Attachment Theory and Reactive Attachment Disorder: Theoretical Perspectives and Treatment Implications

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TOPIC: *Attachment theory and reactive attachment disorder (RAD).*
PURPOSE: *To highlight current perspectives on attachment theory, RAD, and treatment implications using a case study of an 8-year-old patient with RAD.*
SOURCES: *Selected multidisciplinary literature related to attachment theory and RAD.*
CONCLUSIONS: *The literature provides a body of work that substantiates the importance of early attachment relationships to human development and highlights gaps in our knowledge related to treatment of children with RAD. The quality of early attachment relationships is correlated with future personality and brain development. Attachment disturbances are associated with psychopathology in childhood and adulthood. Although evidence for the effective treatment of children with attachment disorders is minimal and inconclusive, the two major perspectives, developmental psychology and neuropsychoanalysis, offer guidelines for practice.*
Search terms: *Attachment theory, attachment, attachment disorders, reactive attachment disorder, RAD, child psychiatry, psychiatric treatment*

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Journal of Child and Adolescent Psychiatric Nursing, Volume 20, Number 1, pp. 27–39

History and Evolution of Attachment Theory

Attachment theory was developed by John Bowlby in the 1960s. Bowlby was a psychoanalyst who began to focus on a child's early relationship with the primary caregiver as the most important predictor of the child's future personality development. This position contrasted with the classic Freudian psychoanalytic view, which generally looked backward from adult neurosis to determine the instinctual conflicts that had originated in childhood. Bowlby was the first to suggest that information about a person's future interpersonal relationships could be predicted by looking forward from the early ones. Ainsworth, Blehar, Waters and Wall (1978) state that Bowlby's ideas constituted a paradigm shift in developmental psychology, and indeed, attachment theory has been extremely influential on current thought in psychiatry, psychology, and related fields.

Attachment theory suggests that infants are evolutionarily primed to form a close, enduring, dependent bond on a primary caregiver beginning in the first moments of life. The vulnerability of the infant requires that care be provided by an adult, and the infant's behaviors and inherent faculties ensure that a bond will be created. Infants attend to human voices, recognize human faces, and gaze into parents' eyes when being fed. They look to the attachment object for cues when faced with novel stimuli. The fulfillment of their physiological needs requires close and frequent physical contact throughout infancy (Carlson, Sampson, & Sroufe, 2003). As they develop the capacity for locomotion and intentional movement, they attempt to maintain physical proximity to the caregiver and frequently return for "refueling" when they are involved in an individual activity (Ainsworth et al., 1978). Since

infants are intrinsically driven to form attachments, they will attach to the primary caregiver regardless of the type of interactions that occur. Thus, attachment status is classified according to quality rather than quantity (Main, 1996).

Four infant attachment styles have been identified: secure, avoidant, resistant-ambivalent, and disorganized-disoriented. Infants with a secure pattern of attachment typically protest when they are separated from their caregiver, and they attempt to regain closeness to the caregiver upon reunion. The avoidant attachment style involves behaviors that resemble rejection. Infants with this pattern tend to ignore the caregiver's departure and return and actively avoid the caregiver's attempts to regain contact. The resistant-ambivalent pattern is characterized by a preoccupation or fixation on the caregiver in which the caregiver is alternately sought for comfort and rejected. The disorganized style of attachment is typically seen in infants who have been maltreated by their attachment figure. They exhibit conflicted behaviors such as simultaneously reaching for and turning away from the caregiver. This is most likely related to the inherent conflict between the attachment object being both the cause of distress and the infant's only potential source of comfort from distress. The disorganized attachment style is thought to be most correlated with psychopathology (Main, 1996).

There are two major theoretical perspectives that inform our understanding of the process of attachment. According to the developmental psychology perspective, the early relationship with the attachment object causes an infant to form internal working models for relationships that will influence interpersonal relationships throughout life. These working models consist of representational structures that define one's perception of self and others and contribute to the internal processes that define one's selective experience of the external world (Pietromonaco & Barrett, 2000). Working models are believed to operate unconsciously. Fonagy (2003) adds another conceptualization called the internal interpretive mechanism. He contends that this mechanism undergoes maturation during the attachment process and comprises the neurocognitive processes that are used to interpret all new experiences throughout life. The psychoanalytic perspective maintains that self and object representations form as a result of early childhood experiences and that these representations will influence all future affective exchanges. Similarly, these processes function from the unconscious mind (Schore, 2002). Although there are some differences in the construction and application of the developmental psychology and psychoanalytic perspectives, they seem to differ primarily in semantics.

The neuropsychoanalytic perspective adds a neurobiological component to these perspectives. According to Schore (1994), the affective exchanges between infant and caregiver provide a foundation for neurological development and lead to the creation of neural networks (particularly in the right hemisphere) that will influence the infant's personality and relationships with others throughout life. Neural activity in the right hemisphere creates and maintains continuity of inner affective experience amidst external changes. This continuity is subjectively experienced as a sense of self. In addition, the right hemisphere has extensive reciprocal neural connections to the autonomic nervous system and thus regulates physical reactions to affective stimuli as well. Furthermore, the right hemisphere is dominant in the reception, interpretation, and communication of emotion, and optimal functioning in these areas would be an essential component for empathic interpersonal experiences.

Schore (2002) contends that attachment constitutes "synchronized dyadic bioenergetic transmissions" between infant and caregiver (p. 444). The caregiver's ability to modulate and process affective states and provide this structure to the infant is the most important factor in the infant's early brain development. Since information processing in the brain occurs as a result of metabolic changes, intrapersonal and interpersonal experience is seen as the alteration of energy patterns within and between systems (Schore, 1994). Schore also suggests that the maintenance of homeostasis and

equilibrium in infants' central and autonomic nervous systems is dependent on their reciprocal interactions with caregivers. If the relationship is disrupted, the infant's nervous system must expend large amounts of energy to maintain equilibrium independently. When this energy expenditure fails, the right brain is unable to maintain coherent neural connections and goes into a state of shock that leads to dissociation and stalls normal development. When both internal and external regulatory systems fail, a sense of helplessness (inability to self-maintain) and hopelessness (loss of predictable outer structure) could result.

Other evidence suggests that a defining characteristic of personality disorder is an inconsistent and unstable sense of self that is reflected in difficulties maintaining functional and socially appropriate interpersonal relationships.

Indeed, Fonagy et al. (1996) found significant associations between affective disorders and unresolved attachment status. In addition, Maunder and Hunter (2001) conducted a literature review of studies examining attachment status and physical health and concluded that there is an association between attachment insecurity and physical illness. Potential etiological factors include increased susceptibility to stress, increased reliance on external affect regulation, and increased help-seeking behaviors. Other evidence suggests that a defining characteristic of personality disorder is an inconsistent and unstable sense of self that is reflected in difficulties maintaining functional and socially appropriate interpersonal relationships. One meta-analysis of 13 studies found that attachment insecurity was strongly associated with borderline personality disorder (Agrawal, Gunderson, Holmes, & Lyons-Ruth, 2004). Brennan and Shaver (1998) also found attachment style to be correlated with personality-disorder measures. These data add support to Schore's claim that attachment problems lead to insufficient development in the right hemisphere resulting in dysregulation of self-perception and altered autonomic response to external events.

The neuropsychoanalytic perspective joins the concepts of the self-regulatory unconscious mind and the biological components of nervous system response. These concepts should be seen as complementary and symbolic of one another. For example, in classic psychoanalytic thought, the ego is believed to be the socially derived internal system that provides structure to our instinctive urges. In the neuropsychoanalytic view, the right brain is believed to develop in response to early social experiences and provides future regulation of interpersonal affective experience. The ego and the right brain provide symbolic representations of the higher level functioning that begins to occur as an infant matures. Since an infant's motivation and behavior are thought to be primarily instinctual and unconscious, early experiences provide the framework for what will become the unconscious mind (which can also be seen as the more primitive brain structures whose processes are modulated by the frontal lobe) in adulthood (Schore, 2002).

Conclusions

Attachment theory is a descriptive theory and does not claim to offer prescriptions for intervention or treatment. However, interventions may be developed following the theoretical understanding of the relationship between early attachment relationships and future interpersonal interactions. Attachment theory contributes to a deeper and broader level of

Table 1. *DSM-IV-TR* Diagnostic Criteria for Reactive Attachment Disorder of Infancy or Early Childhood

	Inhibited type	Disinhibited type
A. Markedly disturbed and developmentally inappropriate social relatedness in most contexts, beginning before age 5 years, as evidenced by:	1. Persistent failure to initiate or respond in a developmentally appropriate fashion to most social interactions, as manifest by excessively inhibited, hypervigilant, or highly ambivalent and contradictory responses	2. Diffuse attachments as manifest by indiscriminate sociability with marked inability to exhibit appropriate selective attachments
B. The disturbance in Criterion A is not accounted for solely by developmental delay and does not meet criteria for a pervasive developmental disorder.		
C. Pathogenic care as evidenced by at least one of the following: 1. persistent disregard of the child's basic emotional needs for comfort, stimulation, and affection; 2. persistent disregard of the child's basic physical needs; and 3. repeated changes of primary caregiver that prevent formation of stable attachments		
D. There is a presumption that the care in Criterion C is responsible for the disturbed behavior in Criterion A.		

understanding of psychiatric problems in childhood and adulthood. Since attachment theory holds that the quality of interpersonal interaction results from the groundwork laid in early childhood, interventions aimed at primary prevention would be the most effective way to prevent the sequelae of disordered attachments. However, since infant attachment patterns have been shown to remain stable into adulthood and will influence all future attachments (Main, 1996; Morton & Browne, 1998), primary prevention would necessitate the treatment of adults who have a history of attachment difficulties in order to prevent the formation of insecure attachments with their future children.

Treatment of pre-existing attachment insecurity rests on efforts to promote the ability to regulate affective response to external stimuli. The most effective interventions would incorporate high levels of consistency and reflective interaction in order to provide an external structure for affective experience that could eventually be assimilated by the person being treated. This outcome would result from alteration of interpersonal energy exchanges leading to neurological changes. Successful treatment would be expected to improve emotional stability in both the subjective experience of the person being treated and in objective measures of interpersonal relationships. Attachment theory could provide important guidance for the development of psychiatric nursing interventions and could also assist psychiatric nurses to gain self-awareness regarding their own affect regulation and interpersonal communication patterns. Because of limited resources in most settings, the present treatment delivery system does not support the types of interventions that would be most effective for creating change in patterns that are believed to be deeply ingrained in the most basic levels of neurological and emotional development.

Disordered Attachment Patterns

In the *Diagnostic and Statistical Manual of Mental Disorders, Fourth Edition-Text Revision* (American Psychiatric Association, 2000), the only pathology that is officially related to attachment is reactive attachment disorder of infancy or early childhood (RAD) (see Table 1). The diagnostic criteria for this disorder include: a pattern of disturbed and developmentally inappropriate social relationships prior to age five, a history of pathogenic care that predates the presentation

of the disturbances, and the assumption that the disturbances are not better accounted for by other diagnoses (p. 130). There are two subtypes of RAD, inhibited type and disinhibited type. The *DSM-IV-TR* (2000) criteria do not include any descriptors of associated behaviors, and there are no validated instruments for assessing or diagnosing RAD (Minde, 2003). A wide variety of behaviors have been attributed to RAD, but there is limited empirical research in this area (Hanson & Spratt, 2000; Minde). While diagnosis and treatment of disordered attachment patterns are vitally important, limiting the conception of attachment-related psychopathology to the narrow diagnostic criteria of RAD significantly understates the importance of other attachment-related conditions and may limit the use of potentially effective interventions. Identifying the links between these disorders will guide interventions to impact the attachment problems by targeting underlying issues rather than focusing on just the symptoms.

Haugaard and Hazan (2004) describe the inhibited type of RAD as a pattern resulting from experience with caregivers who do not provide emotional support and comfort when needed. Because children who have been treated in this way expect to be rejected by others, they avoid social contact. Behaviors that are typically associated with this pattern include withdrawal from others, avoidance of comforting gestures, self-soothing behaviors, vigilance, aggression, and awkwardness in social situations. In the disinhibited type, behaviors are believed to be related to experience with caregivers who are not responsive but can be coerced into providing affection. This results in behaviors such as inappropriate familiarity and comfort-seeking with strangers, exaggeration of needs for assistance, chronic anxious appearance, and inappropriate childishness (p. 158). Hanson and Spratt (2000) caution, however, against extending the definition of RAD-related behaviors beyond what is identified in the *DSM-IV-TR* (2000). They believe that many of the behaviors might be better accounted for by other diagnostic categories such as conduct disorder or attention deficit–hyperactivity disorder. However, they do not indicate how applying these other diagnoses would enhance treatment.

Much of the work on indiscriminate behavior patterns has been done with children who have been institutionalized, and the authors also caution that these behaviors may be adaptive for children in an institutional setting and may not be found as frequently in noninstitutionalized children with disordered attachments.

Zeanah, Smyke, and Dumitrescu (2002) present data that challenge the current conception of the disinhibited pattern of attachment disorder. In a study of children in a Romanian institution, nearly 60% of children in one group with high levels of behavior associated with social disinhibition, also known as indiscriminate behavior, were found to have one preferred attachment figure. Since children with the disinhibited pattern are presumed to be unable to form a consistent secure attachment, the diagnostic criteria may be inaccurate. The authors suggest that indiscriminate behaviors represent social cognitive abnormalities that are present across a range of social relationships rather than being singularly representative of disordered attachment status. Much of the work on indiscriminate behavior patterns has been done with children who have been institutionalized, and the authors also caution that

these behaviors may be adaptive for children in an institutional setting and may not be found as frequently in noninstitutionalized children with disordered attachments.

In further research with the Romanian institution population, Smyke, Dumitrescu, and Zeanah (2002) found that mixed patterns of inhibited and disinhibited behaviors were more typical than exclusive presentation of one pattern. In this study, children who had a predominately inhibited presentation were found to have no preferred attachment figure, while some of the children who had mixed or predominately disinhibited presentation did have a preferred figure. The presence of aggressive behaviors was also quantified in this study, and the findings suggest that the institutionalized children had either more or less aggression than children who were raised at home. Most of the non-institutionalized children had moderate levels of aggression, more than half of the institutionalized children had very little aggression, and about 25% of institutionalized children had considerable aggression. This result also calls into question the tendency to attribute aggressive behavior to attachment disturbances in children with RAD.

Since the diagnostic criteria for RAD are relatively nonspecific, the diagnosis may be given to children who come from a range of different backgrounds. Research has focused on children who have been institutionalized as well as on children who have had a primary caregiver but developed a disordered attachment due to maltreatment. In another study, Zeanah et al. (2004) found evidence of disordered attachment in maltreated toddlers who were removed from their primary caregiver and placed in foster care. The criteria for the RAD diagnosis were met in approximately 40% of these children. Again in this study, indiscriminate and inhibited patterns of behavior were found to overlap in some of the children, and indiscriminate behaviors were observed in children with and without preferred attachment figures. Since both types of behavior were found in similar proportions in this population, the authors suggest that they may both arise from a history of disturbed attachment. However, the authors also state that children with the indiscriminate pattern of behavior are more likely to have an attachment figure at present than those with the inhibited pattern. This suggests that disinhibition may be better understood as a symptom of attachment disturbance rather than as a subtype of RAD.

Marvin and Whelan (2003) further emphasize some of the difficulties associated with the RAD diagnosis and with the assessment of attachment disturbances. Because attachment has typically been studied by applying Ainsworth's original model of qualitative differences between attachment typology, focusing on the RAD criteria and associated behaviors presents a difficult transition. The RAD diagnosis does not fit neatly into the categorization of the four attachment styles that have been identified by Ainsworth and Main. Also, some attachment research has focused on the quality of the relationship with one attachment figure, other research focuses on descriptors of children's individual behavior, and still other research looks at their relationship difficulties. In addition, interventions would vary based on the child's age and cognitive abilities.

Synthesizing these disparate sources of information has proven to be a difficult undertaking. Marvin and Whelan (2003) report that in their work as clinicians, they typically use terminology associated with the four attachment patterns, the *DSM-IV-TR* (2000) criteria, and ICD-10 codes. Their assessment protocol includes the use of standardized assessment tools, clinical and open-ended interviews with child and parents, and clinical observation of child and parent behavior during free play and while engaged in the Strange Situation protocol. The data collection for one evaluation typically takes a full day with two clinicians, and another full day is required to analyze the data and formulate recommendations for intervention and treatment. In the experience of the authors, this type of evaluation is more cost-effective and provides more practical information than traditional evaluations, but they note that subspecialty training for the clinicians is

required. The implication is that drawing on multiple sources of information in the understanding of attachment disturbances and related behaviors is more clinically useful than an approach limited by the criteria found in the *DSM-IV-TR* (2000).

These issues highlight some of the drawbacks of adherence to strict and limited diagnostic criteria in the assessment and treatment of attachment disturbances. If a child does have a history of pathogenic care and interpersonal difficulties, should the behavioral symptoms be placed into fragmented categories? This approach would appear to lead to ineffective long-term treatment, since it emphasizes only the behaviors that are seen rather than addressing what is causing them. For example, a child who presents with symptoms that could be classified as conduct disorder and who also has a history of attachment insecurity may be best served by a directed attachment approach. Treating the conduct disorder as if it were unrelated to attachment problems would be similar to throwing water on the flames of a fire rather than at the base. There might be a temporary reduction in certain symptoms, but the underlying pathology and structural deficits would remain.

Treatment of Attachment Disturbances

Since attachment disturbances have been linked to a variety of different outcomes in children and adults, using attachment theory to inform psychiatric treatment in general is warranted. In children who show significantly maladapted attachment patterns and/or those who meet the criteria for RAD, more directed interventions may be required. Empirical evidence in this area is limited. Furthermore, interventions may differ for children who have been adopted into a stable home, those who are in foster care, those who still reside in institutions, those who reside with their original attachment figure, those who developed attachment disturbances at varying ages, etc. The connection between attachment insecurity and other non-attachment-specific disorders is also far from clear, and the existence of co-occuring disorders is likely to increase the complexity required for effective treatment. Thus far, treatment of disordered attachment and related behaviors tends to be focused in several areas: enhancing current attachment relationships, creating new attachment relationships, and reducing problematic symptoms and behaviors. Due to the current propensity towards diagnosis-focused research, most of the related recommendations are focused on children who meet criteria for RAD.

Caregiver involvement in the treatment process, providing the caregiver is psychologically healthy enough to participate appropriately, is believed to be an important contributor to positive treatment outcomes.

Hanson and Spratt (2000) identify treatment strategies based on interventions that have been effective in populations of children who have been abused. Their rationale is that RAD is more common in children who have been maltreated and that it involves similar symptom profiles. Their preferred interventions include cognitive behavioral management of mood symptoms, behavioral modification, and psychoeducation. Since RAD is characterized by impaired social relationships, the addition of social support and coaching may enhance peer relationships (Haugaard & Hazan, 2004; Minde, 2003). Interventions designed to enhance self-esteem and increase self-efficacy could also improve functioning (Haugaard & Hazan).

Children who have a healthy and supportive relationship with an adult (not necessarily a caregiver) are less likely to be negatively affected by insecure attachments. In addition, caregiver involvement in the treatment process, providing the caregiver is psychologically healthy enough to participate appropriately, is believed to be an important contributor to positive treatment outcomes. Treatment of caregivers' own attachment difficulties and current psychopathology may also be indicated (Hanson & Spratt; Haugaard & Hazan).

Other psychotherapeutic approaches to the treatment of RAD include encouraging the development of a healthy attachment relationship to the therapist and processing traumatic events through play therapy (Haugaard & Hazan, 2004). Cunningham and Page (2001) present a case study in which individual therapy with a teenager in residential treatment was guided by the attempt to develop a healthy attachment relationship between the patient and the therapist. The authors report that as therapy proceeded, the relationship began to take on the characteristics of a healthy attachment relationship. For example, the patient began to show pleasure upon seeing the therapist; share information, thoughts, and feelings spontaneously; attempt to maintain proximity to the therapist; and show anxiety at separation. During this time, the patient also began to show increased positive behaviors outside of therapy and had unprecedented success in the residential milieu.

In a report on the residential treatment of children with attachment disturbances, Berlin (2001) describes the approach of one institution. In this setting, the therapeutic milieu is seen as the most important factor in successful treatment. Children are encouraged to develop an attachment relationship with a milieu worker by remaining physically and emotionally proximate to the same worker for a period of several weeks. As children gain the ability to regulate their behavior in accordance with milieu expectations, they are given increasing amounts of freedom. Their treatment is modulated based on their ability to participate safely in the milieu. In addition to this milieu treatment, children receive individual and family therapy and educational support. In a qualitative study of residential treatment facility staff, Moses (2000) found that staff perceived individualized relationship-focused interventions as more effective than standardized behavior modification interventions.

An outpatient treatment approach involving a short-term psychoeducational intervention was found to improve scores on a scale measuring language and cognition, fine and gross motor skills, social interaction, and self-care in children with RAD (Mukkades, Kaynak, Kinali, Beşikci, & Issever, 2004). Outcomes for 10 children with autism and 11 children with RAD were compared following 3 months of weekly treatment sessions. All of the participants were living with their biological parent or parents. The sessions included didactic and experiential education for children and parents designed to increase knowledge of the disorders, enhance the development of reciprocal interaction, improve communication, and develop more effective parenting skills. The children with RAD showed significant improvement in all measurement scales, and they showed significantly more improvement than the children with autism. The authors also report that the parents were highly motivated to use the skills promoted by the program.

Interventions designed to enhance caregivers' ability to understand the meaning behind the behaviors of children with RAD are also believed to be an important part of treatment in children with severely disturbed attachment-related behavior (Minde, 2003; Marvin & Whelan, 2003). This approach goes beyond traditional psychoeducational or supportive therapies in that it addresses children whose symptoms have not been reduced by the formation of a healthy attachment. Particularly for children who have been adopted or are in foster care, caregivers may already have the knowledge and sensitivity required to form healthy attachments, but the children's behaviors may be extremely complex and contradictory. Marvin and Whelan state that the interpretation of these

behaviors is difficult even for clinicians. They suggest that if caregivers are taught to interpret and address the meaning behind the behaviors, they may be better able to assist the children in developing more adaptive relational patterns.

Case Study

"John" is an 8-year-old boy who was treated at a residential treatment facility for approximately 10 months. John was initially admitted to the facility's acute unit at age 7 due to an increase in aggressive and dangerous behavior in his therapeutic foster home and at school. Shortly after his admission, John's status converted to a 30-day evaluation during which psychological testing, educational testing, and occupational therapy assessment were performed. Among the results of John's evaluation was a recommendation for residential treatment, so he was admitted to the residential unit shortly thereafter.

His early childhood included neglect and physical, sexual, and emotional abuse. During his first 2 years of life, John lived with his biological mother and experienced severe neglect and physical abuse. John was then removed from his biological mother's care and was placed with relatives. Unfortunately, these relatives perpetrated continuing sexual and physical abuse. John was unable to discuss or allude to any of these issues in treatment. His evaluation had been difficult and incomplete due to his refusal to participate in activities that he did not value. During his time in residential treatment, John had virtually no emotional engagement with his individual therapist and resisted or denied any mutual affection between them.

At the time of his discharge, John's *DSM-IV-TR* (2000) diagnoses were still unclear. Diagnoses that had been considered or given included attention deficit–hyperactivity disorder, bipolar disorder, oppositional defiant disorder, posttraumatic stress disorder, and reactive attachment disorder. His intelligence was above average. John had been given various medications in varying combinations, including dextroamphetamine sulphate, clonidine, sertraline, quetiapine fumarate, divalproex sodium, oxcarbazepine, trazodone, and hydroxyzine. He was typically impulsive, intrusive, and argumentative. He vacillated between being oppositional with adults and protecting them from perceived injustices perpetrated by other patients. On some days, he showed affection towards certain adults and expressed pleasure at their presence. On other days, however, he was dismissive or neutral towards the same adults. He spoke of his foster parents as "my mom and dad," but once he was admitted to the residential unit, he rarely expressed a desire to see them or speak to them, and if they came to visit, he sometimes expressed displeasure or maintained neutrality. In family therapy, he did indicate that he cared about them but in neutral terms with little affect. He was highly desirous of peer relationships, but he frequently sabotaged them by teasing, provoking, or arguing with the peers, cheating at games, and destroying or stealing peers' property.

During his treatment, John's behaviors became increasingly difficult to manage. As he learned the routines of the unit and developed relationships with the staff, he became more sneaky in his attempts to gain what he wanted. Although his foster family brought him numerous toys that he liked, he frequently snuck into peers' rooms and took their belongings. He was unable or unwilling to follow most directions, and he often responded to directions with "no" or "why?" before even processing what the direction was. He was quick to become aggressive with peers and at times was able to time his aggression in order to escape perception by staff. At other times, John would seem to reach a point of no return and become diffusely aggressive to anyone who came near him. John also had some sexualized behaviors such as touching peers' genital areas and coming out of the shower in front of peers and staff with no clothes on. John typically did not express regret for his behaviors or respond to the efforts of staff to engage him in discussions about their meaning.

The treatment program included a behavior modification program based on earning points for positive behavior throughout the day. At the end of each day, the points earned are totaled to achieve one of three levels with which various privileges are associated. Certain types of behavior are identified for each child to result in an automatic level one (the level with the least privileges). For John, these behaviors included physical aggression, direct provoking of peers, and verbal threats to peers. Because John typically displayed these behaviors throughout most days, he almost always earned a level one and did not receive extra privileges. The program also includes individual psychotherapy three times a week, family therapy once a week, occupational therapy three to five times a week, recreational therapy two to three times a week, and special education services.

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Various attempts were made to help John change his behaviors. A special program of more immediate rewards was tried (he earned video game time three times daily for having no aggressive behavior during a specified time period), but John's aggressive behaviors did not decrease. John was engaged in a program of receiving additional one-on-one services with occupational therapy and recreational therapy. At one point when John's behaviors had escalated to a dangerous point, he was required to alternate half hours of time away from the group and time in the unit milieu. Staff attempted to keep John engaged in enjoyable activities during his milieu time, but he often expressed anger at the intrusion or refused to participate. John enjoyed helping adults with tasks and playing games with them, but he always preferred to interact with his peers if given the choice.

John's behaviors elicited a wide range of emotional reactions from staff. Working with him aroused coutertransferential feelings of anger, fear, love, sadness, irritation, affection, helplessness, joy, hope, and hatred. One staff member described her experiences with John as being the precipitant in a personal spiritual crisis. Some staff saw him as conniving, mean, and intentionally oppositional. Others viewed him as intelligent, anxious, and severely damaged. Even for the adults who had a more positive view of John, at times his behaviors were so difficult to accept that they responded in a nontherapeutic manner. The staff could agree that interacting with John was extremely frustrating at times. The multidisciplinary team differed in their perceptions of what would help John. The opinions included a more punitive approach, a less punitive approach, more immediate rewards, more or different medication, more one-on-one adult time, more time with peers, more restrictions, or fewer restrictions

Many believed that residential treatment had made John's behaviors worse and that he should be discharged as soon as possible. Some felt that he had gained enough comfort to begin to express his true reactions to his traumatic past and that discharging him at this point would be detrimental. After several particularly bad episodes, one of which involved John stabbing a peer in the hand with a pencil, the team decided that John could no longer be maintained safely on the residential unit, and he was transferred to the acute unit. He remained there for approximately 1 month until another placement could be secured. Most facilities were unwilling to accept him due to his history of aggressive and sexualized behaviors, and no appropriate adoptive or foster families could be identified. He was finally discharged to a group home.

If John's history and behavior are conceptualized according to an attachment theory perspective, several themes emerge. John's experiences as an infant and young child were most likely characterized by confusion and contradiction. His biological mother did not provide consistent satisfaction of his physical and emotional needs. Since all infants are primed to form attachment bonds, parental behavior dictates the quality of the attachment rather than the quantity (Main, 1996). Maltreated infants are more likely to form insecure attachments (Bacon & Richardson, 2001). Main connects infant maltreatment to the disorganized-disoriented pattern of attachment and describes that pattern as originating from a "collapse of behavioral strategy" on the part of the infant (p. 239). Since the infant seeks the attachment figure for comfort during periods of distress, the infant is unable to integrate its experience when the attachment figure is also *causing* the distress. The disorganized-disoriented pattern of attachment is characterized by conflicted behaviors such as a frozen trance-like expression or approaching the attachment figure and then turning away.

Although the four patterns of attachment are used to describe designated patterns of infant behavior in the Strange Situation experiment, they can also be used symbolically to understand John's behaviors as an older child. John exhibited conflicted behaviors towards others in accordance with the disorganized-disoriented pattern. At times he would seek proximity to and interaction with adults, and at other times he would actively attempt to distance himself from them. His frequent attempts to secure peer approval were interspersed with socially unacceptable behaviors that peers found reprehensible. He did not seek comfort from adults and refused it when it was offered during periods of distress, but he expressed reproach when his perceived needs were not met. In terms of the RAD diagnosis, John's symptoms cannot easily be classified as primarily inhibited or disinhibited. Approximately 20% of the children in one sample of maltreated toddlers were found to have characteristics of both subtypes of RAD (Zeanah et al., 2004). John appeared to be inhibited in his ability to form close, emotionally connected relationships to others, but he appeared disinhibited in his immediate attempts to engage with anyone he encountered.

According to Schore's perspective (1994, 2002), John's experiences with his early caregiver would have prevented his right hemisphere from developing normally. Since his biological mother did not provide adequate regulation of John's internal affective states, John's brain would not have been able to maintain its neural connections effectively, and a state of internal collapse and dissociation would have resulted. Later correlates of these early crises would be an inconsistent sense of self and an inability to perceive and understand the emotional states of others. This provides another way to understand John's antisocial behaviors with his peers and his apparent indifference to approval or disappointment from adults. In psychodynamic terms, it would also help to illuminate the complexity of the staff's countertransferential reactions to John. Since John himself did not have the capacity to maintain internal affective consistency, his own rapidly shifting emotional states were reflected in the widely disparate feelings he evoked in others. In addition, the lack of stability in his selfhood could create a proverbial blank slate for the projection of staff's own anxieties and insecurities, which might help to explain the multiple contradictions in the team's suggestions for him.

Using attachment theory to determine John's treatment plan would have yielded a set of recommendations that would not fit easily into the existing treatment program. An attachment perspective would indicate that John's behaviors were the result of his desperate attempts to maintain a semblance of internal stability amid complex external stimuli. He would be viewed as a child who had developed coping strategies that were effective for him in an unstable, unpredictable environment. His internal working models for interpersonal relationships would have been defined by his experiences with caregivers who were not only neglectful of his needs but who also actively harmed

him. Because these strategies and models were neurologically encoded during his early brain development, they would be expected to continue even when he was placed in a relatively safe and consistent living situation.

An attachment-based approach would thus not rely on behavioral modification techniques or punitive approaches to John's behaviors. His behaviors would be interpreted in terms of their underlying meaning, and interventions would be designed to address John's need for emotional closeness, consistency, acceptance, and stability.

An attachment-based approach would thus not rely on behavioral modification techniques or punitive approaches to John's behaviors. His behaviors would be interpreted in terms of their underlying meaning, and interventions would be designed to address John's need for emotional closeness, consistency, acceptance, and stability. A short-term residential treatment facility would be an undesirable location for treatment, because it involves frequent changes in both caregivers and peers and would discourage the formation of long-term bonds. Due to the severe nature of John's psychopathology, the most effective treatment would include remaining in a stable location with the same caregivers for a *minimum* of several years, and preferably until adulthood. This could be achieved in a specialized small institutional setting or with a therapeutic foster family. John would be well-served by participating in long-term individual psychotherapy informed by a psychodynamic attachment approach and to include play therapy if possible. This would allow John to process and master the traumatic events of his past. His therapist would have to be committed to maintaining his treatment regardless of his initial level of participation. Ideally, his caregivers would be involved in personal psychotherapy or clinical supervision in order to help process and contain their emotional reactions to John. Goodwin (2003) highlights the importance of mental health workers' awareness and exploration of their own attachment status in working with patients who have insecure attachment histories.

Unfortunately, these recommendations for John's treatment are little more than an idealistic reverie. The existence of such interventions and the ability to fund them are extremely limited. Children like John rarely have access to sensitive and well-informed adults who understand their behaviors from a complicated perspective. Once children's behaviors have become physically dangerous or sexually inappropriate, there are few places or people who are willing to accept the responsibility of caring for them. Children who are in the custody of the state are subject to major financial limitations and are usually "managed" as one part of a huge caseload. However, severely disordered attachment histories are the rule rather than the exception in most children who have been removed from their biological parents' custody. Given the future costs of caring for adults who have developed psychopathologies associated with early attachment insecurity, the importance of providing proper treatment at a young age seems self-evident. Regrettably, the reality of our current healthcare system begs a different interpretation.

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