.
- *Emotional Range-Sensorimotor (including speech)*: This area focuses on the range of sensory and motor equipment, including speech, the infant or child is able to employ in mastering his/her primary functional emotional capacities (e.g., using motor gestures, touch, words, etc.). At later ages these capacities will involve the use of sensory, motor, and speech capacities to support higher level functional and conceptual abilities.

- *Emotional Range-Affective:* This area focuses on the different affective themes (e.g., dependency, aggression) that the child can organize at his/her age-expected developmental level (e.g., one child can use words and pretend play in relationship to the theme of dependency-the dolls hugging-while another child can only use play and words for aggression).
- *Related Motor, Sensory, Language, and Cognitive Capacities:* This area comprises selected developmental items not already covered in the primary emotional capacities. Many capacities that would ordinarily fall in one of the cognitive categories will be seen to be covered as part of a functional emotional capacity.
- *General Infant Tendencies:* These are constitutionally and maturationally based capacities.
- *Overall Caregiver Tendencies*: These are facilitating and undermining caregiver patterns.

At present, the quantitative use of the scale should only be for descriptive purposes. Although based on the developmental model described in this work, this particular scale has not yet been used with a large number of normal, delayed, and dysfunctional infants and young children and their caregivers. The categories that are used in this scale, however, have been rated reliably, discriminate between clinical and nonclinical groups, and evidence age-related stability and expected shifts with developmental progression (Doherty, 1991, 1983; Hofheimer, Strauss, Poisson, & Greenspan, 1981) and are related to the (G.L.O.S.) scales (Greenspan & Lieberman, 1989a, 1989b; Chapter 5, this book).

In using the FEAS, the clinician should first assess the age-expected primary emotional capacities of the infant or young child. He 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. He should then assess emotional range (sensorimotor) and emotional range (affective). If the infant or young child evidences an optimal emotional range in both emotional range categories 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 emotional range, the clinician should keep assessing the developmentally earlier category of emotional range (one or both) to see if the infant or young child was ever able to establish a broad and 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. These should only be used qualitatively. Next, the clinician should assess the infant's constitutional tendencies and the caregiver's capacities.

The clinician arrives at a number of judgments regarding the infant's capacities, which includes the developmental level in terms of primary functional emotional capacities; the sensory motor range; and affective range. He also gains an understanding of contributions from the infant's constitutional and maturational tendencies and the caregiving patterns.

The clinician will see 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. Also, the clinician will gain an impression about the infant's emotional range. A child who is, for example, 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 with a constricted sensorimotor and affective range. The clinical interpretation of the child's profile must be a clinical judgment based on the child's overall adaptation. A child who, because of a medical illness, is a little delayed but 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 emotional range (e.g., a 2½ -year-old who talks and does some pretend play, but avoids pleasure and only deals with dependency through physical touch and impulsive behavior may be more at risk than another 2½ -year-old who operates in all ways fully like a 2-year-old).

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/her adaptive and coping capacities are at that level (i.e., his/her sensorimotor and affective emotional range). If one wants to see how stable his/her capacities are, one looks at the ratings themselves. Lots of 1s and 2s ("fleeting" or "intermittent") suggest unstable capacities; 3s and 4s ("most" or "all of the time") suggest stable capacities. A stability score can be derived if needed by dividing the sum of the rating numbers by the highest possible score (i.e., all 4s for ratable capacities).

One then may 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, fine motor and motor planning capacities may be behind while receptive language and cognition are advanced. If this child is also constricted in her emotional range, especially in dealing with aggression, one may wonder if the lag in fine motor and motor planning is contributing (i.e., a lack of security in the fine control of her motor system). Another child may evidence lags in her primary functional emotional capacities and her affective emotional range and be advanced in his/her motor, sensory, language, and cognitive areas. Here, one may wonder about her interactive opportunities with his/her caregivers and her family functioning.

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., over- or undersensitive to touch or sound) and his/her caregiver's capacities. One now wonders about how each of these may contribute to the developmental profile. For example, an intrusive caregiver coupled with a tactilely and auditorily hypersensitive child may contribute to a certain developmental profile (e.g., a fearful, cautious child who avoids assertive behavior).

While it is always tempting to use rating scales to simplify complex clinical judgments, it should be clear that the goal of the Clinical Functional Emotional Assessment Scale is to assist the clinician in systematizing and fine-tuning clinical judgments, and in incorporating judgments about functional emotional capacities into research protocols. In working up a case, the scale is of assistance in pointing out critical areas for further clinical inquiry.

For example, an infant's profile evidences the following: a delay in achieving intentional communication (i.e., opening and closing circles of communication); a narrow emotional range (not using vocalization or evidencing assertive exploratory behaviors); auditory underreactivity; and a withdrawn depressed caregiver. Such a profile would alert the clinician to explore the infant's constitutional and maturational pattern of underreactivity and look for related constitutional and maturational patterns, including motor capacities dealing with vocalizing and sensory processing capacities dealing with auditory processing. It would also alert the clinician to explore the caregiving capacities, learning more about the depressed caregiver, other caregivers, and the family. Most importantly, it would alert the clinician that he or she should explore in great depth the

interactive patterns that were not supporting intentional, purposeful communication. It would also create an immediate concrete goal for the potential intervention once the diagnostic workup was complete, namely to foster intentional interactions and initiative.

Therefore, the goal of this scale is to operationalize complex clinical judgments about what is often considered to be the vague and difficult to describe world of emotional capacities. Functional emotional capacities can be described just as can motor, sensory, language, and cognitive capacities. The goal is now for each clinician to routinely do it!

The Clinical Version of the Functional Emotional Assessment Scale

Self-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

1. Shows an interest in the world by looking (brightening) at sights or listening to (turning toward) sounds. Can attend 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., melding with caregiver), or other age-appropriate activities.

Emotional Range: Sensorimotor

1. Looks at interesting sights for three or more seconds (brightens or turns to sights).
2. Listens to interesting sounds for three or more seconds (brightens or turns to interesting sounds).
3. In response to touch (light or firm), relaxes, smiles, vocalizes, or looks.
4. In response to moving 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 side to side).
6. Tolerates or evidences pleasure in routine smells (e.g., a fruit odor like 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 20 minutes.

Emotional Range: Affective

1. Shows an interest in the caregiver by looking, listening, or evidencing curiosity and pleasure (as compared to only being interested in inanimate objects or nothing).
2. Shows interest, through looking, listening, or signs of pleasure, when the caregiver makes happy, joyful facial expressions and vocal tones (e.g., caregiver smiling and laughing with great joy).
3. Shows interest when caregiver is assertive and reaches out by means of his or her facial expressions and vocal tones (caregiver talking in a regular tone of voice about, for example, "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 Already Included Above

1. Motor:
   a. Holds head upright on own;
   b. Lifts head by leaning on elbows while on stomach;
   c. Hands open 75 percent of the time;
   d. Rolls from side to back or stomach to back;
   e. Reaches for rattle or other toy;
   f. 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;
   d. Tolerates deep pressure-type touch.
3. Language:
   a. Watches lips and mouth of speaker;
   b. Vocalizes with at least one type of sound.
4. Cognitive: (same as sensory and language)

Forming Relationships, Attachments, and Engagement

By five months, infant evidences positive loving affect toward primary caregiver and other key caregivers; looks and/or smiles spontaneously and

responds to their facial expressions, voices, or touch with signs of pleasure such as smiling, relaxing, "cooing."

Primary Emotional

1. Responds to social overtures with an emotional response of any kind, which may include pleasure (a smile), but also may include a frown, other facial expressions, vocalizations, arm or leg movements, or postural shifts.
2. Responds to social overtures with an emotional response of pleasure (e.g., smile, joyful vocalizations, etc.).

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. Gently moving the infant's arms or legs;
5. Moving infant horizontally or vertically in space (indicate rhythm that works best—fast, slow, etc.).

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 the caregiver (e.g., looks and studies caregiver's face).
4. Anticipates with curiosity or excitement the re-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 or 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. Can recover from distress with caregiver's social overtures, such as vocalizing and making interesting facial expressions, within 15 minutes.

Selected Associated Motor, Sensory, Language, and Cognitive Capacities Not Already 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;
   j. Can hold rattle.
2. Sensory:
   a. Reacts to paper on face;
   b. Looks toward sound;
   c. Tolerates roughhouse type play.
3. Language:
   a. Regularly localizes source of voice with accuracy;
   b. Vocalizes two different sounds;
   c. Vocalizes to caregiver's facial expressions and sounds.
4. Cognitive:
   a. Can focus or attend for 30 or more seconds;
   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;
   f. Manipulates and plays with toys, such as a rattle or ring.

Two-Way, Purposeful Communication

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

Primary Emotional

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 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

Responses intentionally to caregiver's:
1. Vocalizations;
2. Facial expressions;
3. Touch (e.g., holds caregiver's hand when being touched or tickled);
4. Moving 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. Can be playful and smile and vocalize joyfully while putting finger in caregiver's mouth or taking a rattle out of caregiver's mouth and putting it in own mouth.
3. Assertive exploratory behavior. Infant touches and explores caregiver's hair.
4. Protest or anger. Infant pushes undesired food off table with an angry look; screams intentionally when desired toy is not brought to him, etc.
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 Already Included in Above

1. Motor:
   a. Can sit with good balance;
   b. Can hold toy 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;
   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 (e.g., looks at or touches textured toy);
   c. Not sensitive to loud noises like that of vacuum cleaner, toilet flushing, or dog barking;
   d. Not sensitive to bright lights;
   e. Enjoys movement in space.
3. Language:
   a. Responds to name and/or some simple requests (e.g., "No");
   b. Vocalizes different sounds from front of mouth (e.g., "Ba" or "Ma" or "Da") and can use 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;
   d. Can imitate a few sounds (e.g., a "raspberry" or tongue click).
4. Cognitive:
   a. Can focus on toy or person for one or more minutes;
   b. Explores and examines a new toy;
   c. Makes sounds or creates visual or tactile sensations with a toy (e.g., cause-and-effect playing);
   d. Can discriminate between different people as evidenced by different responses;

   e. Looks for a toy that has fallen to floor;
   f. Can pull on a part of an object (e.g., a piece of cloth) to get the object closer.

Behavioral Organization, Problem-Solving, and Internalization (A Complex Sense of Self—I)

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 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

The infant strings together three or more circles of communication (interaction) as part of a complex pattern of communication. Each unit or circle of communication begins with an infant behavior and ends with the infant building on and responding to the caregiver response. For example, an infant looks and reaches for a toy (opening a circle of communication), caregiver points to the toy, gestures and vocalizes, "This one?" The infant then nods, makes a purposeful sound, and reaches further for toy (closing a 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

Can organize, with caregiver support (i.e., responsive empathetic reading and responding to infant's communications), three or more circles of communication around:

1. Negotiating closeness. Gives caregiver a hug and as caregiver responds with a hug back, 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, explore the house.
4. Cautious or fearful behavior. Infant hides behind caregiver when in a new setting; negotiates with caregiver degrees of protection needed.
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 a door to go outside and play).

Selected Associated Motor, Sensory, Language, and Cognitive Capacities Not Already Included in 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;
   f. Can organize one-step motor planning sequence such as pushing or 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. Not sensitive to bright lights;
   d. 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;
   c. Jabbers.

4. Cognitive:
   a. Can focus and attend 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;
   e. Explores how toy works and figures out simple relationships like pulling a string to make a sound.

Behavioral Elaboration (Complex Sense of Self 2)

By 18 months the infant elaborates sequences of inter-reaction, which convey basic emotional themes.

Primary Emotional

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, and pointing to the 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: Sensory and Motor

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 vocalization 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. Funny faces, funny 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 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 the 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, lie on floor as part of an organized pattern well under toddler's control. Can also give the angry cold shoulder to a wayward caregiver. Sometimes, can use the angry gesture, look, or vocalization instead of hitting, screaming, or pinching.

   f. Limit setting. Can, for example, respond to caregiver limits communicated through gradually louder vocal gestures, serious-looking facial expressions, and body postures, as well as to simple phrases like, "No, stop that!"; "Leave it alone!"; "Come here!" For example, with the above type limit setting, the toddler puts telephone down and returns to caregiver.
2. Can use imitation to deal with and recover from distress (i.e., toddler may bang hands on floor and yell after being yelled at).

Selected Associated Motor, Sensory, Language, and Cognitive Capacities Not Already Included in Above

1. Motor:
   a. Can plan motor pattern involving two or more steps (e.g., can bounce a balloon and try to catch it);
   b. Will try to imitate scribble or scribble on own;
   c. Holds crayon or pencil adaptively;
   d. Will put items in cup or toys in a box;
   e. Builds a tower with two or three blocks;
   f. Can put pegs in a pegboard;
   g. Can put round block in the round opening on a board;
   h. Can remove socks.
2. Sensory:
   a. Enjoys or tolerates various types of touch (e.g., cuddling, roughhousing, different types of clothing, brushing teeth or hair);
   b. Is comfortable with loud sounds;
   c. Is comfortable with bright lights;
   d. Is comfortable with movement in space.
3. Language:
   a. Comprehends some simple questions, carries out simple directions (e.g., with a ball);
   b. Imitates simple words;
   c. Uses words to make needs known.
4. Cognitive:
   a. Uses objects functionally (e.g., vocalizes on the toy telephone, combs hair with toy comb);
   b. Searches for a 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. Recognizes family pictures;
f. Can use a stick or other object to get another object.

Representational Capacity (Emotional Ideas I)

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

Primary Emotional

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., dolls feeding each other, child says, "Want mommy");
2. Pleasure and excitement (e.g., makes funny faces like clown on TV and laughs);
3. Assertiveness and exploration (e.g., cars racing, looking at a real car in wonderment and asking "car?");

4. Cautious or fearful behavior (e.g., says, "Scared");
5. Anger (e.g., dolls fighting or hitting, "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 Already Included in Above

1. Motor:
   a. Catches a 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;
   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, different types of clothing, brushing teeth or hair);
   b. Is comfortable with loud sounds;
   c. Is comfortable with bright lights;
   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;
   d. Begins to use some pronouns.
4. Cognitive:
   a. Can attend or focus for 30 or more minutes;
   b. Can do pretend play on own;
   c. Can search for favorite toy where it was day before;
   d. Can do simple shape puzzles (two to three shapes);
   e. Can line up objects in design (e.g., a train of blocks);
   f. Points to parts of a doll;
   g. Puts round and square blocks in correct places on a board.

Representational Elaboration (Emotional Ideas 2)

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

Primary Emotional

1. Creates pretend drama with two or more ideas (trucks are crashing and then they pick up 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 in terms of 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: Sensory and Motor

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 like they do on TV.);
4. Can participate in simple spatial and motor games with rules (e.g., taking turns in 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 the room);

4. Cautious or fearful behavior (e.g., pretend drama in which 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. Uses 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 Already Included in Above

1. Motor:
   a. Walks up and down stairs;
   b. Throws ball;
   c. Stands on one foot.;
   d. Can walk on tip toes;
   e. Draws a line with crayon or pencil;
   f. Can turn a knob;
   g. Can remove a cap;
   h. Can fold paper;
   i. Can make a tower of eight or more blocks.
2. Sensory:
   a. Enjoys or tolerates various types of touch (e.g., cuddling, roughhousing, different types of clothing, brushing teeth or hair);
   b. Is comfortable with loud sounds;
   c. Is comfortable with bright lights;
   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");
   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 it in a picture;
   d. Can repeat two or more numbers.

Representational Differentiation (Building Logical Bridges Between Ideas and 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 knows what is real from unreal and switches back and forth between fantasy and reality with little difficulty.

Primary Emotional

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, child can build on adult's pretend play idea (i.e., close a circle of communication). For example, child is cooking a soup and adult asks what is in it and 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." 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

Can communicate symbolically, logically connecting two or more ideas about intentions, wishes, needs, or feelings with:

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 in which child is the "daddy");
4. Can organize spatial and motor games with rules (e.g., takes turn in 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 soldier's 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., the soldiers can only hit bad guys because of the "rules");
7. Uses 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 Already Included in 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;
   h. Can unbutton buttons.
2. Sensory:
   a. Enjoys or tolerates various types of touch (e.g., cuddling, roughhousing, different types of clothing, brushing teeth or hair);
   b. Is comfortable with loud sounds;
   c. Is comfortable with bright lights;
   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 "doing" type questions;
   d. Comprehends actions/verbs;
   e. Uses plurals;
   f. Uses two prepositions.

4. Cognitive:
   a. Pretend play has logical structure to it (i.e., pretend ideas are connected);
   b. Spatial designs are 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;
   d. Can identify objects by their function as part of developing abstract groupings.

42–48 Months

By 42 to 48 months, the child is capable of elaborate complex pretend play and symbolic 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 informed by concepts involving causality, time, and space.

Primary Emotional

1. Elaborates 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 and 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, and/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 communicates 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 backrub, looking longingly in her eyes and smiling, and then asking for a new toy);
4. Can organize spatial and motor games with rules (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 the prince);
2. Pleasure and excitement (e.g., says bathroom words like doody and laughs, and then goes and says it 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 the monster);
5. Anger (e.g., good soldiers fight bad ones, and use secret bombs and rockets to defeat the enemy);
6. Limit setting: Child can now set limits for him- or herself by reasoning about consequence (e.g., using ideas causally and in time framework. "If I am bad now, I will be punished later."). Even though he doesn't always follow them, child now is able to understand rules in terms of limits. He also can form abstract principles. "You shouldn't be mean to them".

7. Separation and loss. Child can now picture mom in home while he is at school or in waiting room while he is in office, and relate some feelings of sadness and loss (e.g., "She is in waiting room. I miss her a little, but I am having fun.").

Selected Associated Motor, Sensory, Language, and Cognitive Capacities Not Already Included in 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;
   i. Cuts across a line
2. Sensory:
   a. Enjoys or tolerates various types of touch (e.g., cuddling, roughhousing, different types of clothing, brushing teeth or hair);
   b. Is comfortable with loud sounds;
   c. Is comfortable with bright lights;
   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 feelings of wish or intention: "I am only a little mad";
   c. Can repeat a 5- to 10-word sentence;
   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 hot?");
   b. Can deal with concepts of quantity (e.g., which is biggest, which box has more marbles in it, etc.);
   c. Can identify similarities and differences with shapes and verbal concepts (e.g., triangle and rectangle or people and animals);
   d. Can recall and comprehend experiences from recent past.

General Infant 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 including high and low pitch, 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, 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), 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, side to side, etc.), 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 any routine 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 four for any of the above, also rate the items below.

1. Infant tends to be hyper- 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., routine household odors, perfumes).

2. Infant tends to be hypo- or undersensitive (i.e., doesn't 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 hyper- and hyposensitivities.)
3. Infant tends to have difficulty processing, organizing (making sense of), or sequencing:
   a. Sounds (e.g., 3-year-old following two simple directions such as "Take the glass and put it in the sink");
   b. Sights (e.g., 3-year-old identifying or copying a design like a circle);
   c. His or her own motor pattern (e.g., tying shoes);
   d. Spatial concepts (e.g., figuring out the geography of a new house).

General Caregiver Patterns (By History and/or Direct Observations)

In many families there are a number of caregivers. As one becomes aware of which parent or nanny or day care caregiver tends to do what, indicate the person and the amount of time he or she spends with the infant or child each day next to the rating (i.e., Father/3 hrs). You may need to draw additional lines. (Attach additional sheets as necessary.)

1. Caregiver tends to comfort the infant, especially when he or she is upset (by relaxed, gentle, firm holding; rhythmic vocal or visual contact; etc.), rather than tending to make the infant tenser (by being overly worried, tense, or anxious; or mechanical or anxiously over- or understimulating).
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 games and toys, etc.), rather than being hyperstimulating and intrusive (e.g., picking at and poking or shaking the infant excessively to gain his attention).
3. Caregiver tends to pleasurably engage the infant in a relationship (by looking, vocalizing, gentle touching, etc.), rather than tending to ignore the infant (by being depressed, aloof, preoccupied, withdrawn, indifferent, etc.).
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 need to be assertive, explorative, and independent), rather than either misreading signals or only responding to one emotional need. For example, caregiver can hug when baby reaches out, but hovers over baby and cannot encourage assertive exploration or vice versa.
5. Caregiver tends to encourage the infant to move forward in development, rather than to misread infant's developmental needs and overprotect, "hold on," infantilize, be overpressured and/or punitive, be fragmented and/or disorganized, or be overly concrete. For example:
   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 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, 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 there is an impression that the caregiver patterns are less than optimal (i.e.,

ratings less than 4), it may be useful to consider the characteristics described below.

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 as in a pinching, poking, "rev-the-infant-up" type caregiver);
5. Fragmented and/or insensitive to context (e.g., responds to one part of an infant's communication but misses the "bigger pattern," as when a caregiver gets excessively upset and hugs her active toddler who accidentally banged his leg while trying to run and obviously wants to keep exploring the room);
6. Overly rigid and controlling. Trying to get the infant to conform to rigid agenda (e.g., making the 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 won't talk to his mother. Mother perceives this as a literal sign of rejection and refuses to "play anymore.");
8. Illogical in reading or responding to infant's communication (e.g., the caregiver is so flooded with emotion that he or she misreads what is communicated. A 3½-year-old says, "I am scared of the monster, but I know it is just make believe." The caregiver explains, "Monsters will never get in 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 areas (e.g., in pretend play parent ignores the child's interest in aggression and always ignores separation themes). Consider the following emotional areas:
   a. Security and safety;
   b. Dependency;
   c. Pleasure and excitement;
   d. Assertiveness and exploration;
   e. Aggression;
   f. Love;
   g. Empathy;
   h. Limit setting;
10. Unstable in the face of intense emotion (e.g., caregiver can support development only if emotions are not too intense; if emotions are strong, tends to become chaotic, unpredictable, withdrawn, or overly rigid).

Suggestions for Eliciting the Infant's Emotional and Developmental Capacities

To observe the infant's emotional and developmental capacities, observe 15 to 20 minutes or more of free interaction between 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.

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 level a child is at, as well as those he or she may have mastered, should be observed. When the suggestions only refer 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 play and smiles rather than only smiles and sounds).

Self-Regulation and Interest in the World

1. To attend
2. To be calm
3. To experience sensation through each sensory modality without being hyper- or hyposensitive
4. To organize motor movements

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

1. *Sights.* Beginning with a 6- to 8-foot distance, make funny faces and gradually move closer (no closer than 2 to 3 feet). Hold for 30 or more seconds 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 or more seconds, repeat exercise while shining a light (use a flashlight) on your face; if 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 he/she is looking at you, move a little to the left or right and see if he/she follows your voice with his/her eyes.
3. *Touch.* Stroke the baby's arms, legs, feet, hands, back, top of head, and if possible face and lips with (1) light touch (like a feathery tickle); (2) medium gentle touch; and (3) 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/her up and down and side to side and then slowly spin around with him/her. 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 he/she craves vigorous movement.
6. *Motor Patterns.* As caregiver or clinician holds infant, observe if muscle tone is loose (low) (e.g., infant doesn't 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 such as holding head up, turning to voice, reaching for toy, and later on, crawling for 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 the 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.

Forming Relationships, Attachment, and Engagement

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, 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 8 to 10 feet away and move in slowly. If the 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, or 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 very slowly, warmly, and sensitively.

Two-Way, Purposeful Communication

1. Initiating gestures (smiles, vocalizations, deliberate motor movements, such as pointing, reaching out to be picked up, covering face).
2. Responding to caregiver's gesture with gestures (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 toot").

To elicit, place yourself in front of baby on the floor with the 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 he takes it and examines it, hold your hand out and see if he will give it back. Support your action with words, "Can I have it back?" Use lots of facial gestures (nodding, etc.) and animated hand gestures, which say, "Give it to me." If he holds on to it, offer another toy in exchange. If he won't give it up, gently take it out of his hand, and slowly hide it under your hand and see if he takes it back. If he won't take the toy, try putting the toy in your mouth and move close enough for him to take it. If necessary, try over and over 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 it creates interactive opportunities (e.g., peek-a-boo game, etc.).

Behavioral Organization, Problem-Solving, and Internalization

Initiating and responding in a chain of purposeful interactions. Many circles are opened and closed 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, begin playing with a real or toy telephone and pretend to talk to someone else. See if toddler or child comes over and copies what you are doing or tries to babble on the telephone in his own way. If he takes phone, ask for it back, saying, "I want to talk," and see if he lets you talk for a while, and so on. If he won't give it back to you, flirt with him, offer an exchange, and, if necessary, gently take it and see if he vocalizes or gestures to get it back or just grabs it back. Pick up another phone and see if he will "talk" with you phone to phone.

If the phone won't get his attention, put on a silly hat and see if he will take it off your head and use it. Try to get it back like above.

If neither of the above works, walk around on all fours, pretending to be a horsy, and see if he rides you. If you make noises, does he?

If none of these ideas works, follow what was described under "Two-Way Purposeful Communication." 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 in a row.

Representational Capacity (Emotional Ideas)

1. Initiating pretend play (e.g., dolls hugging or fighting).
2. Initiating symbolic communication to convey intentions, wishes, or feelings (as compared to just labeling a picture or object).

To elicit, have toys, including dolls, action figures, cars, trucks, a house, furniture, kitchen and cooking utensils, a comb, toothbrush, two telephones, and an airplane or rocket. See what the child starts doing (e.g., pushing a car). Add a little doll to the car, saying, "He wants a ride," and see if the child builds on your gestures and words and begins a pretend drama such as the doll riding to the store. If the child opens the door to the toy house, say, "He [doll] wants to go in," and see if he/she incorporates your doll into a pretend drama.

If the child just sits still without initiating any play, try to establish some shared attention and a few simple gestural interchanges such as offering to hand him/her a doll or animal. He/She may nod or turn away and in this way begin a gestural interchange. You may put the doll in his/her lap and say, "Dolly hungry; wants to eat," and see what he/she does. Or you may begin feeding the doll, put it in the child's lap and say, "Wants more."

You may substitute other initiatives for these if they create an opportunity for the child to initiate a pretend sequence. Do not tell child what to do. Create an opportunity. To evidence this capacity, the child need not do what you expect; he/she only needs to initiate pretend play (e.g., you say, "Dolly is hungry," and child takes doll and has it hit another doll while saying, "Bad boy.").

Representational Differentiation (Building Logical Bridges Between Ideas and Emotional Thinking 2)

1. Connect pretend sequences together logically (dolls hug and get mad and fight);
2. Connecting symbolic communications together logically ("I don't like broccoli because it tastes bad");
3. Connect visual/spatial concepts together (e.g., figuring out geography of a new house, as evidenced in going upstairs and coming down and finding mom in the dining room or in knowing directions, finding things that are hidden, or building houses or farms with many interconnected parts).

To elicit, begin pretend play as described above. Only in addition to saying, "Dolly is hungry," mention other feelings ("Dolly wants a hug"; "Dolly is mad and wants to fight"). See if and how the dolly you give a voice to is incorporated (or not) into the child's play.

If Dolly is incorporated into the child's play or the child on his own initiates a pretend sequence, ask questions that create opportunities for logical reasoning (connecting ideas). They include, "Why are they hugging or fighting or exploring?" "How did that happen?" "What is this or that?" See if child connects pretend sequences or ideas. He need not respond as you want him to: "Why is the dolly hitting the dog?" Child: "Because they are from outer space and space animals like to fight" or "I don't know and stop asking questions!" Look for logical bridges between ideas, but not necessarily logical ideas.

Also discuss daily events with the child: "What do you like to play?" "Why/What do you like to eat?" etc.

To elicit the child's ability for spatial reasoning (how the child thinks nonverbally, which includes such abilities as a sense of direction, and constructing drawings of houses or farms), and reasoning about the physical properties of the world (these abilities are hard to elicit in the office), the following activities may prove useful. Hide an object the child takes an interest in, such as a little doll or car or rabbit's foot. First, hide it under a piece of paper with the child seeing you do it and see if she gets it. Next, hide the object in a box. Next hide it in a box and in turn put that box into a bigger box and see if she can find it (now that it is displaced twice). Any variation on this theme may be useful. The goal is to see how well the child figures out ever more complex spatial relations.

Another game that may get at this ability is a variation on the old shell game or three card Monte. Through speed of hand, you hide an object that the child likes, such as a key, under one of three boxes or shells. You make it look like it is in the middle one, but it is under one of the corner ones. See how many trials it takes for the child to figure it out. This can be done with cards also (i.e., find the ace or queen). If the child can look for the object in other than the middle by the third trial, he evidences a differentiated level of spatial reasoning.

Other types of activities to elicit spatial abilities might include creating a maze-like structure out of furniture, cardboard, or pillows (like the mirror room of an amusement park), and see how long it takes the child to solve the maze in order to find the new toy or keys.

This section has described only a few semistructured ways of helping a child demonstrate his 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 going. 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 as 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.

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3

The FEAS Developmental Growth Chart for Observation and Developmental Monitoring

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One of the most important components of a functional, developmental approach to intervention is for clinicians to initiate the interventions at the earliest possible time. Early intervention minimizes a child's ongoing functional impairments and missed opportunities for mastering critical functional skills. For example, many children who are diagnosed between ages 2½ and 4 with autistic spectrum disorders began evidencing a subtle deficit in complex preverbal interactive problem solving patterns between 12 and 18 months of age (Greenspan & Wieder, 1997). The children who are not helped to engage in complex social problem-solving interactions at this age (e.g., taking daddy by the hand to the toy area and pointing to the desired play object) miss an opportunity for mastering critical social, emotional, language, and cognitive skills.

There is mounting evidence that the absence of critical functional developmental capacities is associated with increased likelihood of severe developmental disorders. For example, Baron-Cohen, Frith, and Leslie (1988) demonstrated that by 18 months of age, a child's lack of a type of functional social pointing (which involves complex social in-