

A Behavioral Perspective of Childhood Trauma and Attachment Issues: Toward Alternative Treatment Approaches for Children with a History of Abuse

Walter Prather and Jeannie A. Golden

Abstract

Attachment theory provides a useful conceptual framework for understanding trauma and the treatment of children who have been abused. This article examines childhood trauma and attachment issues from the perspective of behavior analysis, and provides a theoretical basis for two alternative treatment models for previously abused children and their foster or adoptive parents: rational cognitive emotive behavioral therapy and trauma-based psychotherapy. These new treatment approaches are based on the integration of attachment theory and basic concepts and principles of rational thought and behavior analysis. These therapeutic models provide dyadic, cognitive, and emotive interventions that encourage behavior change with foster or adopted children who have been abused or neglected as part of their early experiences. The role of emotion in behavioral causation and the teaching and learning of different behavior are central to the treatment process, just as they are central features in healthy parent child relationships. Conclusions are reached that “familial and therapeutic environments” in which perception and previous learning guide parent child interaction are more important than diagnostic orientation, and implications for specific cognitive and behavioral interventions are suggested.

Keywords: Cognitive behavior therapy, childhood trauma, attachment theory, foster care, adoption

INTRODUCTION

Authors of recent studies on abuse have proposed that trauma and related traumatic experiences within the family of origin have important implications for parent-child relationships, and may disrupt normal attachment behavior in children. These studies have primarily examined previous trauma and long-term sequela of severe childhood and adolescent psychopathology from the perspective of attachment theory (Bowlby, 1969, 1973, 1980). The central premise of attachment theory is that the security of the early child-parent bond is reflected in the child's interpersonal relationships across the life span (Schneider, Tardif, & Atkinson, 2001). This article examines childhood trauma and attachment issues from the perspective of behavior analysis, and provides a forum in which the authors provide rationales for new cognitive focused or trauma-focused behavioral treatment approaches for abused children and their foster or adoptive parents. These new therapeutic models provide dyadic, cognitive, and emotive behavioral interventions that encourage positive behavior change with abused children placed in foster and adoptive families.

Research studies focusing on mediating the long-term sequela of repetitive, intrafamilial abuse and neglect have repeatedly argued that a history of pathogenic care can interfere with secure attachment and disrupt healthy development in children (Howe, Brandon, Hinnings, & Schofield, 1999; Schneider, Tardif, & Atkinson, 2001). This is especially true in foster and adoptive families in which children have been abused or neglected as part of their early experiences. Research on foster children and problematic attachment has consistently found that long-term sequela of abuse leads to a complex array of emotional deficiencies and behavioral symptoms that reflect the traumatic effects of maltreatment on children, and create strain on attachment with their adoptive parents (Berry & Barth, 1989; Dyer, 2004; O'Connor & Zeanah, 2003). This strain in the children's lives, often across multiple placements and multiple caregivers, increases the likelihood of difficulties across a range of development. Research investigating abuse and insecure attachment behavior in foster and adoptive children has linked

these factors to emotional and behavioral difficulties in these children.

Statement of Problem

Researchers investigating maltreated children have repeatedly found that neglected or abused children in foster and adoptive populations manifest different emotional and behavioral reactions to regain lost or secure relationships (Ainsworth, 1989; Hazan & Shaver, 1994), and are frequently reported to have disorganized attachments (Hughes, 2004) and a need to control their environment (Loyn-Ruth & Jacobvitz, 1999). Such children are not likely to view caregivers as being a source of safety, and instead typically show an increase in aggressive and hyperactive behaviors, which Berry and Barth (1989) suggest disrupt healthy or secure attachment with their adopted parents. These children have apparently learned to adapt to an abusive and inconsistent caregiver by becoming cautiously self-reliant, and are often described as glib, manipulative and disingenuous in their interactions with others as they move through childhood (Schofield & Beek, 2005).

The major challenges reported in parenting maltreated children include their profound lack of trust (Schofield & Beek, 2005) and a distorted sense of security, often reflected in the child's poor interpersonal relationships across the life span. Researchers investigating children adopted at older ages report many of the same symptoms found in foster children with backgrounds of pathogenic care, including a failure to develop secure attachments. Behavioral and emotional descriptions of these older children suggest that they lack impulse control and normal conscience and moral development (Termini & Golden, 2007), and often present as superficially engaging or connected to others, emotionally aloof, and unwilling to participate in treatment, all possibly connected to impaired attachment (Dyer, 2004; O'Connor & Zeanah, 2003).

In adulthood, these children often are described as shallow or emotionally aloof and have difficulty forming close relationships, demonstrate a lack of resilience, and frequently display severe antisocial behavior (Howe, 1998). In recent research regarding long-term family foster care, older children were often described by foster and adoptive parents as suspicious and highly adaptable, all in an effort to control or manipulate people viewed as sources of fear rather than sources of love or security (Schofield & Beek, 2005). Research studies focusing on different methods of attachment related treatment indicate that these children generally present as a diagnostic challenge and were likely to view caregivers as someone who must be controlled through threats and intimidation (Hughes, 2004; O'Connor & Zeanah, 2003). This finding is especially important to the psychological treatment of children, given recent retrospective evidence that most attachment and post-attachment related problems inevitably impact other family members and eventually influence adjustment outside the family. As such, these problems represent a major challenge for therapists and other mental health professionals who are often confronted with the difficult emotional and behavioral reactions in these children, as well as the fear and desperation of their caregivers and adoptive parents. While family therapists have embraced many elements of attachment theory as a critical treatment area for working to repair attachment related problems with adoptive and foster children (Weir, 2006), there is still a significant lack of research into the treatment of either maltreated or previously institutionalized children who continue to show attachment disorder behavior following adoption (O'Connor & Zeanah, 2003).

O'Connor and Zeanah (2003) summarized the difficulties in using attachment theory to make diagnoses and to identify treatment interventions in regard to attachment related disorders. They report, "...there is still no consensual definition or assessment strategy; nor are there established guidelines for treatment or management" (p. 241.) This finding is especially important

for clinicians who have embraced elements of attachment theory to help foster and adopted children and their caregivers. While attachment theory is identified as the conceptual foundation underlying attachment-based family therapy, no positive process or outcome studies of attachment based family therapies are found in the scientific literature, and recent research suggests that the criteria for more severe attachment disorders associated with abused children is vague and not well researched, and that other diagnostic criteria may be more reliable (Ziberstein, 2006; O'Connor & Zeanah, 2003).

This lack of prospective research into the psychological treatment of multi-problem, maltreated adopted children, is not unique to the study of trauma, but presents a major challenge for standard cognitive based therapy (CBT) protocols that tend to be less effective with the pervasive emotional and behavioral difficulties in these children (Hughes, 2004; Cloitre, Koenen, Cohen, & Han 2002; Saywitz, Mannarino, Berliner, & Cohen 2000). This is particularly true for foster and adopted children with a history of abuse who manifest impaired social judgment and behavior secondary to severe anxiety associated with previous trauma at the hands of someone who was supposed to keep them safe. These complex behavioral symptoms, along with emotional deficiencies, all interfere with the effectiveness of standard cognitive behavioral interventions with these children.

This article looks at the emotional and behavioral symptoms associated with these children and presents a new rational cognitive emotive focused behavioral model based on the integration of attachment theory and basic concepts and principles of behavior analysis. Although this new model provides the context to examine the many important roles of family members and other reinforcing agents, the rationale underlying this treatment approach is consistent with the principles of brevity and rational cognitive perspectives, and is based on the assumption that both learning and thinking connect the causal sequences of a child's experiences and perceptions and guide behavior (Prather, 2007), and that altering the fixed statements or language of abused children and their parents can lead to dramatic changes in the quality of relationships inside and outside of the family (de Shazer, S. & Berg, K., 1988). While individual differences in abused and neglected children are determined by previous learning, the reciprocal role of emotion and thought in behavioral causation and the encouragement of rational thinking and behavior change are central to the treatment process. Conclusions are reached that "familial and therapeutic environments", in which perception and previous learning (reinforcement history) guide parent-child interaction, are more important than nondirective based treatments, and implications for specific cognitive and behavioral interventions are suggested. Given the implicit role of learning or reinforcement history in behavioral causation, the following two sections describe many of the interlocking and concurrent behavioral and other environmental contingencies that operate in families in which children have been abused or neglected as part of their early experiences, and provides the theoretical rationale underlying the acquisition of faulty or inappropriate behavior in children growing up in long-term family foster care or adoptive homes.

Reinforcement History and Faulty Learning

From a behavioral analytic perspective, reinforcement history and faulty learning may account for differences between "secure" and "insecure" attachment. These concepts may explain why children with so-called "insecure attachment" appear to lack "trust" and appropriate "moral development". Lack of attachment behavior, trust behavior and moral behavior can be explained by principles of reinforcement and punishment, rather than some vague, underlying, unobservable concepts called "attachment", "trust" or "morality" that merely describe behavior. What appears to be a lack of "emotional development" may be instead the failure to exhibit appropriate emotional behaviors due to Sds, MOs and the principles of reinforcement and punishment.

Given that feeling safe is our most primary social need (Howe, Branson, Hinnings, & Schofield, 1999; Schneider, Tardif & Atkinson, 2001), physiological changes throughout the lifespan creates a predisposition or readiness for human beings to learn certain tasks (behaviors). During the first five years of life, children are physiologically dependent primarily on adult caregivers to provide for their basic survival, safety and emotional needs. Through their experiences with healthy adult caregivers, children learn that they can relax, stay close to, respond to, and basically “trust” those adults to take care of them. Such children also exhibit noticeably preferential treatment toward the specific set of adults who primarily respond to their needs (discriminative stimuli for reinforcement) by showing visible signs of being upset when they leave and pleased when they return. This cluster of learned behaviors is sometimes referred to as “secure attachment”. While previous learning determines individual differences in children, it is not expected that this set of behaviors would automatically transfer to a new adult, except with repeated positive experiences with this new adult, and especially not with every stranger.

When children are not adequately cared for during their early years of dependency and vulnerability and their safety and survival needs are compromised, children may experience a series of painful or horrific events (referred to as “traumatic experiences”), either directly at the hands of their adult caregivers or indirectly due to their negligence. As a result, these children fail to learn the cluster of behaviors referred to as “attachment”, and learn an entirely different set of behaviors in their interactions with adults. Such children often learn to avoid their adult caregivers (familiar adults) and fend for themselves and/or approach strangers (unfamiliar adults) to obtain what they need. These same abused or uncared for children often may have observed behavior patterns in the abusive and neglectful homes in which lying, stealing, cheating, sneaking and coercion were modeled and reinforced.

For example, children who have been abused and neglected and/or had multiple placements often across multiple caregivers spent the first few years of life engaging in survival behaviors and manipulating and coercing strangers into giving them what they want. Because of these and other existing problem behaviors, rules established by ‘secondary parents’ (foster or adopted) regarding behavior are less likely to be paired with supporting natural environmental contingencies (e.g. tell their children never to lie and that people don’t like it when others lie). People in the natural environment respond more readily to sneaky and manipulating behaviors they learned (through observation) in the presence of their ‘primary parents’ (abusive or neglectful) (i.e. when they do lie, they frequently get what they lied for from naïve adults). Thus, these children frequently fail to generalize moral behavior (and appear as if they lack “conscience” or “internalization” of parental values). However, their history is that of a lack of prior parental punishment for deviant talk and mock enactment (often met with indifference) coupled with positive reinforcement for deviant talk and being taught antisocial rules (i.e. hitting as a generalized response).

When children are moved to foster or adoptive homes, they bring these same negative interaction patterns into their new homes and may exhibit them in the presence of their new adult caregivers. At first, the new adults may inadvertently reinforce undesirable behaviors, particularly coercion, because it is much easier to give in and it is so punishing to the adult to not give in. However, once the parents realize the faulty interaction patterns, they may be able to change. They learn to reinforce alternative appropriate replacement behaviors (telling the truth, asking for things they want, etc.) and extinguishing (not giving in to) or punishing the undesirable behaviors. However, even when new caregivers are vigilant about reinforcing the replacement behaviors and not reinforcing (extinguishing) the undesirable behaviors, the undesirable behaviors get intermittently reinforced, since lying, stealing, cheating and sneaking can be difficult behaviors to detect. Furthermore, for many of these behaviors the important reinforcer is

not adult attention. Instead, for example, stealing may be reinforced by avoiding detection and obtaining the desired item, while lying and sneaking may be reinforced by escaping punishment or by getting to do what is not permitted. These children are often well trained in manipulation and surveillance, whereas their adult caregivers (well meaning adoptive and foster parents) are motivated to earn trust and believe their children.

Even when adult caregivers are successful at detecting undesirable behaviors, other adults these children come in contact with (strangers, teachers, etc.) reinforce these undesirable behaviors because they don't realize the children are exhibiting them (i.e. don't recognize a lie, don't know the item they have is stolen, don't know that they're not permitted to do an activity). There are three major ramifications with the aforementioned:

1. No matter how diligently the caregivers monitor healthy behavior and not reinforce inappropriate behaviors, children are being intermittently reinforced in the "outside world";
2. No matter how often healthy adult caregivers model appropriate behavior and tell children what's wrong with their behaviors (i.e. people won't like you, you'll get in trouble, you'll lose friends), the child won't believe it because the caregiver's claims don't come true. In fact some children are so adept at lying and manipulating that caregivers are sometimes the ones who are not believed by others; and, finally,
3. Sometimes the caregivers are avoided and shunned by children, and naïve strangers are preferred because they are more reinforcing; they reinforce the undesirable behaviors which are more comfortable and familiar and a lot easier to exhibit than the new set of behaviors that the caregivers are trying to get the children to exhibit. This is similar to the way an adult may feel about someone trying to coerce them to quit smoking or start exercising.

Loved and well-cared for children, on the other hand, learn to trust, believe and rely on their adult caregivers. They want to be in the presence of their adult caregivers and they want to please them. They have learned through modeling, reinforcement, extinction and punishment that lying, stealing, cheating and sneaking are undesirable. It's not that they never exhibit these behaviors; it's just that when they do, they have an anticipatory behavior (withdrawal) and emotional response (i.e. "guilt") that makes them dread the negative responses of the caregiver. Even if they don't get caught, or if the caregiver provides no punishment other than to express disapproval, that is aversive enough for "attached" children to learn, i.e. make the association between their behavior and the punishment and "generalize" to similar situations in which they may want to exhibit the behavior (internalize the moral lesson) in the future. Given the implicit role of learning or reinforcement history in behavioral causation, it is the behavioral theoretical view of the second author that for "unattached" children, the association between appropriate punishment (caregiver exhibiting anger, telling the children that the caregiver is disappointed, taking away a privilege) and painful and horrific events in their past (deprived of basic needs, being yelled at or hit in anger) can trigger (become an Sd for) anger (the current punishment becomes associated with their early trauma).

In the *Diagnostic and Statistical Manual of Mental Disorders, Fourth Edition, Text Revision*. (DSM-IV-TR) (American Psychiatric Association (APA), 2000) symptoms of PTSD include "intense psychological distress" or "physiological reactivity "when exposed "to internal or external cues that symbolize or resemble an aspect of the traumatic event." Consistent with this view, the second author's behavioral perspective is that these children may shut down and try not

to feel, think or believe anything the caregiver is saying. This “shutting down” is negatively reinforced because it is so aversive to feel the negative feelings associated with their early experiences. Thus, their behavior of “shutting down” becomes an inherent pattern of negative interaction or behavior that is entrenched in these children’s behavioral and emotional repertoire. In an article entitled *Posttraumatic stress disorder: A state-of the-science review*, Nemeroff, Bremner, Foa, Mayberg, North and Stein (2006) make the argument that whereas individuals who have suffered a trauma and allow everyday experiences to gradually correct their distorted thinking regain feelings of competence and safety, “those who make extensive use of avoidance and numbing will also avoid the very experiences that could have corrected their cognitive distortions” and that those “individuals may be at higher risk for the development of PTSD” (p.18). From a behavioral perspective, “unattached” children often react to many emotional situations in which others would appear to be “sad”, “ashamed”, “guilty”, or “embarrassed”, in such a way that they appear “neutral” or “happy”. In situations where children do things that they know the caregiver would disapprove of, they may fail to experience negative feelings (punishment). Therefore, these children fail to learn the association between their behavior and punishment. This, combined with the possibility that they might not care that much for their caregiver, means that they will not experience any type of anticipatory response (i.e. “guilt”) when they engage in “forbidden” behavior.

The Role of Perception and Social Agents in Behavioral Causation

The major challenge in treatment and parenting these children is the requisite that the way an abused child reacts to foster or adopted parents varies according to how the child perceives them (Taylor, 1962; Wolpe, 1978). To the extent that perception and previous learning governs a child’s reactions, then thinking or thoughts and associated emotional responses are a major determinant in the behavior of the abused child. Implicit in this view of human (cognitive and emotional) behavior, though somewhat subtle, is a focus on perception (causal antecedents to overt behavior), and the interlocking behavioral contingencies inherent in the experiences or controlling conditions (discriminative stimuli, differential associations), linked with dysfunctional emotional and behavioral patterns in abused and neglected children. Because research indicates that contingencies of reinforcement maintain most problem behaviors, the unlearning and relearning of healthy cognitive and emotional reactions in these children requires relearning verbal and motor behavior associated with how abused children perceive and interact with their adoptive parents and other social agents. Since learning history and the reciprocal role of emotion and thought in behavioral causation is critical to the treatment process, rational cognitive emotive behavior therapy (RCEBT), “favors a conception of interaction based on triadic reciprocity, and suggests that behavior, cognitive and other emotional (personal) factors, and environmental influences all operate as interlocking determinants that affect each other bidirectionally” (Bandura, 2004, pg. 27; Bandura, 1977a, 1982b).

While specific antecedents to and reinforcers for problem behavior vary widely, this conceptual framework is consistent with the idea that abusive and neglectful experiences differ qualitatively from other types of early childhood experiences, and that something peculiar about certain kinds of abusive caregivers promotes emotional and behavioral symptoms in children. This is especially important when working with previously abused children, and suggests that the primary force that shapes abused children depends solely on how caregivers model and affectively respond to the child’s healthy or unhealthy behavior over time. This theoretical link between a child’s experiences and problem behavior is the keystone to effective treatment strategies, and suggests that the principle behavioral and emotional effects of abuse and neglect are learned through reciprocal interaction with various socializing and reinforcing agents, and, through these interactions, rewarded behaviors are adopted, reinforced behaviors are maintained,

and punished behaviors are extinguished.

Therein lies the major problem regarding traditional attachment based family therapy methods of treatment. Whereas for children from nurturing homes, the essential social agents are the parents and continue to be the parents throughout the developing years through puberty, for children from abusive and neglectful homes, strangers, casual acquaintances and peers are the major social agents. There are three major ramifications of the aforementioned:

1. No matter how much you alter the behavior of the adoptive parents, their effect as a social agent on the children's covert behavior is minimal at best;
2. Strangers and casual acquaintances (who can't possibly be privy to all that needs to be altered in a child's behavior) will act as strong social agents who will inadvertently reinforce many undesirable behaviors (covert, charming and manipulative); and
3. Troublesome peers (the type of peers these children are drawn to) will teach children (through modeling and differential reinforcement) additional covert, undesirable behaviors.

Thus, after traditional behavior management interventions, these children will continue to exhibit moral behavior in the presence of the Sd for reinforcement of moral behavior and punishment for immoral behavior. However, since immoral behavior (lying, stealing, cheating) is intermittently reinforced in the presence of the Sd for reinforcement of immoral behavior (peers, naïve adults), these children will continue to exhibit immoral behavior in their presence.

Another troublesome symptom of "insecure attachment" is the seeming lack of typical emotions. Many children with "insecure attachment" exhibit no observable indicators of experiencing shame, guilt, anxiety or fear (i.e., they seem to lack all negative emotions other than anger). Behaviorally, these children exhibit behaviors indicative of feeling happy most of the time even when it is "inappropriate" to the occasion to exhibit happiness (i.e., they hurt someone, stole something, failed at a task because they put forth no effort, lost something of value). Naïve observers might believe the child is happy most of the time because the child shows "happy behavior". Observers of these children might also believe the children are "cold" and "callous" and "lack emotion" because of their observable behaviors.

Traditional psychologists have researched and dealt with this phenomena clinically when dealing with symptoms of Post Traumatic Stress Disorder (PTSD), i.e. numbing of general responsiveness; avoidance of stimuli that trigger the re-experience of trauma; restricted range of affect; etc. (APA, 2000). Their explanation is that these individuals have been "traumatized" by a tragic experience (such as a sudden major loss or extremely painful experience) or by repeated experiences of trauma (such as child abuse) and have "numbed" their emotions as a defense against the physical and psychological pain. They then remain chronically "numb" and unable to experience "normal" emotions or become that way when some event or person "triggers" their "memory" of the traumatizing event or circumstances. According to the second author, the behavioral explanation for these same phenomena might be that when another individual exhibits a negative emotional behavior (i.e., an angry face or voice tone) that becomes an Sd for an aversive situation (i.e. abuse) and the individual is thus negatively reinforced for numbing/blocking emotional behavior associated with that aversive situation (see Sheaffer et al. in this same issue for more information about the role that facial expressions play in affecting social and emotional behaviors).

TOWARD A RATIONAL COGNITIVE EMOTIVE BEHAVIORAL MODEL

According to Albert Bandura (1969), the father of modern cognitive social learning theory, “the process of behavior change involves substituting new controlling conditions or stimulus patterns for those that have regulated a person’s behavior.” This view of human behavior is especially true in families in which children have been abused or neglected as part of their early experiences, and is grounded in the notion that the physical and emotional topography of an abused child’s behavior is controlled, and that overcoming abuse and changing behavior is subject to the same lawful inevitability as other behavior (Wolpe, 1978). Thus, the theoretical rationale underlying a new rational cognitive focused behavioral model assumes that attachment related problems (behavioral and emotional) develop from the conditioning of motor and verbal responses to complex integrations of stimuli (Taylor, 1962; Wolpe, 1978) that evolve into learned habits that are then reinforced or maintained in multiple interpersonal environments. While this model differs substantially in concept and method from traditional cognitive behavior therapy for anxiety and depression, rational cognitive emotive behavior therapy (RCEBT) shares the belief that therapy should be brief, maltreated children who reside apart from their family of origin are not pathological, and children can change rapidly. Since much learning is reinforced through external consequences, these beliefs are central to the clinical aspects of this approach, just as teaching and learning of different behaviors are central features in healthy parent-child relationships.

Developmental History

Because the clinical aspects of this model deemphasize history and pathology, there is no assumption that attachment impairment or change in the quality of parent-child relationships are static moments in time and activated during traumatic experiences. This view is especially important when working with previously abused children, and is consistent with the belief that the origin of emotional and behavioral symptoms associated with abused children embodies a long-term developmental process occurring within an abusive family environment. The critical role of abusive caregivers and how they model and affectively respond to the child’s behavior is seen as the primary force that shapes abused children over time. This is especially true in families in which children have been abused and exposed to multiple adults who model inappropriate behaviors, often in multiple placements. Researchers studying foster children and problematic attachment have consistently found that most problem behaviors are learned as a result of an individual’s experiences with his or her environment and are maintained by contingencies of reinforcement (positive and negative). This emphasis on the environment and the value of reinforcement is critical to this new rational treatment approach, given that social interaction is necessary for behavior to be reinforced, and that many of the reinforcers associated with problem behavior are mediated by others in a person’s environment (Derby, Wacker, Sasso, Steege, Northup, Cigrand, & Asmus, 1992; Iwata, Pace, Dorsey, Zarcone, Vollmer, Smith, Rodger, Lerman, Shore, Mazaleski, Goh, Cowdery, Kalsher, McCosh, Willis, 1994). Recent research investigating children growing up in long-term foster family care and exposed to inappropriate models indicates that many of these children have developmental or learning (reinforcement) histories characterized by familiar adults who ignored appropriate behavior and attended to inappropriate behavior, while at the same time, inflicted pain (punishment), neglect, or, in a reverse sense, “gave in” to stop inappropriate behavior (positive reinforcement) (Golden, 2007). The problem for children who grow up having experienced multiple placements and exposed to multiple inappropriate models is that many of them fail to learn accountability (Golden, 2007), and have no concern for parent approval or disapproval.

Theoretical Formulations

While the origin of these learned dysfunctional patterns is appreciated, rational cognitive emotive behavior therapy (RCEBT) is based in part on the theoretical underpinnings of behaviorism and solution focused therapy (de Shazer & Berg, 1993), and provides an opportunity to examine how the child's perception and previous learning experiences influence (regulate) current behavior. The underlying mechanism of RCEBT involves the development of cognitive emotive behavioral strategies to recognize and evaluate the language and behavior of previously abused children. Because RCEBT maintains that language is merely behavior that reflects thinking, it follows that learning and thinking connect the causal sequences of a child's experiences and perceptions and guide behavior. Thus, the clinical aspects of this approach (RCEBT) are extended to a consideration of the role that trauma plays in current thinking, and maintains that an abused child's behavior and emotional difficulties are most often productively addressed by considering the reciprocal role of thought and emotion in behavioral causation. Negative interactional patterns in families in which children have been abused or neglected are maintained because the individuals involved are responding to the abused child's language and associated behavioral symptoms and emotional deficiencies. From an attachment perspective, an insecure emotional connection with an adoptive parent disrupts "parent-child relationships", and avoiding or escaping those negative emotions (aversive events) appears to maintain unattachment behavior. Such an approach emphasizes that an insecure emotional connection does not explain abused children's "unattachment behavior," but rather disrupts healthy attachment behavior with adoptive parents. From a Skinnerian perspective, emotions are described as "explanatory fictions" that psychologists have claimed to be causes for behavior. Skinner is referring to what the authors call "emotional deficiencies" or behavior that reflects language and thinking, and develops from the conditioning of motor and verbal responses that evolve into learned habits. Skinner, in an implicit sense, is referring to the same set of behaviors that the authors call "emotional deficiencies," and are used to describe people's motor and verbal behaviors when they report feeling in particular ways. Consistent with Skinner and RCEBT, "emotional behaviors" do not explain people's behavior they merely describe people's behavior, though the authors have expanded on this idea and suggest that internal feelings or emotional connections that people report when they say they are feeling "negative emotions" (i.e., angry, sad, scared) could be described as aversive stimulus events.

Drawing on Skinner's seminal work regarding therapy, the first author agrees with the importance of "introducing variables which compensate for or correct a history which has produced objectionable behavior (Skinner, 1953, pg. 379)," and suggests that encouraging abused children to shift attention or thinking away from negative thoughts and associated aversive emotional feelings is central to a child's social attachment behavior. Such an approach argues that thinking and behaving differently does not increase attachment behavior or change the negative effects of trauma, but rather competes with unattachment behavior and the role of the cognitive emotive therapist is to amplify and reinforce these differences in emotional connectedness to abused children and their adoptive parents. Beyond the importance of teaching previously abused children how to recognize and compete with objectionable emotional behavior, the primary goal of this approach is to amplify positive behavioral differences in the family, whether describing real or imagined relationship patterns, and identify or highlight behavioral exceptions to unattachment behavior associated with different controlling conditions (antecedents) in and outside of the family.

Implicit in this new cognitive emotive behavioral approach to treatment is the view that language is relative and there is no absolute truth, and the role of the therapist is to de-emphasize the causes of unattachment behavior and normalize the child's thinking and behavior for both the

child and the adoptive or foster parents. Because RCEBT focuses strongly on how attachment problems are solved and the cognitive emotive connections in attachment behavior, therapy with previously abused children involves teaching and rewarding them in a controlled safe environment how to compete with negative thoughts (controlling conditions or discriminative stimuli) associated with early childhood experiences. The underlying clinical mechanism involves helping children learn the importance of thinking and behaving differently, and that avoiding aversive childhood experiences appears to be negatively reinforcing for abused children.

This process of focusing on language and the associated emotional interplay with behavior is critical, especially with younger children, and depends on the skill of the therapist and the interchange between the child and adoptive parents. The goals for treatment, beyond encouraging and rewarding positive behavior change (with themselves and in relationships), involves shifting attention away from problem talk, and focusing on those times when the parent-child relationship works (positive behavioral differences) and how abused children and their adoptive parents have successfully solved problematic attachment behavior in the past.

Because what and how abused children think affects the way they behave, implicit in therapeutic process, is the importance of establishing a logical framework or structure, which begins with normalizing the language of abused children and their parents to encouraging the child to think or behave differently and compete with negative thoughts. This theoretical structure is consistent with the belief that helping children shift thinking from talk about relationship problems to behaving differently leads the individuals involved to positive behavior change and greater control over themselves and their relationships. While often difficult to maintain due to learning history and associated environmental cues (controlling conditions), such a focus on changes in feelings and improved relationships sets the stage for a therapist to focus on the identification of antecedent conditions (learning and thinking) linked or associated with negative emotional reactions in abused children. Because research indicates that contingencies of reinforcement maintain most problem behaviors, helping abused children and their parents appreciate this cognitive emotive connection in unattachment behavior provides the foundation for the use of establishing and motivational operations. Unlike cognitive behavior therapy for anxiety or depression, the use of establishing and motivational operations is designed to increase the effectiveness of healthy affective parental accessibility as a form of reinforcement, as well as compete with specific antecedents (controlling conditions) that regulate problem behaviors and leads to dysfunctional relationship patterns outside of the family.

PROPOSED TREATMENT: RATIONAL COGNITIVE EMOTIVE BEHAVIORAL THERAPY

The process of RCEBT consists of ten distinct but interdependent steps. These steps fall into one of three theoretical orientations (i.e., rational or solution focused, cognitive emotive, and behavioral) and are intended to provide abused children and their adoptive parents with positive behavior change, corrective interpersonal skills, and greater control over themselves and their relationships. They are: 1) determining and normalizing thinking and behaving, 2) evaluating language, 3) shifting attention away from problem talk 4) describing times when the attachment problem isn't happening, 5) focusing on how family members "successfully" solve problematic attachment behavior; 6) acknowledging "unpleasant emotions" (i.e., angry, sad, scared) underlying negative interactional patterns, 7) identifying antecedents (controlling conditions) and associated negative cognitive emotive connections in behavior (reciprocal role of thought and emotion in behavioral causation), 8) encouraging previously abused children to experience or "own" negative thoughts and associated aversive emotional feelings, 9) modeling and rewarding positive behavior change (with themselves and in relationships), and 10) encouraging and

rewarding thinking and behaving differently. Unlike traditional attachment based family therapies, which often interpret verbal information in terms of underlying emotional dynamics, the rational cognitive emotive view of human behavior focuses solely on the causal sequences of a child's experiences and perceptions, and the impact that the child's negative thoughts regarding trauma have on the role of emotion in behavioral causation.

While many attachment based family therapy models focus on how individual emotional problems are maintained in the family, RCEBT focuses on how individuals solve unattachment behavior, and argues for interventions or tasks that compete with negative interactional patterns in and outside the family. This is a significant difference from traditional attachment therapies, and is based on the assumption that altering cognitive emotive sequences through specific tasks that either compete or compensate for a history that has produced unattachment behavior can lead to dramatic changes in the quality of parent-child relationships in the family. Although this model is consistent with the principle of brevity, the heart of this new therapeutic model falls somewhere between the therapist's focus on language - the way abused children and their parents talk about problems, and the behavioral contingencies that shape and maintain a child's negative perception of early childhood experiences.

Since learning is reinforced through external consequences, this focus on the importance of changing the quality of parent-child relationships is based on the belief that thinking and behaving differently does not increase attachment behavior or change the negative effects of trauma, but rather competes with the many external reinforcers for problem behavior mediated by other social agents and leads to corrective interpersonal skills and greater control over themselves. Through this process, children are taught the importance or power of behavior change, and that they can choose to think or behave differently. Since behavior reflects thinking, rational cognitive emotive behavior therapy is based on the assumption that abused children and their adoptive parents will feel good about themselves when they are provided with the cognitive and behavioral tools necessary for experiencing greater control over themselves and the quality of their relationships. Because families can usually describe times when the attachment problem isn't happening, it follows that the success of this method depends on teaching abused children and their adoptive parents to focus on differences in thinking and the corresponding different pattern of behavior that already works well in the family. This concept may be difficult, especially for young children, and involves helping the family learn to respond not to the child's language and associated behavioral symptoms and emotional deficiencies, but rather to connect the link between each individual's own thoughts and behavior, and the role that positive emotion has in realizing and maintaining different positive patterns of interaction over time. Thus, changing current behavior and emotional problems begins with helping the entire family embrace the idea that relationship patterns change, and that moving beyond hurt feelings and angry words requires thinking and behaving different, similar to the interaction pattern or behavior described in the following brief therapist statements:

Therapist to adopted child:

You mentioned that sometimes you hate your parents. I'm curious...help me understand. Can you tell me about other times, times when you and your parents are together, and you feel different toward them, when you get along and like them?

Therapist to adopted child (while looking at parents):

When you were younger and you and Mom would spend time together, can you talk more about this...maybe help me understand how the relationship has

changed? Do you think maybe spending time with her, or your Dad, was different than not having someone care for you?

Therapist to adopted parents:

While listening to both of you talk about your relationship with (*adopted child*), I was struck by how each of you began by pointing out how much she means to each of you, and how much you each love her. Can you talk more about this...maybe help me understand other situations when the relationship is positive and good?

Therapist (end of the session and addressing the entire family):

Over the next week, I would like each of you to take a moment to think about the kind of relationship you want to have with each other. How would the relationship look and feel? What would you be doing...how would you act...what words would you be saying...what words would you like to hear? When we meet again, I would like each of you to talk about your role in having the kind of relationship that you want with each other.

Establishing and Motivational Operations

Because this model values emotion not as the primary change mechanism but rather as central in behavioral causation, the interchange between therapist and family also focuses on the use of establishing (EO) and motivational operations (MO) to alter the abused child's emotional or affective dysregulation. Michael (2004) defined EOs as environmental events, operations or stimulus conditions that affect behavior by altering the reinforcing or punishing effectiveness of other events, as well as altering the momentary frequency of any behavior that had been consequted by those other events (Laraway, Snyckerski, Michael, & Poling, 2003; Michael, 2004). For example, children deprived of positive affective experiences (love and security) might be expected to establish positive affective experiences as a reinforcer, thereby increasing the momentary likelihood of responses that have previously produced positive affective experiences. In the case of foster and adopted children, affective responsiveness is the primary mode of nonverbal affective interaction between parent and child, and an establishing operation that momentarily increases the effectiveness of positive affective parental accessibility as a form of reinforcement during attachment-focused interactions. As such, emotional responsiveness not only establishes positive affective experiences as an effective form of reinforcement, if the child encounters loving or nurturing (secure) caregivers; it also serves to help children to feel safe and to regulate or alter the occurrence of any affective behavior that has been followed or consequted by emotional responsiveness and other positive affective experiences. The child's affective response to the experience is being reinforced by the parent's affective response, and the child's attention is being held by the parent's affective accessibility. As parents respond positively to their child's emotional responsiveness, nonverbally and verbally, they reinforce the affect with mutual attachment behavior, which creates within the child the aspect of a secure attachment that competes with a history that previously produced unattachment behavior. This complex behavioral approach to treatment is critical, especially when working with children exposed to multiple abusive caregivers across multiple placements, and provides the social context for a child to learn (appropriate discriminations) and compete with the critical links in the interlocking behavioral contingencies that shape and maintain emotional deficiencies and other attachment related problems that impact abused children. The goal of this approach is to model and teach parents and children new learning patterns (stimulus-response) that reinforce or establish healthy emotional regulation and responsiveness, and compete with the reinforcers for

problem behavior mediated by other social agents.

Since behavior affects how we think and feel, the use of establishing and motivational operations is designed to increase the effectiveness of healthy affective parental accessibility as a form of reinforcement, which can produce positive alternative feelings (establishing operations) designed to reinforce previously abused children's tendency to express positive emotions (i.e., kindness, attached) that competes with emotional inaccessibility (i.e., hurtfulness, detached). Such an approach argues that teaching abused children how to disrupt or unlearn dysfunctional stimulus-response habits in the presence of emotional responsiveness does not increase attachment behavior, but rather competes with many of the reinforcers for problem behavior mediated by other social agents outside of the family. This approach to treatment, which translates into parents setting up expectations, emphasizes teaching parents how to prompt, as well as model honest emotional accessibility, while systematically reinforcing positive interaction patterns designed to increase positive relationship patterns in and outside of the family. This use of an established operation procedure to produce change in a child's emotional behavior demonstrates the operant aspects of emotion as a predisposition designed to control and or regulate dysfunctional parent-child relationship patterns in the family. This kind of approach is particularly important in families in which children have been abused and neglected, since the social learning process links the development of dysfunctional behavior from involvement with others (strangers, troublesome peers), and the mediating influence of rewards, reinforcements and punishments (Iwata & Worsdell, 2005). While a range of individuals may engage in unattachment behavior, research indicates the formation or continuation of attachment behavior will be affected in part by the individuals' involved own cognitive processes or thinking and prior or anticipated parental reinforcement (Akers, 1998; Warr, 2002). Although the literature supports the use of EOs and MOs as environmental events to affect behavior, an empirical question remains regarding the effectiveness of this training procedure to produce appropriate or discriminated preferential treatment toward a specific set of adults. While this view is beyond the scope of this paper, the specific causal logic is consistent with the indications of behavior analysis, since research in social learning theory predicts that learning occurs through reciprocal, affective, social and environmental interaction, and that unattachment behavior of abused or neglected children is learned through observing and modeling the parents' behavior. *For an earlier discussion and overview of the behavioral constructs underlying this treatment approach and applied to abused children placed in foster and adoptive families, see Prather, 2007.*

PROPOSED TREATMENT:

TRAUMA-FOCUSED COGNITIVE EMOTIVE BEHAVIOR THERAPY

The second author takes issue with two of the previous points regarding the treatment of children who have been abused/neglected, are exhibiting problematic moral and emotional behaviors, and appear "cold", "callous" or "neutral" in situations where others are more likely to appear "sad", "anxious", "fearful", "ashamed" or "guilty". Indeed, "avoiding aversive childhood experiences appears to be negatively reinforcing for (these) children" and they are already experts at knowing "how to compete with negative thoughts" to the point that if they begin to feel shame for having stolen something, hit another child or cheated on a test, they can effectively avoid the thoughts and feelings of shame and be completely happy when exhibiting the immoral behavior. They can feel happy, think happy thoughts and exhibit happy behaviors in the presence of the most adverse circumstances to the point where it is baffling and frightening to the adults who live with them. To then use therapy to focus only on happy events, happy thoughts and times when their behavior was appropriate would not seem to be effective for these children and their families. "Encouraging the child to think or behave differently and compete with negative thoughts" is, in my clinical experience with these children, an insufficient approach to therapy. The problem with

attempting to “shift thinking from talk about relationship problems to behaving differently” is that these individuals welcome opportunities to avoid discussion of their problematic behavior and are great at talking about all the ways they are going to change and act differently. Unfortunately, positive talk does not “lead the individuals involved to positive behavior change and greater control over themselves and their relationships”. Ironically, they often have great control over their own emotional behaviors as well as the individuals that they are in relationships with (through coercive, charming and manipulative behavior).

Cognitive behavioral therapy has been recognized as an efficacious treatment of posttraumatic stress disorder (PTSD) with rape victims (Foa & Kozak, 1986; Foa, Rothman, Riggs, & Murdock, 1991; Resick, Jordan, Girelli, Hutter, & Marhoefer-Dvorak, 1988; Resick & Schnicke, 1993), veterans (Brom, Kleber, & Defares, 1989; Kene, Fairbank, Caddell, Zimering, & Bender, 1995) and more recently with survivors of major disasters (North, Nixon, Shariat, Mallonee, McMillen, Spitznagel, & Smith, 1999). Major components of this therapy involve gaining access to emotions that were experienced during the traumatic event and then “processing” those emotions. “Exposure” is typically employed in order to aid in processing and can include “in vivo” (i.e., actual location of event, time of day, sensory stimuli associated with the event) and/or “imaginal” (telling or listening to the story, picturing the event in the mind). Processing consists of talking about the event, experiencing the emotions that were associated with the event, and then gaining “mastery” over the event and the associated feelings. Mastery would mean that emotions could be felt and tolerated and that this experience would be “survived” by the individual so that the individual was no longer “afraid of” or unwilling to tolerate these emotions. This would be therapeutic in that the individual would no longer escape the thoughts and feelings associated with the traumatic event because they would no longer be too aversive to tolerate.

For individual who are otherwise emotionally and psychologically healthy and who experienced normal interfamilial and interpersonal relationships prior to experiencing rape, combat, prisoner of war status, or a major disaster, the major goal of trauma-based therapy is to return them to their original state of being prior to their trauma. The purpose of dealing with the thoughts and feelings associated with the trauma is to deal with nightmares, flashbacks and other intrusive experiences that might be spontaneously brought on by any number of discriminative stimuli in the environment or in the individual’s brain. This would aid the individual in becoming less fearful of specific stimuli that would arouse debilitating fear, anger, sadness or other negative emotion. In other words, the individual would have some control or mastery over those emotions.

Children with attachment difficulties may share some similarities with individuals with PTSD (hypervigilance, for example), but they typically do not have nightmares and flashbacks and do not have fear of particular stimuli in the environment. The individual would no longer be negatively reinforced for escaping aversive thoughts and feelings. With the aid of the therapist and family members, the individual could instead be reinforced for “holding on to” and tolerating those unpleasant negative thoughts and feelings. Once the individual was more willing and able to tolerate negative thoughts and feelings associated with the traumatic event, the individual would then also be more willing and able to tolerate other appropriate negative thoughts and feelings. Because their trauma was chronic and pervasive, and occurred during early childhood development, the major goal of therapy is quite different. The goal would be to have children experience negative thoughts and feelings that are appropriate to the situation. If they have hurt someone, they would feel sad and remorseful and that would be a motivating operation for them to repair that relationship with that person. In her clinical practice, the second author has actually worked with children with attachment issues who claim that they take negative thoughts and feelings and “lock them up in the back of their head”. Then, after trauma-focused therapy, they

are often dismayed because they are no longer able to do so.

In trauma-focused therapy, some of the difficult but necessary components include: helping children revisit the circumstances, feelings, thoughts and behaviors of early childhood; talking to the children about how the circumstances outside of their control led to the feelings, thoughts and behaviors; empathizing with the children about their painful experiences and assisting them in tolerating uncomfortable feelings; and encouraging them to hold on to situation-appropriate negative feelings so that they can help them in modulating their behaviors.

Behaviorists often voice objections to psychotherapy as follows:

1. "Exposure" to the traumatic event will retraumatize these children who have already experienced enough trauma in their lives. There is evidence that supports the use of exposure for the identification of discriminative stimuli (facial expressions, voice intonation, smells) that trigger thoughts and feelings associated with traumatic events in order for individuals to "process" their feelings and "master" their trauma.
2. Talking about traumatic and other aversive experiences will encourage these children to use their trauma and the ensuing negative outcomes (crying, for example) as a means of escaping punishment or task demands. Talking about traumatic and other aversive experiences teaches children the appropriate occasion for crying and other emotional behaviors.
3. The assumption is made that if children experience catharsis (the free expression of negative feelings) that they will somehow feel and act better.

Thoughts and feelings associated with traumatic events are elicited (through verbal behavior) in order to teach these children better coping skills. Research indicates that adult victims of trauma experience reduced symptoms when they have been emotionally engaged in talking about their trauma.

The positive behavioral goals of trauma-focused cognitive behavior therapy are:

1. Children are able to feel and tolerate negative emotions (because they are positively reinforced for feeling emotions instead of negatively reinforced for escaping or avoiding them through denial/detachment.)
2. Children learn to express emotions appropriately (through modeling, prompting, shaping, and reinforcement.)
3. Children learn skills for coping with emotions (through modeling, prompting, shaping, and reinforcement.)
4. Children learn to modulate their behaviors because their feelings serve as establishing operations (the reinforcement or punishment for certain behaviors becomes more salient due to their feelings.)

SUMMARY

The key to the success of these new cognitive emotive behavioral approaches lies in the understanding that perception and learning history guides behavior, and changes in behavior

associated with trauma are subject to the same lawful inevitabilities as other behavior. While attachment problems may predispose a child toward future behavior problems, early experience does not cause pathology in a linear way (Sroufe, Carlson, Levy, & Egeland, 1999), and these problems must be evaluated and treated using the principles of behavior analysis and rational cognitive perspectives. Since research indicates that previously abused and neglected children are often viewed by their caregivers as aggressive, emotionally dishonest, and present a major challenge for diagnosis and treatment (O'Connor & Zeanah, 2003), this paper has endeavored to present a new cognitive emotive behavioral approach for helping these children and their adoptive parents feel good about themselves and the quality of their relationships.

While there is a lack of research into the treatment of multi-problem, maltreated children who reside apart from their family of origin, the brief analysis elaborated here provides guidance for achieving positive changes in families, and suggests critical directions for further study. Research is obviously needed to test the two alternative hypotheses presented in this paper. The first author proposes that changes in behavior are associated with different controlling conditions, and that teaching abused children to behave differently and shift attention or thinking away from negative thoughts is central to a child's learning of "emotional responsiveness". Such a hypothesis may also prove useful in predicting the causal sequences between learning and thinking and the negative effects of trauma, given the assumption that thinking and behaving differently does not increase attachment behavior or change the negative effects of trauma, but rather competes with unattachment behavior. The second author also believes that changes in behavior are associated with different controlling conditions and that focusing on negative thoughts and feelings are essential in order to "correct a history which has produced objectionable behavior (Skinner, 1953, pg. 379)." To the extent that either of these predictions is demonstrated empirically, a new rational cognitive emotive attachment perspective should prove useful in the development of a comprehensive and theory-based program of intervention for children with attachment issues and their parents.

REFERENCES

- Akers, R. (1998). *Social learning and social structure: A general theory of crime and deviance*. Boston: Northeastern University Press.
- Ainsworth, M. D. S. (1989). Attachment beyond infancy. *American Psychologist*, 44, 709- 716.
- American Psychiatric Association (2000). *Diagnostic and statistical manual of mental disorders* (4th ed., text rev.). Washington, D.C.: Author.
- Bandura, A. (1969). *Principles of behavior modification*. New York: Holt, Rinehart & Winston, 1969.
- Bandura, A. (1977a). *Social Learning Theory*, Englewood Cliff, NJ: Prentice-Hall.
- Bandura, A. (1982b). Self-efficacy mechanism in human agency. *American Psychologist*, 33, 344-358.
- Bandura, A. (2004). Model of causality in social learning theory. In Author Freeman, Michael J. Mahoney, Paul DeVito, and Donna Martin (Eds). *Cognition and psychotherapy*. New York, NY, US: Springer Publishing Co.
- Berry, M. B., & Barth, R. P. (1989). Behavior problems of children adopted when older. *Children & Youth Services Review*, 11, 221-238.

- Bowlby, J. (1969). *Attachment and loss: Vol. 1. Attachment*. New York: Basic Books.
- Bowlby, J. (1973). *Separation (Vol. 2)*. London: Hogarth Press.
- Bowlby, J. (1980). *Attachment and loss: Vol. 3. Loss, sadness and depression*. New York: Basic Books.
- Brom, D., Kleber, R. J., & Defares, P. B. (1989). Brief psychotherapy for posttraumatic stress disorders. *Journal of Consulting and Clinical Psychology, 57*(5), 607-612.
- Cloitre, M., Koenen, K. C., Cohen, L. R., & Han, H. (2002). Skills training in affective and interpersonal regulation followed by exposure: a phase-based treatment for PTSD related to childhood abuse. *Journal of Consulting and Clinical Psychology, 70*, 1067 – 1074.
- de Shazer, S. & Berg, K. “Constructing Solutions in Family Therapy” in *The Family Therapy Networker*, September – October, 1988.
- de Shazer, S. & Berg, I. K. (1993). Constructing Solutions. *Family Therapy Networker, 12*, 32-43
- Dyer, F. (2004). Termination of parental rights in light of attachment theory. *Psychology, Public Policy, and Law, 10*, (1/2), 5-30.
- Fairbank, J. A., & Keane, T. M. (1982). Flooding for combat-related stress disorders: Assessment of anxiety reduction across traumatic memories. *Behavior Therapy, 13*(4), 499-510.
- Foa, E. B., & Kozak, M. J. (1986). Emotional processing of fear: Exposure to corrective information. *Psychological Bulletin, 99*(1), 20-35.
- Foa, E. B., Rothbaum, B. O., Riggs, D. S., & Murdock, T. B. (1991). Treatment of posttraumatic stress disorder in rape victims: A comparison between cognitive-behavioral procedures and counseling. *Journal of Consulting and Clinical Psychology, 59*(5), 715-723.
- Golden, J. A. (2007). Children with behavioral and emotional problems: Is their behavior explained only by complex learning, or do internal motives have role? *International Journal of Behavioral Consultation and Therapy, 3*, (4), 449-476.
- Howe, D. (1998). *Patterns of adoption: Nature, nurture and psychosocial development*. Oxford: Blackwell Science.
- Howe, D., Brandon, M., Hinings, D., & Schofield, G. (1999). *Attachment theory, child maltreatment and family support: A practice and assessment model*. London: Macmillan.
- Hughes, D. (2004). An attachment-based treatment of maltreated children and young people. *Attachment and Human Development, 6*, (3), 263-278.
- Iwata, B. A., Pace, G. M., Dorsey, M. F., Zarcone, J. R., Vollmer, T. R., Smith, R. G., Rodger, T. A., Lerman, D. C., Shore, B. A., Mazaleski, J. L., Goh, H. L., Cowdery, G. E., Kalsher, M. J., McCosh, K. C., & Willis, K. D. (1994). The functions of self-injurious behavior: An experimental-epidemiological analysis. *Journal of Applied Behavior Analysis, 27*, 215-240.
- Iwata, B. A., & Worsdell, A. S. (2005). Implications of Functional Analysis Methodology for the Design of Intervention Programs. *Exceptionality, 13*(1), 25-34.

- Keane, T. M., & Kaloupek, D. G. (1982). Imaginal flooding in the treatment of a posttraumatic stress disorder. *Journal of Consulting and Clinical Psychology, 50*(1), 138-140.
- Laraway, S., Snyckerski, S., Michael, J., & Poling, A. (2003). Motivating Operations and terms to describe them: Some further refinements. *Journal of Applied Behavior Analysis, 36*, 407-414.
- Lyons-Ruth, K., & Jacobvitz, D. (1999). Attachment disorganization: Unresolved loss, relational violence, and lapses in behavioral and attentional strategies. In J. Cassidy & P. R. Shaver (Eds.), *Handbook of attachment: Theory, research and clinical applications*. London: Guilford.
- North, C. S. M. P. E., Nixon, S. J., Shariat, S., Mallonee, S., McMillen, J. C., Spitznagel, E. L., & Smith, E. M. (1999). Psychiatric disorders among survivors of the Oklahoma City bombing. *JAMA, 282*(8), 755-762.
- O'Connor, T.J. & Zeanah, C.H. (2003). Attachment disorders: assessment strategies and treatment approaches. *Attachment and Human Development, 5*, 223-244.
- Prather, W. (2007). Trauma and Psychotherapy: Implications from a Behavior Analysis Perspective. *International Journal of Behavioral Consultation and Therapy, 3*, (4), 555-570.
- Resick, P. A., Jordan, C. G., Girelli, S. A., Hutter, C. K., & Marhoefer-Dvorak, S. (1988). A comparative outcome study of behavioral group therapy for sexual assault victims. *Behavior Therapy, 19*(3), 385-401.
- Saywitz, K. J., Mannarino, A. P., Berliner, L., & Cohen, J. A. (2000). Treatment for sexually abused children and adolescents. *American Psychologist, 55*, 1040 – 1049.
- Schofield & Beek, (2005). Providing a secure base: Parenting children in long-Term foster family care. *Attachment & Human Development, 7*(1), 3– 25.
- Schneider, Tardif, & Atkinson, (2001). Child-parent attachment and children's peer relations: A quantitative review. *Developmental Psychology, 37*, (1), 86-100.
- Skinner, B. F. (1953). *Science and human behavior*. New York, NY: The Free Press.
- Taylor, J. G. *The behavioral bases of perception*. New Haven, Conn.: Yale University Press, 1962
- Termini, A., & Golden, J. (2007). Moral behaviors: What can behaviorist learn from the developmental literature? *International Journal of Behavioral Consultation and Therapy*. Volume 3, No. 4, 477-493.
- Warr, P. (2002). *Psychology at work*. Peter Warr (Ed); (5th ed.).pp. 153-177. New York, NY, US: Penguin Press, xvi, 452 pp.
- Weir, K. K. (2006). Repairing adoptive and foster attachments. *Family Therapy Magazine*, September/October 2006, Volume 5, Number 5.
- Wople, J. (1978). Cognition and causation in human behavior its therapy. *American Psychologist, 33*, 437-446.

Zilberstein, K. (2006). Clarifying core characteristics of attachment Disorders: A review of current research and theory. *American Journal of Orthopsychiatry*, Vol., 76, No. 1, 55-64.

Authors Contact Information:

Walter Prather, Ph.D., BCBA-D
Adjunct Professor of Behavioral Sciences
Barry University, ACE in Tallahassee FL
(850) 567-3840
wprather@mail.barry.edu

Jeannie Golden, PhD, BCBA
Department of Psychology
East Carolina University
Greenville, NC 27858
(252) 328-6206
goldenj@ecu.edu

Notice to Readers

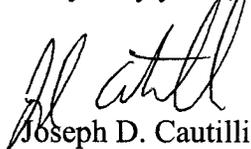
Due to technical difficulties, it has become necessary for us to create a mirror site to access all editions of BAO journals published since loss of our webmaster. We are working to correct all the problems with the old site and we appreciate your patience. We are currently constructing a new, fully functional BAO journal website with the features of the old BAO site. Until further notice, you may access the current and future BAO journals at www.BAOJournal.com.

Please bookmark this location or put it in your “Favorites” for future access.

A link on the new BAO Journal site will take you to the old BAO site where all past issues are currently accessible.

Thank you for your loyal support for BAO and its journals.

Very truly yours,



Joseph D. Cautilli

Joe Cautilli and BAO Journals