

# **A Place for Attachment Theory in Child Life Programming: The Potential to Assess the Quality of Parent–child Relationships**

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**ABSTRACT:** Child Life Specialists (CLS) working in pediatric health care settings provide programs designed to reduce the stress and anxiety associated with hospitalization and illness for children and families. Assessment in child life practice typically includes attention to a range of variables found to influence the response of children and families to the stressors of hospitalization. With roots in observations of early separation experiences, attachment theory may serve as an appropriate framework from which CLS may clarify the central role of the parent–child relationship to the well being of the child. Recognition of distinctions among secure, avoidant and resistant attachment relationships can inform child life assessment and interventions designed to address the specific needs of the child and family.

**KEY WORDS:** child life; assessment; attachment theory; hospitalization.

Over the last 40 years, the need to maximize positive outcomes and minimize stressors associated with illness and hospitalization for children and families has become an expectation in pediatric health care. As a result, a transition in the philosophy of care and the inclusion of Child Life programs is evident in many pediatric hospital facilities across North America. Trained in research and theory from the fields of human growth and development and family systems, Child Life Specialists (CLS) use play as the primary mode for the provision of unique services designed to meet the needs of children and their families experiencing hospitalization. Research results indicate the potential for the hospitalization of young children to be a stressful experience due to the child's age, separation from his/her parent, the discontinuity of caregiving provided in the hospital and the frightening and unfamiliar nature of hospital procedures (Hägglöf, 1999;

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Rutter, 1987). Given the disruption to family life introduced by the experience of illness and hospitalization, assessment of the child and family is an important component of the services provided by the CLS.

CLS are often called upon to contribute to this assessment process through the documentation of their observations of the child and family (parents, siblings) under a range of conditions (e.g., in the playroom or stressful transition points, such as treatments and procedures). However, evidence of specific assessment *criteria* applied to appraise the specific characteristics of the parent–child relationship is not evident in the literature. Through the development of attachment theory, Bowlby (1973) focused attention on the potential of conditions related to distress, fatigue, hunger, illness or pain to reveal patterns of behavior indicative of the attachment relationship. Therefore, Attachment theory may serve as an appropriate framework from which CLS may clarify the central role of the parent–child relationship to the well-being of the hospitalized child.

### Child Life Practice

CLS working in health care settings value practice standards firmly supported by current theory and research and promote interventions designed to address issues related to the stresses of hospitalization (Child Life Council, 2002). Through the unique application of play as a healing modality, CLS deliver both group and individualized programs and interventions. Supervised play and activity rooms are designed to provide opportunities for normalization, autonomy, peer interaction, exploration of health care equipment and to provide a “safe haven” away from the stresses of the hospital environment for at least a brief portion of the day. Preparation and procedural support may include interventions such as hospital tours, pre-operational preparation in a “mock” operating room, practicing procedures on medical dolls, learning and applying coping strategies, and expressive and exploratory health care play. Parent–child relationships are supported through, for example, the practice of a philosophy of family centered care (Letourneau & Elliot, 1996) and positioning for comfort during stressful medical procedures (Stephens, Barkey, & Hall, 1999).

Although the recommended CLS-to-patient ratio is 15–20 (American Academy of Pediatrics, 2000), CLS are typically assigned to large units in a hospital and must prioritize patient services on a daily basis. The *stress potential assessment process* is one procedure used as a guide or triage tool for the development and implementation of child life care plans (Gaynard et al., 1990). Pediatric hospital admission procedures routinely involve the collection of information related to family history,

reason for the hospitalization, home routines (bedtime, toileting, food preferences and security items), usual activities and fears and reactions to novel experiences. Given that a child's response to illness and hospitalization is influenced by many additional factors, this stress potential assessment model incorporates a number of additional variables, such as developmental stage, previous experience with illness, separation from family and the seriousness of the medical problem.

The stress potential assessment model is not based on standardized measurement protocol (Gaynard et al., 1990). Rather, assessment classifications serve as an indicator of the level of need for services of a given patient, for example 1 (low) to 5 (high). Therefore, a formal structure for organizing *specific* observations related to the transactional nature of the parent-child relationship and the demands placed on that relationship due to the nature of the hospital experience could be elaborated through the application of concepts from attachment theory.

## Foundations of Attachment

### *Theory*

For over three decades, attachment theory has been the focus of research efforts linking early childhood experiences to later developmental outcomes. Bowlby (1973) identified the influence of caregiver behavior as a key factor in the organization of the parent-child relationship as it develops in the early years. Attachment is described as the emotional bond characterized by a *reciprocal* relationship between the infant attachment system and the caregiving system of the parent. That is, the quality of care provided by the parent *functions* to influence the child's confidence in the availability of the parent and the qualitative organization of the parent-child relationship. The resulting *observed* relationship quality reveals a level of flexibility in behavior resulting in the development of strategies for the maintenance of proximity under a range of conditions. According to Bowlby (1973), it is under conditions when the child's reaction to a sense of threat may be especially intense (e.g., fatigue, hunger, illness or pain are typical experiences during hospitalization) that these *patterns* indicative of the attachment relationship are revealed.

### *Phases of Development*

For young infants, specific "signals" such as crying, muscle tension and diffuse movements during episodes of distress elicit a response in

the caregiver. The caregiver response requires sensitivity as to the source of the child's distress and the ability to return the infant to a state of comfort. Subsequent to the age of four months, infants gain the ability to discriminate perceptions, their physical movements become increasingly controlled allowing for reaching and grasping and their cognitive skills expand to include the ability to recognize familiar caregivers. As the infant grows and develops, he/she becomes able to influence the organization of the relationship (Ainsworth, Blehar, Waters, & Wall, 1978). That is, the child is able to perceive a need for proximity maintenance and respond through eliciting caregiving behaviors in the parent.

By the time the child reaches approximately six months of age, the caregiver begins to read and understand the child's signals in such a way that a pattern of signals and responses becomes organized and characteristic to the specific caregiver and child (Ainsworth et al., 1978). Child proximity to the caregiver or a sense of caregiver availability is gained through coordination of both locomotion and use of signals. The expanded repertoire now includes "active contact behaviors" (e.g., clinging, following) and the ability to communicate through language. In addition, the dyadic relationship itself becomes represented *internally* through the child's developing capacity to believe in the existence of the caregiver without the physical presence of that caregiver (Bowlby, 1969/1982).

As the child develops beyond the first year, cognitive advances help coordinate the system of behaviors. By the time a child is three or four years of age, the organization of expectancies and patterns for care, referred to as "internal working models," is facilitated through the cognitive capacity to predict, plan, influence, communicate, and negotiate with the caregiver. However, the egocentrism of the preschool-aged child may be a handicap to the ability to consider the perspective of the other. Until around the age of 7 years, the child may lack abilities that allow for the emergence of the "goal-corrected partnership" that contributes to the sense of collaboration between caregiver and child (Bowlby, 1969/1982).

Qualities of the parent-child relationship influence the child's confidence in the security of the relationship relative to the availability of the attachment figure during times of need. Attachment theory considers attachment to be internally represented by working models but manifested in behavioral patterns (Main, 2000). That is, the quality of the parent-child relationship must be inferred via the observed behavior of the parent and child, preferably under conditions that elicit attachment behaviors in the child and caregiving responses in the parent. For example, a secure relationship arising from sensitive

and responsive caregiving promotes a reduction in anxiety for the child and the ability for the child to explore the environment from a secure base, the parent. An insecure relationship may be characterized by intensifying anxiety to the detriment of the child's interest in exploring and therefore learning about the environment. The child in an avoidant relationship focuses attention away from the parent, while the ambivalent/resistant child maintains a hypervigilance toward the parent. These early attachment relationships are carried forward in life in the form of working models, with additional attachment relationships developing as the individual progresses through adolescence and adulthood.

### *Standardized Measurement*

Measurement of attachment security during early childhood is traditionally based on observations of behavior. Patterns of attachment derived from the strange situation scenario have been the foundation from which much of the research on childhood attachment has been grounded (Ainsworth, 1989; Solomon & George, 1999). Secure or insecure patterns of attachment in childhood are broadly categorized by the quality of the parent-child relationship. Secure attachment is described as a healthy parent-child relationship based on trust in the availability of the caregiver. Insecure attachment is described as resistant or avoidant. The avoidant category is based on observations of indifference to parents and avoidance of interaction. Distress and anger toward the caregiver characterize the resistant category. An additional category reflecting an anxious-disorganized attachment system has also recently been suggested, but has not been consistently included in research designs (George & Solomon, 1999).

The strange situation procedure (SSP) was developed by Ainsworth et al. (1978) to classify attachment in infants. The laboratory procedure, based on the assumption that security cannot be directly observed but must be *inferred* from observations of behavior, creatively introduces increasing, but moderate, amounts of stress as a means of eliciting attachment and exploratory behavior in the infant and caregiving behavior in the parent. Waters and Deane (1985) developed the Attachment Q-sort (AQS) measure to assess the quality of secure-base behavior in the home. This measure is appealing due to the sensitivity to the context (home), naturalistic observation, and the source of information (parent-child). Although the SSP is the most commonly cited valid and reliable measure of infant attachment used in research, followed by the AQS, these procedures require extensive training, time to administer and code, and include high standards of

reliability that limit application beyond research into daily practice (Rutter & O'Connor, 1999; van IJzendoorn, Vereijken, Bakermans-Kranenburg, & Rikson-Walraven, 2004).

Research on attachment emphasizes the power of early parent-child relationships to launch the child toward a path of secure or insecure relationships. Much research includes a focus on sensitivity and responsiveness of mothers (For reviews see De Wolff & van IJzendoorn, 1997; Nicholls & Kirkland, 1996). However, recent developments draw attention to the influence of childhood experiences on adult functioning in caregiving relationships. These investigations have resulted from the development of a classification tool for "current state of mind related to attachment," the Adult Attachment Interview (AAI). A strong concordance between adult attachment classification categories of autonomous, preoccupied and dismissive and the child attachment categories secure, insecure avoidant and insecure resistant, respectively, has been reported (van IJzendoorn, 1995; Main, 2000). Therefore, this "second generation effect" (Main, 2000) of attachment representations compels us to attend to representations of attachment in both the child and the adult in the relationship. Like the observational measures, the AAI requirement of extensive training, time to administer and code, and high standards of reliability restricts its application in child life practice.

### *Adaptations*

Adaptations of attachment measures can be found in the literature. Robinson, Rankin and Drotar (1996) and Chisholm (1998) both modified the AQS for research purposes. In a study of hospitalized children, Robinson et al. (1996) selected 12-items (identified by the original authors) to distinguish between secure and insecure attachment in an interview protocol with parents. Chisholm (1998) derived a brief 23-item interview for adoptive parents from the original 90-item Q-sort measure, selecting the items that loaded highest and lowest on the security scale. For example, "when something upsets child, she/he tends to stay where she/he is and cries," "child sometimes gives the impression of wanting to be put down, and then fusses or wants to be picked up right away," "child readily shares with you or lets you hold things if she/he is asked to." Although brief interview protocols seem to be a pragmatic manner in which to assess quality of attachment, reliability trials would be required prior to the acceptance of such a tool.

The nature of child life practice may better afford the application of an observational tool. Bush, Melamed, Sheras and Greenbaum (1986)

applied the observation codes related to the functional systems derived from Ainsworth et al. (1978) to assess the potential influence of parent and child interactions on children's adaptive and attachment behaviors in hospitals. Patterns of parental behavior seen to be helpful to children's coping were the use of distraction, information provision, and low rates of ignoring. Correlations between mother and child behaviors, such as maternal information provision with child exploring, reassurance with child attachment behaviors (e.g., look at, approach, or touch parent, verbal expression of concern), and distraction with prosocial behaviors were suggestive of mutually compatible interactions. In contrast, maternal agitation was found to result in maladaptive behaviors in the child (e.g., crying, diffuse motor movement, anger, withdrawal).

The results of Bush et al. (1986) support the notion from the AAI literature that autonomous mothers attune their behavior to the needs of the child (Crowell & Feldman, 1988; Haft & Slade, 1989). In general, research using valid and reliable measures finds that secure parent-child relationships serve as a protective factor promoting social competence in close relationships, e.g., friendships. In contrast, insecure relationships may interact with the stressors of the environment in a less than optimal manner, resulting in difficulties related to socio-emotional development. The potential for professionals in the field of child life to develop an attachment based tool to inform the care provided for hospitalized children and their families has yet to be explored.

### **Application of Attachment Theory to Child Life Assessment**

Knowledge of the child's behavior and responses relative to the parent-child relationship and daily life in the home can assist the CLS early on during the admission period in planning interventions. Additionally, observations of the parent-child relationship over the course of an admission or relationship with the health care system are also beneficial. While Rutter and O'Connor (1999) encourage the application of concepts from attachment theory to childcare practice and policies, they also warn against the inappropriate operationalization of attachment concepts for the development of practical assessment tools. However, given the opportunities to observe the parent-child relationship under mildly to intensely threatening circumstances in the hospital setting, CLS are placed in an opportune situation to speculate what secure and insecure relationships *might look like* relative to the separation, reunion and caregiving behavior of

parents and their hospitalized children (e.g., meal breaks, playroom time, treatment or operating room transitions and bedtime). Care must be taken however, in applying attachment terminology (e.g., secure, avoidant, anxious, disorganized) without the support of reliable and valid measurement.

Although pediatric health care research related to parent–child relationships is limited, evidence of *good care* can be reviewed. Woodgate and Kristjanson (1996a) identified monitoring and comforting as two principle categories of care provided by parents staying with their hospitalized child. Children reported a preference for parents to maintain a level of closeness relative to how they were feeling at the time (Woodgate & Kristjanson, 1996b). This ranged from sitting beside the child, touching the child and embracing the child. Posada et al. (1999) observed mothers of hospitalized children using a measure of attachment based maternal sensitivity and the AQS. Forty of the maternal sensitivity items were found to correlate significantly to security in the attachment relationship. For example, “mother is aware of how her moods affect baby,” “arranges her location so that she can perceive baby’s signals,” and “displays affection by touching.” Consistent with Woodgate and Kristjanson (1996a), mothers were observed to respond to their child’s health status by being careful in exchanges that involved close physical contact and making sure that children were comfortable (Posada et al., 1999). This work supports the notion that the parent–child processes observed under the stress of hospitalization suggest patterns of behavior that reflect characteristics of the attachment system.

### Case Examples

Consistent with presentations of attachment relationships from the literature, the following examples speculate on what a secure, avoidant and resistant parent–child relationship *might look like* from the perspective of a CLS. The narrative is brief and limited to a description of information available from immediate events. It is important to note that infant attachment has not been found consistently to be related to either sex or birth order (Main, 2000). Hence, observations using a variety of attachment measures are coded separate from “contextual” information. However, qualitative changes in attachment are expected relative to development.



*Secure*

Upon admission, the CLS takes the opportunity to informally interview the mother of 18-month-old Jeffrey admitted for dehydration due to a gastrointestinal infection. The mother holds the boy closely on her lap, balancing her attention between her son and the CLS. She reports her child to soothe readily when comforted, to play independently at home and transition easily between activities. The CLS observes that Jeffrey slowly pats his mother's hand as he begins to fall asleep.

*Avoidant*

Rachel is engaged in the play area of the emergency waiting room while her mother responds to the queries of the CLS. Three-year-old Rachel has just seen the doctor and received a tetanus shot for a cut she has on her foot. Rachel has her back to her mother and does not respond when her mother calls her to come and meet the CLS. The mother reports that Rachel prefers to play independently and is very brave. In fact, Rachel had cut her foot about an hour before her mother noticed her limping around the house. The CLS observed that Rachel pushed her mother away when comfort was offered during the medical examination and treatment.

*Resistant*

Randy is struggling in his father's arms as Dad attempts to transition him from his hospital bed to the wheelchair. The father does not look at Randy as the 4-year-old pushes him and cries for him to stay. As he adjusts the seatbelt, Dad turns to respond to the child in the next bed. Randy pushes him away, causing his wheelchair to turn in the opposite direction, away from Dad. He continues to cry and scream while the father chats with the other child. The father had previously indicated that Randy has a hard time with change, and is very clingy and fearful when facing new experiences. He stated that Randy is better behaved with his mother.

### **Child Life Assessment**

Informal interviews, checklists and observations are common sources for the documentation of services in child life programs. Within the health care setting, the use of an informal interview and/or observa-

tions could extend current practice to include specific attention to the quality of the parent–child attachment relationship.

An attachment questionnaire similar to the adaptations of Chisholm (1998), Robinson, Rankin and Drotar (1996) and Bush et al. (1986) could be developed and interpreted as one component of the stress potential assessment process (Gaynard et al., 1990) to assist in planning for the care of hospitalized children and their families. Indications of a secure parent–child relationship would recognize the supportive strategies used in the relationship. Interventions would focus on maintaining the positive, nurturing parent–child connection, while facilitating the developmental needs and progression for the child. Encouraging continuity of patterns of nurturing and pleasure (e.g., play opportunities) may help to prevent the onset of any negative developmental and maladaptive outcomes.

Some relationships would exhibit issues related to lack of warmth, rejection, control, pressure, role reversal, neglect or frustration within the relationship. Stressed, fearful, angry, grieving, or overwhelmed parents may be unable to focus on the needs of their child. Specific efforts by CLS to facilitate healthy patterns of parent–child interaction related to trust, pleasure and motivation could relieve some of the negative effects associated with interrupted caregiving. Understanding the *function* of the behaviors observed in the parent–child relationship can inform the care plan of the CLS.

For example, the relationship between Rachel and her mother appears to be somewhat avoidant. Attention to the manner in which the mother may be dismissive of Rachel's bids for attention may reveal a subtle misunderstanding of the needs of the child from the perspective of the mother. The child on the other hand may be observed to minimize distress and not share her feelings with her mother because of a history not having had her needs met. Expressive play and exploration for Rachel can be facilitated by the CLS following health care interactions. Episodes of miscommunication between the parent and child may be observed by the CLS who can, in turn, encourage the mother to observe and reflect on her behavior and practice new strategies of care with her child. The child may then have the opportunity to experience security in having her needs met in a sensitive and responsive manner.

Similarly, Randy's father may be unaware of how his behavior influences the resistant behavior observed in his child. Randy responds to the father's inconsistent attention through hypervigilance and heightened distress. A CLS can point out the importance of attention, e.g., eye contact, comforting touch and consistency in caregiving interactions. A CLS can also provide developmentally

appropriate opportunities for choice and control for Randy. This information may be shared and applied when planning and preparing both the child and parent for stressful events that may arise during the hospital stay.

### **Child Life Practice**

Sensitive and responsive care practices are clearly evident in the work of CLS. Distraction techniques, positioning for comfort, preparation and planning for procedures are examples of interventions used by CLS and other health care professionals to promote positive interactions for the parent and child under stressful circumstances. While these techniques are common in child life practice, the level of discernment of the rationale for the selection of particular methods of intervention relative to the needs of particular parent–child dyad and the degree to which parents and or children are provided with insight into the connection between their behavior and the behavior of the child has yet to be documented in the literature. Efforts to normalize the environment, provide interventions, encourage participation in programs and advocate for the child and family can better meet the needs of individuals when the relationship between the parent and child is understood.

### **Integrating Attachment into the Assessment Process**

Parent–child attachment relationships can be assessed early in the admitting process through a child behavior questionnaire specific to the pre-hospital at home behavior of the parent and child. This information can be interpreted in conjunction with ongoing assessment (e.g., observational, interdisciplinary) in order to plan a program of care that meets the specific needs of parents and their hospitalized child. Child Life assessments and interventions should reveal an understanding of the function of the attachment and caregiving systems under the stresses of hospitalization and illness. Positive outcomes can be maximized when parent–child relationship data is translated into practical plans by hospital caregivers working in partnership with the children and families. Granted, attachment theory allows for the development of multiple relationships. Therefore, a unique relationship may exist between the mother and child and the father and child, as well as additional relationships (e.g., foster care providers). Such distinctions add to the complexity of the assessment

process but may serve to better inform child life practice via sensitivity to the individual needs of the relationships.

### Future Directions

The goal of this paper has been to direct attention to the implication of attachment theory to child life practice. Including specific attention to the quality of the parent–child relationship as a component of the assessment process can enhance the effectiveness of current practice. This can be promoted in a number of ways. First, professionals with teaching, supervisory or administrative roles in the field should direct attention to current knowledge and understanding of relevant attachment theory and research. Additionally, even though notions of attachment theory appear implicitly embedded in child life programming, illumination of the importance of attachment as a foundation of child life practice has been overlooked in published work. Accessibility to discussions of current practice through publications outside the traditional child life realm may serve to inspire dialogue across disciplines sharing an interest in the care of children and families in unique settings. Further, although theories are a helpful tool in the explanation of “why” we support and promote specific interventions and policies, commitment to empirical research is a necessary component for the continued growth and development of the profession. Evaluation of an attachment based assessment tool using empirical methods would contribute to the ongoing development of professional practice.

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