

Developmental Assessment of Play:

A Model for Early Intervention

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This article is the second in a two-part series. It presents an integrated overview of the construct of play and its development in infants, toddlers, and young children. The author describes developmental levels of play ranging from early sensorimotor-exploratory to symbolic play involving complex and planned multischeme sequences. In addition, functional components of symbolic play—agent, instrument, and scheme—are specified. Finally, the author presents a developmentally based, descriptive, and criterion-referenced protocol for the dynamic assessment of play in infants, toddlers, and young children.

The role of play in the development of infants, toddlers, and young children is of great interest and utility to professionals involved in early intervention. A number of professionals have noted that measuring play is a developmental domain that is critical to early intervention (Casby, this issue; Lifter & Bloom, 1998; Rossetti, 1991, 2001). Much can be revealed about the developmental status of an infant, toddler, or young child through the observation, assessment, and evaluation of his or her play. The development of play demonstrates a strong relationship with the constructs of the sensorimotor and preoperational periods of cognitive development, as well as with early communication and language (Bates, Benigni, Bretherton, Camaioni, & Volterra, 1977; Casby & Della Corte, 1987; Lifter & Bloom, 1998; McCune, 1995). Play in and of itself can be the basis of a valuable developmental assessment and intervention strategy. Play activities, behaviors, and interactions are very often some of the only performances available for observation of infants, toddlers, and children suspected of having a developmental delay. Rossetti (2001) noted that by

eliciting, observing, and describing the play of infants, toddlers, and young children, one is able to gain significant insight into the child's overall development that may provide information and direction for intervention efforts. Therefore, professionals who work with infants, toddlers, or young children need to become expert in aspects of play development, assessment, and intervention. This article focuses on sensorimotor manipulation and exploration to symbolic forms of play—sometimes referred to as object play. This construct of play is contrasted with what has been referred to as social play, which consists of such aspects as solitary, parallel, interactive, and thematic/dramatic forms of play with (or without) others (Lifter & Bloom, 1998; Rossetti, 2001; Patterson & Westby, 1994).

The early play behavior of infants and toddlers is reflective of early cognitive development (Fenson, Kagan, Kearsley, & Zelazo, 1976; Lifter & Bloom, 1998; Nicolich, 1977; Piaget, 1951; Rossetti, 2001). For example, the early levels of sensorimotor-exploratory play and nonfunctional relational play are reflective of the early stages of sensorimotor development, whereas later forms of play, such as functional-conventional and symbolic, are indicative of later stages of sensorimotor development and early aspects of preoperational development (Casby, this issue)

Some researchers believe that symbolic play is an early demonstration of young children's developing mental representation and symbolic capacity and functioning (McCune-Nicolich, 1981; Nicolich, 1977; Piaget, 1951; Sinclair, 1970; Werner & Kaplan, 1963). It is contended here that the development of symbolic play is indicative of the child's development of symbolic functioning, and as such, it is a *positive*

developmental characteristic of the preoperational period of cognitive development, traditionally defined by its lack of concrete operational abilities on the part of the child (Brainerd, 1978; Casby, this issue; Flavell, 1963).

A number of investigators have explored the developmental relationship between symbolic play and language (Bates, Benigni, Bretherton, Camaioni, & Volterra, 1977, 1979; Bates, Bretherton, Snyder, Shore, & Volterra, 1980; Belsky & Most, 1981; Casby & Della Corte, 1987; Casby & Ruder, 1983; Lifter & Bloom, 1998; McCune, 1995; McCune-Nicolich, 1981; Nicolich, 1977; Ogura, 1991; Shore, O'Connell, & Bates, 1984; Veneziano, 1981). The general consensus of this line of inquiry has been that early language developments and symbolic play are closely correlated developmentally. The two domains have been shown to be related in time, content, and structure. The contemporary perspective is that symbolic play and early language are related to one another in a local homologue manner (Bates et al., 1977, 1979). I propose that the local homologue—the shared basis/structure/system from which different domains emerge—is the child's capacity for mental representation and symbolic functioning.

The observation and assessment of play—in particular, symbolic play—have been of interest as they relate to a number of populations of children with developmental disabilities, including autism (Tilton & Ottinger, 1964; Ungerer & Sigman, 1981); mental retardation (Casby & Ruder, 1983; Hulme & Lunzer, 1966); hearing impairment (Casby & McCormack, 1985); developmental/specific language impairment (Casby, 1997; Lovell, Hoyle, & Siddall, 1968; Rescorla & Goosens, 1992; Roth & Clark, 1987; Terrell, & Schwartz, 1988; Terrell, Schwartz, Prelock, & Messick, 1984); and Down syndrome (Hill & McCune-Nicolich, 1981).

Research has shown that the noted special populations have delays in symbolic play. One consensus finding has been that the younger the children with developmental disabilities, the more likely it is that they will demonstrate difficulties in play, in particular, symbolic play. The type of developmental disability apparently also has an effect on young children's development of symbolic play (Terrell et al., 1984; Tilton & Ottinger, 1964; Wing, Gould, Yeates, & Brierley, 1977). For example, research has shown that children with autism who are at equivalent cognitive levels demonstrate more restrictive play patterns, play less, and spend more time in off-task behaviors than do typically developing children or children with mental retardation or Down syndrome (Riguet, Taylor, Benaroya, & Klein, 1981; Tilton & Ottinger, 1964; Wing et al., 1977). Children with developmental/specific language impairment have demonstrated play performances that are superior to those of their linguistically matched (and thus younger) typically developing peers (Casby, 1997; Terrell & Schwartz, 1988; Terrell et al., 1984). The former perform at the same level of complexity as their chronologically age-matched peers, but they tend to produce fewer symbolic play acts (Roth & Clark, 1987). Casby and Ruder (1983) found that children with mental retardation demonstrated play con-

tent and sequence similar to that seen in young typically developing children, although with a significant delay in onset and a significantly protracted course of development. Kennedy, Sheridan, Radlinski, and Beeghly (1991) reported that although they did observe correspondences between play and language that had been previously noted for typically developing children, their study participants with developmental delays demonstrated considerably more variability with regard to the two domains. Interesting gender differences in the play behavior of preschool children with cognitive delays were reported by Malone and Langone (1995). They found that young boys engaged in more repetitive motor movements, whereas young girls demonstrated more actions of organization and arranging.

DEVELOPMENTAL FRAMEWORK OF PLAY

Play develops along ordinal levels that range from early sensorimotor-exploratory and adaptive interactions with objects to fairly elaborated scripted sequences of events. The developmental framework of play described in this article consists of the following four major ordinal levels:

1. sensorimotor-exploratory,
2. relational-nonfunctional,
3. functional-conventional, and
4. symbolic.

Within this framework, symbolic play has a number of different nominal types. These different types of symbolic play are related to the major functional components of symbolic play—the *agent*, the *instrument*, and the *schemes* components (Casby, 1991a, 1991b). The framework and functional components presented herein are based upon a sizable body of basic and applied research that has addressed the nature, content, development, role, and methods of observation of play of infants, toddlers, and young children (Casby, this issue; see Figure 1).

Sensorimotor-Exploratory Play

Sensorimotor-exploratory play consists of the physical manipulation and inspection of objects, such as grasping, holding, mouthing, licking, banging, and rubbing, by infants. This is the attempt of an infant to assimilate the objects into his or her existing cognitive structures while also attempting to adapt to the world by making accommodations to the objects. In further Piagetian terms, it can be viewed as the infant's demonstration of secondary circular reactions—that is, the repetition of interesting events without regard to the social-conventional function of the object. Sensorimotor-exploratory play emerges and is prevalent around the ages of 2 to 4 months, extending to the age of approximately 10 to 12 months (Lezine, 1973; Sinclair, 1970; Rosenblatt, 1977). Thereafter, it declines and is replaced by other, more advanced

forms of play. Piaget (1951) noted that with the development of sensorimotor Stage IV—coordination of secondary circular reactions—the child’s sensorimotor–exploratory actions develop into something else with the emergence of the child’s relating of objects one to another. In the domain of play, that “something else” is relational–nonfunctional play.

Relational–Nonfunctional Play

In relational–nonfunctional play, infants and toddlers begin to relate objects one to another, albeit in a nonfunctional or nonconventional manner that is void of social–conventional knowledge or typical use of the objects. This is very similar to what Piaget observed as the coordination of secondary circular reactions during sensorimotor Stage IV. It consists of the child stacking, bumping, nesting, touching, and pushing objects together. During the earlier level of sensorimotor–exploratory play, the child’s actions were performed on single objects. A notable change with the emergence of relational–nonfunctional play is that now the child is actively engaging and acting on more than a single object at a time. A number of investigators have reliably identified such a level of play as emerging around the ages of 5 to 10 months and being prevalent during the age period of approximately 6 months through 12 months (Fenson et al., 1976; Rosenblatt, 1977; Sinclair, 1970).

Functional–Conventional Play

When children demonstrate functional–conventional play, they begin using objects in play in manners consistent with these objects’ social–conventional typical uses (e.g., holding a doll, stirring a spoon in a bowl, pushing a car, kissing a teddy bear). This is known as typical, conventional, social, and functional use of objects in context. Piaget (1951) viewed this level of play as one in which the child defines objects by their use through ritualized–conventionalized schemes and through recognition of objects. At this level, the child reproduces typical actions with familiar objects; that is, the child reproduces functional, although fixed, recognition actions on objects with little sense of representation or pretense activity. This level of play is viewed as presymbolic and a demonstration of the child’s knowledge of the social–conventional use of familiar objects rather than symbolic behavior per se (Casby, 1991a; McCune, 1993; Rocissano, 1982). According to Bates et al. (1979), this level of play may be viewed as *presentational* rather than *representational* in that the child is capable of “presenting” highly specific and contextually supported actions but is as yet incapable of “representing” such actions within less similar contexts. Zukow (1984) and Casby (1991b) also cautioned that there is little that is symbolic in the play of children at this level.

Certain research reports and assessment procedures have interpreted and classified such functional–conventional play as symbolic. For example, the *Symbolic Play Test* devel-

Sensorimotor–Exploratory Relational–Nonfunctional Functional–Conventional Symbolic

Change in Agent

- Self-as-Agent
- Passive-Other-as-Agent
- Active-Other-as-Agent

Change in Instrument

- Realistic Object
- Substitute Object
- Imaginary Object

Schemes

- Single Scheme
- Multiple Schemes
- Complex/Planned Schemes

FIGURE 1. Developmental framework of play.

oped by Lowe and Costello (1976) presents children with sets of miniature objects, such as a doll, cup, spoon, plate, and hairbrush, that allow for little else than typical, functional–conventional play. There are no designed possibilities within the framework of this test for the child to substitute one object for another or to engage another level of “agentness” in his or her play. The scoring system only denotes typical functional–conventional acts, such as “discriminate handling of doll,” “places cup on saucer,” and “relates spoon to cup or saucer.” The score on this test of symbolic play is the total number of typical functional–conventional actions performed with different sets of toys. There are no conventions for scoring the content or quality of the symbolic nature of the child’s play.

Symbolic Play

Decontextualization, Decentration, and Symbolization. For play to be considered symbolic, it must possess aspects of decontextualization, decentration, and symbolization (Casby, 1991a). The determination of the symbolic nature of a child’s play is based upon the triangulation of these three aspects, which generally are missing from the previously specified level of functional–conventional play. *Decontextualization* is the dissociation of actions from typical settings and contexts. It is evident in the child’s representation of actions removed in time and/or space from their routine environs. An example would be the child pretending to sleep when it is neither nap time nor nighttime.

Decentration is a child’s moving of actions away from his or her self. In Piagetian psychology, it is viewed as the decrease in egocentrism as development proceeds (Brainerd, 1978). Decentration involves young children performing actions they

do not typically perform by themselves (e.g., writing a check, feeding a baby, drinking tea). Decentration is also apparent in children's engagement of other agents in their play. This is reflected in the change-in-agent aspect of the agent component of symbolic play, where children cause a doll or teddy bear to perform actions.

Symbolization involves the active, purposeful use of symbols—something standing in for and representing something else. There is a “signifier” representing a “signified.” Nascent symbolization is apparent in children's use of other agents in their play schemes (e.g., pretending to have a teddy bear drink tea). It becomes more apparent as children attribute more animacy to another (i.e., surrogate) agent. It is clearly apparent when young children use substitute objects or instruments in play schemes (e.g., using a block for a cup or for a comb or using a piece of paper for a doll blanket).

Components of Symbolic Play. In addition to the criteria aspects of symbolic play, three critical components can be distilled from the literature on play (Casby, 1991a, 1991b; Casby, this issue; Casby & Ruder, 1983; Corrigan, 1987; Fenson et al., 1976; Lezine, 1973; Lowe, 1975; Nicolich, 1977; Piaget, 1951; Rosenblatt, 1977; Sinclair, 1970; Watson & Fischer, 1977, 1980). As noted previously, they are the agent, the instrument, and the scheme. Each of these components is seen as important to symbolic play in that each is a readily identifiable and integral aspect of symbolic play that undergoes changes that are reflective of children's developmental progression in symbolic play.

The agent component. The agent component of symbolic play is the animate or pretend-animate being that is involved in the instigation of the play actions. It can be broken down into three ordinal levels—self-as-agent, passive-other-agent, and active-other-agent (Casby, 1991b; Watson & Fischer, 1977, 1980). In self-as-agent symbolic play, the child is the instigating agent of the play actions, as in pretending to pour and drink juice in a pretend snack script or pretending to speak on a play telephone. In passive-other-agent symbolic play, the child uses a substitute agent but does not assign it animism. For example, the child might hold the play telephone to a doll's ear but not have the doll “pretend” to speak. With active-other-agent symbolic play, the child does assign animism to the substitute agent, such as having a doll pretend to walk, talk, and eat. Interestingly, the changing agent component of symbolic play emanates from the Piagetian preoperational cognitive content of animism—the attribution of life to inanimate objects (Brainerd, 1978).

The instrument component. The instrument in symbolic play is the object that the agent of the play uses in carrying out the play actions. It is integral to the play act. For example, instruments in a play snack-time script would be the cups, plates, and pitcher; those in a “clean and dress the baby” script would be the washcloth, comb/brush, and so forth. As with the agent component, research on the development of children's symbolic play has demonstrated that there are dif-

ferent ordinal levels of the instrument component in children's symbolic play other than the realistic instruments themselves (Casby, 1991b; Casby & Della Corte, 1987; Casby & Ruder, 1983; Elder & Pederson, 1978; Fein, 1975; Jackowitz & Watson, 1980; Overton & Jackson, 1973). They are the real or realistic toy objects, substitute objects that have no relationship to the real instrument, and imaginary objects that fill in for the absent real instrument (see the appendix for examples). The changing instrument component of symbolic play is an aspect of the Piagetian preoperational cognitive content of identity. The cognitive content of identity maintains the inherent, invariable, and defining properties of a concept in the face of transformations (cf. Brainerd, 1978, p. 130).

The scheme component. In Piagetian developmental psychology, the term *scheme* refers to observable actions that infants, toddlers, or children perform. For example, during the sensorimotor period of development, there are occurrences of the sensorimotor action schemes of reaching, grasping, holding, and so forth. When engaged in play, children perform various play schemes or play actions, for example, pretending to feed a doll, pretending to drink from a block, pretending to have a doll cry. The scheme component of symbolic play concerns: (a) children's production of single play schemes, (b) the combining/sequencing of multiple schemes, and (c) the relative degree of complexity and apparent planning involved in the sequencing of play schemes (Casby, 1991b; McCune, 1995; McCune-Nicolich, 1981; Nicolich, 1977; see the appendix for examples).

DEVELOPMENTAL ASSESSMENT OF PLAY

The preceding has concerned the development, content, and framework of play and, in particular, the construct of symbolic play. Such information is of significant value and importance to professionals involved in early intervention. In this section, a criterion-referenced, descriptive, and developmentally based protocol for the dynamic observation and assessment of the play behavior of infants, toddlers, and young children will be presented. The recommended assessment form is presented in the appendix, and suggested materials are listed in Figure 2. Prior to using this form, the professional should familiarize him- or herself with the information and references presented in the earlier sections of this article. Related research upon which the protocol is based has demonstrated a high level of validity and reliability in such measurement of play (Casby & McCormack, 1985; Casby & Ruder, 1983; Elder & Pederson, 1978; Fenson & Ramsay, 1980; Nicolich, 1977; Watson & Fischer, 1980).

Although other instruments and procedures for the assessment of play and/or symbolic play may exist, none have as broad a scope as the form covered herein. Reflecting a different state of knowledge and/or perspective at the time of their development, earlier protocols or procedures did not address levels of play ranging from sensorimotor-exploratory through complex/planned multiple scheme symbolic play,

nor did they address the important components of symbolic play, such as agent, instrument, and scheme, as does the procedure presented here (Lowe & Costello, 1976; Nicolich, 1977; Westby, 1980). Also, given the state of knowledge at the time of their development, earlier scales incorporated other varied aspects of sensorimotor development (e.g., object permanence) that do not lead to a valid or parsimonious approach to the assessment of the construct of play (Westby, 1980). The procedure presented here is a clear, concise, practical, and parsimonious one with high construct and content validity, reliability, and applied significance.

The recommended form of interaction for the assessment of play behavior is naturalistic–interactive play involving the examiner, the child (and a parent or significant other, if available), and materials, as opposed to a more regimented presentation to the child of materials, tasks, and trials by the examiner. As noted earlier, the child should be presented with objects that have the potential of being transformed in play, that is, capable of standing in or substituting for other objects, when assessing symbolic play (Casby, 1991a, 1991b; Terrell & Schwartz, 1988). To this end, an assortment of objects (e.g., small play blocks, dowels, balls, and paper) is always presented, along with the standard sets of objects. An example would be presenting the baby doll with blanket, bed, bottle, washcloth, and hairbrush, along with blocks, dowels, sheet of paper, and balls that might be substituted for the bottle, blanket, or hairbrush, for example.

The basic procedure is to present a toy set comfortably in front of the child with the examiner (or parent or significant other) near the child with the intention of encouraging the child to begin and complete a play theme—for example, washing, feeding, and putting the baby to bed or calling the teddy bear on the telephone. The examiner might use parallel and interactive play with the child, modeling and encouraging the use of the standard and nonstandard objects in the play actions, occasionally encouraging/eliciting the child's use of one object to substitute for another (e.g., giving the child a dowel to use to pretend to color or write on a sheet of paper, giving the child a block to pretend to be talking with the examiner on the telephone, giving the child a sheet of paper to use to cover the baby doll in the bed). The use and impact of modeling on the play performance of young children has been explored in a number of investigations with typically developing children and with children with developmental disabilities (Fenson & Ramsay, 1980; Kennedy et al., 1991; Riguet et al., 1981; Watson & Fischer, 1977, 1980). The general conclusion of this research has been that the utilization of modeling of play performances by examiners is an effective and efficient way of eliciting valid and reliable play behavior from both typically developing children as well as children with various developmental delays. The use of such a modeling or imitative strategy is a way of examining a child's zone of proximal development (Vygotsky, 1978) for the domain of play. In addition, it is also recommended that the children be observed for a period of time as they play with and act upon the

- An assortment of play blocks and dowels, balls, rattle, and sheet of paper
(Always presented with each set of materials for the potential of object-transformation, changing instrument symbolic play to occur.)
- Baby doll and/or teddy bear with blanket, bed, bottle, washcloth, comb, hairbrush
- Play silverware, plate, bowl, pitcher, and cups (presented along with teddy bear and/or doll)
- Colorful crayons, pencil, and paper (presented along with teddy bear and/or doll)
- Toy telephone (presented along with teddy bear and/or doll)

FIGURE 2. Recommended materials for use in the assessment of play behaviors in infants, toddlers, and young children.

set of objects alone. In this manner, one may ascertain a child's level and quality of play alone, play with others, and play when provided various forms of scaffolding (e.g., prompting, modeling, imitation).

When scoring children's play behavior with this protocol, it is recommended that their highest level of demonstrated play be the primary concern vis-à-vis a descriptive, criterion-referenced assessment strategy. This index of children's level, quality, and content of play is more important and revealing than is a frequency-based index, such as number of play schemes/actions or frequency of play episodes. Given that young children with developmental delays demonstrate more variability in their play performances than has been reported for normally developing children (Kennedy et al., 1991), the evaluation and assessment of children's play performances and abilities should be based on repeated observations over a short time. The evaluation could also be videotaped for later off-line scoring.

CONCLUSION

This article has presented a research literature-based overview of the construct of the development of play, ranging from early sensorimotor–exploratory play that emerges around 2 to 4 months through the appearance of complex and planned multischeme symbolic play centered on social scripts, which appears at about 30 months. The applied significance of this information was demonstrated with the presentation of a developmentally based, criterion-referenced protocol for the assessment of play in infants, toddlers, and young children.

Certainly, children's development along the levels of play presented in this article is an important aspect to be considered in early intervention. However, as important and useful as they are, such developments cannot be claimed to be sufficient or necessary in the development of young children. Oth-

ers have noted that children with motor impairments who are incapable of manipulating objects and creating physical actions nevertheless can develop normal cognition, mental representation, and language (Bishop & Mogford, 1988; DeCarie, 1969; Lewis, 1987). As stated earlier in this article, such developments in play are reflective of underlying developments. Developmental relationships in important domains such as play, mental representation, symbolic functioning, and language are best viewed within a local homologue model of development. Following from this, then, the claims made here for the importance of play in early intervention are based not on a presumed causal relationship but rather on an important parallel–interactive–supportive homologue relationship with other early social, cognitive, representational, communicative, and linguistic aspects of development.

Although not directly addressed in this article, the utility of the developmental framework and the assessment protocol for intervention efforts for play seems clear. Each of the levels of play may serve as criteria/mastery levels for play-based early intervention. Furthermore, these components of play and their forms as presented herein should become critical aspects of dynamic play-based early intervention. As further regards intervention for play, it is interesting to note that McCune (1992, p. 331) reported that very young children exhibit early forms of symbolic play more frequently in the presence of significant others than in their absence (Dunn & Wooding, 1977; Slade, 1987). McCune went on to suggest that such forms of play serve an early communicative function: to create shared meanings between mother and child. And, as noted by Bates et al. (1979), McCune (1992), and Terrell et al. (1984), the meanings expressed by young children in their early play (i.e., agents, actions, objects, locations) often include many of the same meanings expressed later in their early verbal expressions.

The procedure for the developmental assessment of play set forth in this article adheres to and emanates from classic and timeless perspectives. Siegle (1975) observed that the best assessment “instrument” available is a professional who has knowledge of an area and the ability to observe, describe, and evaluate important behaviors/areas of development. Leonard, Prutting, Perozzi, and Berkley (1978) provided a rationale for the use of criterion-referenced, descriptive measures for use in the assessment of young children. All manner of early interventionists require a high degree of knowledge and competence in the assessment of play in infants, toddlers, and young children. It is hoped that the information and procedures presented in this article will assist in the assessment of young children and in the amelioration of their developmental disabilities.

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 APPENDIX: DEVELOPMENTAL ASSESSMENT OF PLAY

Name: _____ Parents: _____

Date: _____ Cognition: _____

DOB: _____ Language: _____

CA: _____

Other: _____

- | <i>I. Sensorimotor–Exploratory (emerging 2–4 months)</i> | <i>Observations/Comments</i> |
|---|------------------------------|
| <ul style="list-style-type: none"> • Reaching, grasping, holding, rubbing, mouthing objects • Holding and looking at objects • Repetitive pounding/hitting of objects | |
|
<i>II. Relational–Nonfunctional (emerging 6–10 months)</i> | |
| <ul style="list-style-type: none"> • Relating objects one to another without regard for their social–conventional use • Holding two or more objects • Stacking, bumping, nesting, touching, pushing objects together • Offering objects to, and taking objects from, others | |
|
<i>III. Functional–Conventional (emerging 10–12 months)</i> | |
| <ul style="list-style-type: none"> • Relating objects one to another in a social–conventional manner (e.g., putting cup on a saucer, stirring bowl with spoon, holding bottle) • Typical, functional, conventional, social use of objects in settings <i>not</i> decontextualized from the typical settings in which the objects are typically used (e.g., drinking from a cup, pushing a toy car, feeding a doll from a toy bottle, scribbling with a real crayon) | |
|
<i>IV. Symbolic (emerging 12–18 months)</i> | |
| Agent | |
| <i>Self (emerging 12–18 months)</i> <ul style="list-style-type: none"> • Child is the initiating agent of the play actions—pretends to drink from a cup during pretend snack time, pretends to talk on play telephone, brushes own hair during play cleaning and dressing script | |
| <i>Passive-Other (emerging 18–24 months)</i> <ul style="list-style-type: none"> • Child acts on nonanimated substitute agents—puts cup to doll’s or teddy bear’s mouth and pretends to have it drink, puts telephone up to doll’s or teddy bear’s ear and pretends to have it talk on the telephone, pretends to brush doll’s or teddy bear’s hair | |

(Appendix continued)

Active-Other (emerging 24–30 months)

- Child adds animacy to substitute agents—puts cup to doll’s or teddy bear’s mouth and, while pretending to have it drink, may attempt to have the doll or teddy bear “hold” the cup, may make “drinking” sounds for the substitute agent; attempts to have doll or teddy bear “hold” and “speak” on the telephone

Instrument

Realistic Object (emerging 10–12 months)

- Relating objects one to another in a social–conventional manner (e.g., putting cup on saucer, stirring bowl with spoon, holding bottle)
- Typical, functional, conventional, social use of objects in settings not decontextualized from the typical settings in which the objects are typically used (e.g., drinking from cup, pushing a toy car, feeding a doll from a toy bottle, coloring with a real crayon)

Substitute Object (emerging 18–24 months)

- Use of another object as a substitute for the standard one in the play action—for example, pretending to use a block as a telephone, pretending to use a block as a cup, pretending to use a dowel as a crayon

Imaginary Object (emerging 24–30 months)

- Performance of an object–action scheme without the use of an actual object—pretending to hold and talk on an imaginary telephone, pretending to drink from an imaginary cup

Scheme

Single (emerging 12–18 months)

- Child carries out a single play act, such as putting bottle to doll’s mouth, pretending to drink from a cup, putting comb to teddy bear’s head

Multiple (emerging 18–24 months)

- Child carries out a sequence of two or more play acts, such as putting a comb to a teddy bear’s head and pretending to comb its hair, pretending to drink from a cup and eat off of a plate with a fork, pretending to comb own hair and then the hair of another

Complex/Planned (emerging 30 months)

- Laying out the dishes and doll for a pretend snack time and carrying out a sequence of theme-related play acts; pretending to build a house with play tools

Other Comments:

