

Obscure Dichotomy of Early Childhood Trauma in PTSD Versus Attachment Disorders

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### Abstract

There are two competing schools of thoughts involving children who have experienced early childhood trauma. One posture's nosology focuses on the posttraumatic stress responses; the other focuses on the deviant behaviors that ensue from pathogenic care in early childhood. This author sought to review the literature from a holistic perspective, embracing both diagnostic positions. Seventy-three articles addressing childhood trauma and the ensuing emotional or behavioral disturbances were evaluated, mostly empirical --- including 16 that specified PTSD, 21 that specified attachment disorders, and 37 that included potential overlaps between both trauma derivatives. An additional 138 studies were reviewed but not included herein because those focused on broader issues. Statistical data, financial and emotional impacts, and the effects of disrupted attachments were addressed---including both children with secure attachments and those with compromised attachments. The critical effect of both positive and negative parental responses were evaluated, as well as correlations or overlaps in the diagnostic criteria and symptom manifestations of the children, and any apparent gaps in the current research. The literature details that the prognosis and course of treatment vary significantly between the two etiologies --- apparently at least in part due to possible clinician bias in conceptualizations of the two populations. There are clear overlaps in the diagnostic criteria that strongly suggest comorbidity between the disorders, however, which is especially critical to analyze in the future, since there are solid, empirical, evidence-based treatment protocols for PTSD, but not for attachment disorders resulting from pathogenic caregiver maltreatment.

*Keywords:* attachment, PTSD, correlations, RAD, early childhood trauma

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**Histories of the Relevant Diagnostic Disorders**

Three diagnoses in the *Diagnostic and Statistical Manual of Mental Health Disorders – 5th Edition* (DSM-5; American Psychiatric Association [APA], 2013) are relevant for purposes of this literature review: Reactive Attachment Disorder (RAD), Disinhibited Social Engagement Disorder (DSED), and Posttraumatic Stress Disorder (PTSD). Reactive Attachment Disorder and DSED comprise the two forms of attachment disorders experienced by children with traumatic early childhood experiences and pathogenic primary care. Posttraumatic Stress Disorder addresses trauma experienced by children without pathogenic primary care. The literature broaches strong correlations, if not outright comorbidity, between RAD/DSED and PTSD---which is especially critical to evaluate, since there are empirical, evidence-based treatment protocols for PTSD, but not for RAD/DSED.

**RAD/DSED**

Attachment disorders were first included under the title of RAD in the *DSM-III* in 1980 (Zeanah, Chesher, & Boris, 2016). Both the inhibited version (RAD) and the disinhibited version (DSED) were combined as one disorder at that time. In 2013, they were split into two separate disorders in the *DSM-5* (APA, 2013). However, the diagnostic criteria for both disorders continue to be vague and incomplete (Kay & Green, 2012; Keil & Price, 2006).

The concept of attachment disorders is essential to understanding the social malfunctioning in institutionalized children; it embodies a chief psychological causative model that links early maltreatment to later psychopathology (Lehmann, Breivik, Heiervang, Havik, & Havik, 2016). In the last several years, attachment disorders have begun to be scrutinized as possible causative factors of severe behavioral disturbances in children and adolescents (Kempf

& Voeller, 2008).

RAD/DSED's history is turbulent, with conflicting research about its causes, effects, treatment, and prognosis. The clinical presentation of RAD/DSED includes a number of hallmark maladaptive behaviors that are not denoted in the diagnostic manuals (Owen, 2016). More importantly, the diagnostic criteria do not reflect the true pathology of the underlying "reactive" behaviors that are manifested in clinical presentation (Fisher, Burraston, & Pears, 2005; Hall & Geher, 2003; Lake, 2005; Owen, 2016). A number of deviant and maladaptive behaviors that are common amongst children and adolescents with RAD/DSED are not even mentioned in the diagnostic criteria (Fisher et al., 2005; Owen, 2016).

Stinehart, Scott, and Barfield (2012) affirmed this by protesting that the host of symptoms that RAD/DSED children present with often exceeds the behaviors enumerated in the *DSM-5* in clinical practice. These include lack of conscience or empathy, destruction of property, pathological lying, extreme aggression, stealing, sexually provocative and predatory behaviors, food hoarding, feigned ignorance and story-telling (usually to manipulate others into feeling sorry for the child), preoccupation with fire, cruelty to animals, incessant chattering, and presenting as artificially charming or "superficially engaging" (CANGRANDS, 2012, para. 4; Erickson, 2012; Grcevich, 2013; Hall & Geher, 2003; Haugaard & Hazan, 2004; Lake, 2005; Mikic & Terradas, 2014; Stinehart et al., 2012; Vasquez & Stensland, 2016; Woolgar & Scott, 2014). Indeed, Fisher et al. (2005) asserted that children with RAD in foster care often have levels of psychosocial maladjustment that reflect clinical populations, despite there being no criterion regarding same in the *DSM-5*. As such, the diagnostic definitions are almost unidentifiable or incompatible with real-life conduct manifestations of these attachment disorders. Though some claim RAD/DSED are "exceedingly rare" (Zeanah & Gleason, 2010),

the prevalence rate has been proposed as 1% of the general population (the same rate as autism today worldwide), with as many as 45% of children living in foster care being affected by RAD and/or DSED (Mikic & Terradas, 2014; Schechter & Willheim, 2009).

## **PTSD**

A careful examination of the *DSM-5* reveals that children with a RAD and/or DSED diagnosis also satisfy the diagnostic criteria for PTSD. In fact, in addition to the obvious history of insufficient care required for diagnoses of RAD or DSED, the primary *DSM-5* diagnostic elements of PTSD that RAD/DSED children meet are outlined below:

- Criterion A = Experienced, witnessed, or was confronted with actual or threatened death/serious injury, or sexual violence.
- Criterion B = Recurring, upsetting, intrusive memories or dreams; intense psychological or physiological distress with exposure to triggers. In children, reenactment of the correlating interpersonal conflict (with a new caregiver).
- Criterion C = Avoidance of distressing memories, thoughts, feelings about, or external reminders of, the traumatic event.
- Criterion D = Persistent negative beliefs about oneself, others, or the world; persistent, distorted cognitions about the cause or consequences of the traumatic event that lead the child to blame himself or others; persistent negative emotional state; feelings of detachment or estrangement; persistent inability to experience positive emotions.
- Criterion E = Irritability, rage, verbal or physical aggression, destruction of property, reckless or self-destructive behavior, hypervigilance, exaggerated startle response, problems with concentration, sleep disturbances.

Indeed, the behaviors noted in Criterion E are the same conduct-disorder type behaviors

addressed above that manifest in clinical presentation of RAD/DSED clients (but are inexplicably not mentioned in the *DSM-5* criteria for those disorders). Accordingly, the only relevant difference between RAD/DSED and PTSD is that children with RAD/DSED also experienced pathogenic primary care. The therapeutic approaches and perspective of the child's behaviors, however, are completely opposite.

### **Developmental Trauma Disorder**

A fourth disorder has been proposed: Developmental Trauma Disorder (DTD; Ford et al., 2013; van der Kolk, 2005). It was not accepted in the *DSM-5* publication, but is still being studied and evaluated. Perhaps it will receive renewed consideration with the APA's recent invitation for proposed changes to the *DSM-5*. Developmental Trauma Disorder is designed to provide a framework to more appropriately identify and treat youth who have been exposed to complex interpersonal trauma and associated patterns of dysregulation across development stages. McDonald, Borntrager, and Rostad (2014) bolster the support for DTD by arguing that the current criteria for PTSD in the *DSM-5* ignores interpersonal trauma of a child by his or her caregiver, which can cause more-complicated trauma-related symptoms, including dissociation and affect dysregulation. Kisiel et al.'s (2014) study on developmental trauma is especially relevant since its sample size was the 16,000+ children then in Illinois foster care. Their findings support van der Kolk's concept of a developmental trauma framework. Since DTD is not currently recognized as an official disorder in the *DSM-5* or *ICD-10*, however, its scope is limited for purposes of this literature review. This is especially true since the population of children living in, adopted from, or surrendered to foster care here in the United States is an especially vulnerable population, and those children are almost universally insured through Medicaid, which requires a *DSM-5* diagnostic code that DTD lacks. If and when DTD is ever

recognized by the APA, then it certainly warrants deeper investigation and discussion on these issues.

### **Fundamentals of Early Childhood Trauma**

Bowlby's attachment theory derived from his study of three behaviors observed by infants.<sup>1</sup> One of those is a bonded infant's instinctive mechanism of seeking out his or her primary caregiver in times of perceived danger (Hatton, 2008). Attachment theory establishes that the caregiver should reasonably provide nourishment, education, protection, and physiological regulation (Hatton, 2008). When a child has lost his or her parent(s) due to trauma (e.g., murder, suicide, war, termination of parental rights due to neglect or abuse of the child), he or she has nowhere to go when he or she feels threatened. Likewise, if a prior caregiver abused or neglected a child, that child may have a pervasive mistrust of a new caregiver that could likewise harm or mistreat the child, which will also result in that child having nowhere to go when he or she feels threatened. In this sense, both populations have suffered early childhood trauma. Thus, whether a child lost his or her parents due to some unfortunate tragedy (PTSD), or whether a child lost his or her parents due to their pathogenic care (RAD/DSED), the end result is that the child has no trusted caregiver to turn to in times of perceived danger, which interrupts the bonding process in either circumstance.

### **Statistical Data Regarding Early Childhood Trauma**

D'Andrea, Ford, Stolbach, Spinazzola, and van der Kolk (2012) decried childhood exposure to interpersonal traumatic stressors as a "silent epidemic" (p. 187), with approximately

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<sup>1</sup> Bowlby, J. (1944). Forty-four juvenile thieves: Their characters and home lives. *International Journal of Psycho-Analysis*, XXV, 19-52.

33% of children worldwide believed to have suffered physical abuse, and 20-25% of all children worldwide believed to have been sexually victimized. In the United States alone, one million children experience substantiated abuse every year (U.S. Department of Health and Human Services [USDHHS], 2007). Kavanaugh and Holler (2014) estimated the actual number of American children who experience sexual/physical/emotional abuse or neglect at 5.9 million per year. Some estimates place the fiscal cost of childhood abuse and neglect in 2007 at \$103.8 billion (D'Andrea et al., 2012), including foster care and residential treatment.

Statistics reported by Busuito, Huth-Bocks, and Puro (2014) document that parents or caregivers perpetrate approximately 75% of childhood abuse or neglect fatalities, and approximately 80% of all non-fatal childhood emotional abuse or neglect. Four-and-a-half percent of children are sexually abused by their father or stepfather (Classen, Koopman, Nevill-Manning, & Spiegel, 2001). In 2012, the Child Welfare Information Gateway published its report on *Adoption Disruption and Dissolution*, estimating that 10-25% of all adoptions of foster children here in the United States disrupt before the adoption is finalized; another one to five percent of completed adoptions dissolve after the adoption is finalized, bringing the total number of disruptions and dissolutions to 11-30%. This is relevant for this literature review because it reflects a second layer of early childhood trauma in a population of American children already traumatized by their birth parents prior to entering foster care or being released for adoption.

### **Effects of Disrupted Attachments**

Dozier, Zeanah, Wallin, and Shaffer (2012) estimated that there are 2,000,000 to 8,000,000 orphaned, abandoned, and maltreated children living in residential institutions worldwide. Among institutionalized children, disorganized attachments and other aberrant attachment styles (i.e., insecure or unclassifiable) are most prevalent. For example, 65% of

institutionalized children were found to have disorganized attachments, 22% had organized attachments (either secure or insecure), and 13% were unclassifiable (Dozier et al., 2012). This is especially significant because disorganized attachment is most indicative of risk---often characterized by strange behaviors that are designed to unintentionally erect obstacles to the bonding process (Dozier et al., 2012). As a result, nearly one-half of all institutionalized children evidenced high levels of indiscriminately sociable behavior (i.e., DSED), versus only 18% of children who had never been institutionalized (Dozier et al., 2012).

Although the term “institution” often refers to international orphanages, it can also apply to children here in the United States who reside in residential treatment programs (RTCs). Kagan and Spinazzola (2013) estimated that about 50,000 American children are treated in RTCs each year. The USDHHS (2015) published a report documenting that 51,891 of children in foster care across the country resided in “congregate care” (group homes or institutions for behaviorally-disturbed children) on September 30, 2013. This represents a staggering 14% of all foster children nationwide (USDHHS, 2015). These children experienced significantly higher rates of trauma exposure, as well as higher rates of functional impairments, than non-institutionalized American youths, and had a 15% higher incidence of behavioral problems, 63% higher incidence of attachment problems, 133% higher incidence of self-injurious problems, and were five times as likely to be involved in criminal activity.

The most frequent types of trauma exposure for children in RTCs include exposure to chronic and severe caregiver neglect, multiple moves or placement disruptions, loss of primary caregivers, and emotional/physical/sexual abuse. Child trauma researchers have posited that 46% to 90% of all children in foster care have had multiple traumatic experiences (Kisiel et al., 2014). This is especially relevant in light of the fact that the Kisiel et al. (2014) study involved

more than 16,000 children in Illinois foster care, where it was found that the number of traumatic experiences correlated to the number of clinically significant PTSD symptoms and deep-seated mental health issues. The very nature of America's foster care system places many of its children at significant risk of lifelong emotional and behavioral disturbances. Children who enter foster care with PTSD from childhood trauma, too often receive additional pathogenic care in foster care (i.e., multiple placements that further interrupt the bonding process, or neglect from within foster care) that entrenches RAD/DSED, too, rather than staves them off.

### **Emotional and Financial Impacts**

Brown (2003) addressed the incidence and impact of child physical abuse, citing research that it may involve as many as 11% of all U.S. adolescents. These children experience PTSD (11-90%), disruptive behavior disorders, and attachment disorders; with chronic abuse being associated with more severe psychopathology (Brown, 2003). A significant assumption made by Brown is that the same environmental stressors and challenges that physically abused children endure are primarily responsible for their ensuing psychopathology. Likewise, children who suffered extreme caregiver maltreatment by a prior caregiver, may continue to wrestle with the same stressors and challenges under the care of a new caregiver, even without active or ongoing physical abuse in that new environment.

There are a number of studies that delved into the exponential increases in congregate care relative to older children here in the United States (Barth, 2002; Children's Bureau, 2015; USDHHS, 2015). For example, 24% of all incoming foster children ages 13+ are placed in congregate care as their first (and possibly only) placement; 69% of the population of children in congregate care is age 13 or older (Children's Bureau, 2015). A significant portion of children in congregate care suffered previous pathogenic primary care and subsequent failed adoptions

(Children's Bureau, 2015; USDHHS, 2015), suggesting RAD and/or DSED diagnoses. More than one-third of teenagers stay a year or longer in congregate care, with 15% of all teenagers who enter congregate care aging out from such facilities (Children' Bureau, 2015). This factor warrants special concern, since it reflects a significant population of youth (5,000+/year), a majority of whom will transition to adulthood without ever learning to bond with others in a meaningful way, which will necessarily create hardships for them as spouses, parents, and employees—potentially perpetuating a cycle of abuse and dysfunction in future generations. This validates enormous national significance to find effective ways to treat and resolve the effects of early childhood trauma.

In addition to the grave emotional and psychological detriments, the fiscal cost to provide congregate care is three to five times more per child than standard foster care (Barth, 2002; Children's Bureau, 2015, USDHHS, 2015). Fifteen years ago, Hoagwood and Cunningham (1992) calculated that congregate care cost in excess of \$6,300 per month per child. Applying that outdated estimate to the 51,891 children in congregate care in 2013, and the financial burden approaches \$4 billion a year (Barth, 2002). The state of Massachusetts publishes its annual budgets relative to congregate care. At the end of fiscal year 2015, it had 1,915 children in congregate care, with a dedicated budget of \$255,687,649, which averages \$133,518/year per child in congregate care (MassBudget, 2017). Extrapolated over the nationwide population of 51,891, this would total nearly \$70,000,000,000/year.

### **Early Childhood Trauma of Child with Compromised Attachment**

Children who have insecure or disorganized attachment systems often develop inadequate emotional regulation abilities (Kinniburgh, Blaustein, Spinazzola, & van der Kolk, 2005). Critically, the inability of the caregiving system itself to buffer these children's experiences

becomes the very source of their distress (Shapiro & Levendosky, 1999). Domestic violence (against or witnessed by the child), for example, compromises the child's sense of security, safety, and attachment. Borrego, Gutow, Reicher, and Barker (2008) identified a number of ensuing externalizing and internalizing behaviors, including increased aggression, anger, defiance, social skill impairment, depression and anxiety, sleep disturbances, and fear responses. The concept of *externalizing behaviors* is defined by Keil and Price (2006) as those behaviors that are "overt, disruptive, and often involve the violation of societal norms, the destruction of property, and harm towards others" (p. 763). Additionally, there is some evidence that disorganized attachment in infancy is linked to unresolved loss or trauma in the caregiver, in which the caregiver is caught in the crossroads between being both a primary source of the child's fear or distress, and the means to assuage such (Green, Stanley, & Peters, 2007).

Blaustein and Kinniburgh (2015) highlighted the tragic fact that there is a wide chasm separating knowledge of and policy regulating the links between chronic childhood abuse, neglect, and chaotic parenting. They identified this population of children as those who suffered complex developmental trauma, in which the child's chronic interpersonal adversities are concurrent within the context of the child's primary caregiving system (see also D'Andrea et al, 2012; Kisiel et al., 2014; van der Kolk, 2005). The normal scaffolding of core personality domains including emotion regulation, relationship formation, identity formation, and information processing, is often interrupted by the interpersonal trauma (Kisiel et al., 2014).

Spinazzola et al. (2014) broached the special trauma that is inflicted upon a child by intentional psychological maltreatment (PM), which he defined as parental acts that persistently disrupt or thwart the child's primal emotional needs. PM was defined by the American Professional Society on the Abuse of Children (APSAC) as a recurring pattern of caregiver

behavior that conveys to the child a sense that he is worthless, unloved, unwanted, damaged, or only useful to meeting others' needs (as cited in Spinazzola et al., 2014). PM may also involve a caregiver exploiting, rejecting, or terrorizing the child (Spinazzola et al., 2014).

### **Early Childhood Trauma of Child with Secure Attachment**

Secure attachments serve as buffers to mitigate the shock of overwhelming stressors, as well as to provide a medium for recovery and healing (Kinniburgh et al., 2005; Shapiro & Levendosky, 1999). Even still, children with secure attachments who suffer traumatic stress often manifest the same behaviors as seen in children with pathogenic care who suffered trauma. Gaensbauer, Chatoor, Drell, Siegel, and Zeanah (1995), for example, evaluated the case of a five-year old girl whose mother was murdered by a letter-bomb explosion in front of her four years earlier, when the child was only 13-months old. The child had been well-bonded with her mother, and after two brief foster care placements totaling only six weeks, she was placed with a relative of her mother whom she knew, and was subsequently adopted by that family (Gaensbauer et al., 1995). Despite knowing her adoptive mother, this child showed intense symptomology upon placement with her (Gaensbauer et al., 1995), including night terrors, nightmares, self-soothing rocking motions, self-harming behaviors, frequent and intense screaming episodes (sometimes with no apparent provocation), re-experiencing and re-enactment, and exaggerated startle responses. She was also reported to have notable changes in her personality and social relating; she no longer made eye contact and avoided face-to-face interactions. The child allowed her adoptive mother to hold her, for example, as long as the child faced away from her (Gaensbauer et al., 1995); she allowed her new parents to kiss her, but she would not return their kisses. Notably, Gaensbauer et al. detailed that during her second year with her adoptive family, the child developed speech and enunciation problems, as well as a

specialized language that only her adoptive mother could interpret, which is a phenomenon reported by caregivers of children with RAD/DSED (Richters & Volkmar, 1993). The child also manifested angry and disruptive behaviors, violent temper tantrums, battles for control, attention-seeking provocative behaviors, and social isolation problems due to her inability to sustain reciprocal play (Gaensbauer et al., 1995). Gaensbauer et al. noted that this particular child's physical, emotional, social, and cognitive development were within the normal range up until the trauma involving her birth mother's death. Likewise, the three-year boy discussed by Hatton (2008) manifested the same behavioral responses and disturbances after his traumatic experience (mentioned here only to show that this dynamic was not unique to just the child in the Gaensbauer et al. study).

### **Brain Function Attributions**

One distinction that Humphreys and Zeanah (2015) asserted is their belief that both the structure and function of the brain are permanently altered in children who have been institutionalized since the age of six months. McLaughlin et al. (2014) parroted this with their assertion that cortical development is disrupted in children who sustained severe early childhood deprivation. Sheridan, Fox, Zeanah, McLaughlin, and Nelson (2012) identified a variation in traumatized children's neural development, and Shimada et al. (2015) found reduced visual cortex grey matter in the brains of traumatized children. It is notable that these studies all involved children with RAD. None of the studies on children with PTSD discussed these purported permanent and irreversible brain changes, and it is unclear why such children would be presumed to not suffer the same brain dysfunctions.

Other studies did discuss milder alterations to brain neurochemistry, which are neither permanent nor untreatable. Cohen, Perel, DeBellis, Friedman, and Putnam (2002), for example,

detailed a number of brain functions that may play a part in traumatic responses, including the amygdala and limbic system, as well as neurotransmitters (such as dopamine and serotonin) and the adrenergic system. For each, the authors explained the purpose of each function, as well as what normal stress responses are in relation to PTSD responses; they also addressed the clinical significance. This aligns with Corbin (2007), who stated that early childhood trauma changes the brain's organization, abilities, chemistry, and connectivity. Corbin focused specifically on the Hypothalamic-Pituitary-Adrenal (HPA) axis (also addressed by Cohen et al., 2002; Dozier et al., 2012; Humphreys & Zeanah, 2015), which she defined as primarily responsible for regulating stress responses and balancing brain chemistry.

Research substantiates that early childhood trauma induces structural, functional, and chemical changes in the brain (Burri, Maercker, Krammer, & Simmen-Janevska, 2013), which can increase cortisol-release. Childhood abuse has been directly linked to PTSD in adults (Busuito et al., 2014). It stands to reason, therefore, that such PTSD began in childhood following the abuse, and extended into adulthood ... in which case pathogenic primary care may have been present, too.

### **PTSD Prevalence**

The American Academy of Child and Adolescent Psychiatry (AACAD; 1998) identified PTSD prevalence rates in children exposed to traumatic events ranging from 3% to 100%, depending on a number of factors, including the children sampled, the assessment methods, the nature of the traumatic event, and the span of time since such trauma. The AACAD report unilaterally sheds light on the reality that there is too-wide a disparity in how clinicians ascertain whether a child suffers from PTSD. In addition, there are some indications of a genetic predisposition for the development of PTSD (AACAD, 1998). Several studies have also

recognized that familial support (or the lack thereof) and parental emotional reaction can have a profound impact on the child's PTSD symptoms and responses. This is a risk factor for children being raised in foster care or orphanages, who are less likely to have stable familial support than children residing with family before and after the traumatic event.

### **Effect of Family Environment/Parental Responses and Importance of Psychoeducation**

#### **Family and Parenting Dynamics**

Alisic et al. (2015) identified many risk and protective factors that predispose a child to greater traumatic responses. Family characteristics including prior child maltreatment, parental substance abuse, unstable living environments, and financial strains were all noted as risk factors. These are the very issues that would render a child in foster care, and potentially freed for adoption.

Parenting factors have been identified as one of three categories of direct or indirect influences on children's behavioral problems (Bosmans, Braet, Leeuwen, & Beyers, 2006). More specifically, attachment (or the lack thereof) has been linked to both externalizing behavior and to the quality of parenting (Bosmans et al., 2006). Specifically, a number of parenting patterns and practices have been correlated with disruptive behavior, including punitive discipline (i.e., yelling, nagging, hitting, or beating), inconsistent discipline, insufficient supervision, ineffective problem-solving, and a lack of warmth and positive involvement (Bosmans et al., 2006). As such, a child who was physically or verbally abused by a prior caregiver will dissociate and experience PTSD flashbacks to prior abusers when a new caregiver yells at them or has angry, disapproving eyes (Owen, 2016). Bosmans et al. (2006) posited that both nonexistent and excessive levels of positive parenting can preface behavioral disturbances, but the powerful impact of moderate positive parenting that is neither absent nor exaggerated has

not yet been studied.

Non-abusing mothers have been found to have significantly greater realistic expectations and better problem-solving skills than abusive mothers (Erickson, 2012). This can be extrapolated to mean that mothers with more realistic expectations and better problem-solving skills are less likely to create stress for a traumatized child. Mothers with unrealistic expectations and compromised problem-solving skills can unwittingly exacerbate their child's traumatic stress.

Erickson (2012) explained that the new caregiver's lack of understanding of his or her child's attachment issues contributes to this new caregiver's own feelings of rejection by the child. Indeed, Erickson posited that there is some controversy whether RAD is a disorder of attachment, or a complication of the distressed and chaotic responses and reactions between the caregiver and the child, citing that the caregiver's responses to the child may be primarily responsible for the child's reciprocity of attachment. Fear of disruption and additional abandonment can torment an adopted child, and a parent can unintentionally threaten the child's sense of safety and stability (Erickson, 2012). Parents who emphasize how "lucky" a child is to have been adopted, for example, may result in the child feeling inferior. Adoptive parents who do not understand all of the intricacies of traumatic responses may misinterpret a child's efforts to be autonomous or independent as rejecting the new family (Erickson, 2012). A new parent's inconsistent limits, lack of supervision, and harsh expression of negative emotions can also contribute to behavioral problems (Erickson, 2012). Additionally, factors that place an adoption at risk of future dissolution or distress include a parent who is unable to regulate her own emotions, takes the child's rejection personally, or is unable to share and model empathy with the child (Erickson, 2012). Adoptive parents often are fearful that their child's behaviors will

never improve, that they are inadequate parents, and that they have hit a gridlock with their child. Some parents may blame the prior caregiver rather than realize and recognize the role they (the new caregivers) may be playing in the family's "dysfunctional dance" (Owen, 2016; see also Erickson, 2012).

Conversely, Vasquez and Stensland (2016) summarized that parents who adopt children with RAD/DSED are faced with additional challenges in overcoming emotional, behavioral, and developmental issues. Throughout the process of building healthy attachment, these children must navigate painful memories and negative appraisals that often prove difficult for the child. The burden of change, however, remains squarely on the parents (and not the child) to create the requisite adjustments to overcome any obstacles the child broaches to the bonding process.

### **Parental Psychoeducation**

Educating the parents is paramount. The adoptive parents of the child studied by Gaensbauer et al. (1995) anticipated that stable, loving parenting would be sufficient to overcome that child's difficulties; but four years' post-trauma and adoption, the child was still evidencing extreme behavioral disturbances. Hatton (2008) identified a number of parenting factors that have been associated with problematic child outcomes. Caregivers' responses to these traumatized children have also been recognized as having an impact on the severity of the child's behaviors (Hatton, 2008; Scheeringa & Zeanah, 2001). A caregiver's emotional impairments can, in fact, trigger the child's symptoms and intensify them (Hatton, 2008; Scheeringa & Zeanah, 2001). A new caregiver's overprotectiveness, fear, or guilt may also compromise the child's recovery (Hatton, 2008).

Allen (2011) addressed the need to educate children's new parents about the child's traumatic experiences, as well as current research about both the impact of early caregiving

experiences, and parental involvement as an important component for the successful treatment of many behavioral manifestation, such as externalizing problems. This is followed up by helping the new caregiver comprehend the child's working models and the caregiver's role in creating change in the child's behaviors (Allen, 2011). Gatta et al. (2012) called for embracing parents in the therapeutic alliance.

### **Lack of Broad, Unbiased Research to Date**

The current field of research, though copious, myopically focuses on *either* RAD/DSED *or* PTSD, depending on the authors' respective postures. There is scant research that delves into the possibility of overlap between the two disorders, even though RAD/DSED children meet the diagnostic criteria for PTSD (Owen, 2016) --- but not necessarily vice versa, since RAD/DSED require pathogenic primary care that is not true in all childhood PTSD cases. The list of behaviors of children whose parent was murdered by a spouse or partner, for example, correlates directly with many of the behaviors manifested by children with RAD: fear of the dark, night terrors, fear for personal safety in new home setting, intrusive memories, dissociation, reenactment, obsession with guns and violence, avoiding eye contact, aggression, delinquency, self-destructive behaviors, hyperarousal and erratic behaviors, irritability, emotional numbing, flat affect, enuresis, self-stimulation, unwilling to accept new caregivers, dislike of physical affection, and avoidant attachment (Alisic, Krishna, Groot, & Frederick, 2015) ... yet researchers thus far have seemed to resist broaching the possibility that institutionalized children with the same behaviors may suffer from PTSD.

### **Relevance and Implications of a Diagnostic Overlap**

#### **Correlation or Overlap Between PTSD and Attachment Disorders**

Hodgdon, Blaustein, Kinniburgh, Peterson, and Spinazzola, J. (2015) broached some

critical factors in the quest to identify the correlation or overlap between PTSD and attachment disorders. They found that PTSD is the fifth most common diagnosis for traumatized children, with 50% manifesting significant behavioral, academic, impulse control, affect regulation, and attention disturbances. In addition, they expressed concern that children in foster care have higher rates of psychiatric disorders than those outside the child welfare system, with two to four times the number of externalizing behavior disturbances. This is of particular concern because these externalizing behaviors exacerbate caregivers' stress and thus the risk of placement disruptions. Most significantly, Hodgdon et al. asserted that once rooted, externalizing behaviors remain stable or increase over time. According to Hodgdon et al., therapists and other mental health professionals who work with this population should regard the new caregiver as an essential part of therapy.

Humphreys and Zeanah (2015) used the terms *toxic stress* and *complex trauma* to describe “the cumulative and pernicious effect of multiple, chronic environmental adversities, [that] is believed to disrupt developing brain circuitry and other organ systems, having long-term implications for physical and mental health” (p. 154). Kagan and Spinazzola (2013) also identified a crucial aspect of this correlation and overlap by denouncing how welfare programs prioritize treatment for high-risk behavioral problems without addressing the causative factors. A major disconnect that contributes to this cycle of dysfunction within the child welfare system is the reality that few foster care programs integrate an understanding of trauma into policies or practice, despite the fact that these children are known to have experienced multiple traumas that adversely affect their ability to trust and bond with others in meaningful ways.

Bradley, Greene, Russ, Dutra, and Western (2005) conducted a multi-dimensional meta-analysis of 26 psychotherapy studies from 1980–2003, involving 1,535 subjects who had

suffered PTSD. Only two of those studies focused on childhood abuse, involving just 79 participants. Cloitre (2009) likewise analyzed 58 studies on PTSD, involving a total of 4,194 subjects, to evaluate the effectiveness of the therapies used. Five of those studies involved childhood physical and/or sexual abuse, with a total of 306 participants. One of those studies (with 48 subjects) overlapped with Bradley et al.'s review. Therefore, there are only six studies worldwide with a total of just 336 participants total that have focused on PTSD from early childhood abuse. All of those, however, were conducted on adult survivors of early childhood abuse who were no longer living under the care or control of a caregiver who could harm them.

The most promising indicator that PTSD and RAD/DSED may in fact be correlated is evidenced by the studies of children who suffered traumatic losses while securely attached, such as the toddler in Gaensbauer et al.'s (1995) study. D'Andrea et al. (2012) posited that countless studies substantiate that interpersonal childhood trauma is related to significantly increased affect/impulse dysregulation and interpersonal difficulties. They argued that PTSD alone is not a sufficient diagnosis for such interpersonal childhood trauma. Ford et al. (2013) expounded on this further, by asserting that there is substantial evidence that traumatized children are at risk for developing biopsychosocial dysregulation "in addition to, and in the absence of, PTSD" (p. 841), though this author is a bit confused how or whether a traumatized child with such dysregulation could indeed be free of PTSD.

Hatton (2008) reported that infants who witnessed threats of harm to their caregivers demonstrated more-severe PTSD responses than children who suffered other traumatic losses, which highlights the importance of the caregiver relationship in traumatized children. Children who have been adopted from foster care or international orphanages have lost their birth parents to death or other traumatic loss (literally or figuratively, since even a parent's voluntary

surrender of the child is a loss for the child's sense of self and security). Insecure attachments to the new primary caregivers will leave these children powerless to trust their new caregivers to provide care and support (Hatton, 2008). Moreover, research shows that children with insecure and disorganized attachments are at greater risks for psychopathology later in life (Hatton, 2008; see also Choi et al., 2015).

Alisic et al. (2015) addressed the loss endured by children whose parent is killed by an intimate partner. They pointed to the fact that PTSD is commonly diagnosed in such cases, with children manifesting symptoms of dissociation, reactivity, alterations in arousal, and negative alterations in cognitions and mood (Alisic et al., 2015) ---the same behaviors exhibited by children with RAD/DSED. The child in the Gaensbauer et al. study depicts this dynamic.

### **Identified Patterns Within Research Limitations**

Cloitre et al. (2009) identified symptoms of Complex PTSD in individuals who have suffered sustained, repeated, or chronic abuse or neglect in childhood. Of the 582 participants in the Cloitre et al. (2009) Study 1,<sup>2</sup> 68% suffered sexual abuse, 78% physical abuse, 46% neglect, and 77% emotional abuse; more than one-third did not live with their mothers. A unique factor of the Cloitre et al. (2009) study is that it also studied 152 children and adolescents who had experienced at least one diagnostic criterion of trauma.<sup>3</sup> Unfortunately, it only evaluated the complexity of the symptoms related to the number of traumatic events suffered by each child. As expected, the more trauma suffered, the more severe the child's behaviors, which correlates with Terr's model of cumulative trauma (as cited in Cook-Cottone, 2004) and the Adverse Childhood Experiences study conducted by Felitti et al. (1998).

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<sup>2</sup> Cloitre et al.'s (2009) study encompassed two independent sub-studies, only one of which is discussed herein.

<sup>3</sup> This refers to Study 2 of the overall Cloitre et al. (2009) two-part study.

### **Cyclical Patterns**

Cook-Cottone (2004) described that some children's PTSD may be cyclical, with the child exhibiting periods of reactivity followed by periods of numbness and restricted affect. Likewise, research has shown that once some RAD children are removed from their unstable home environments and placed in stable home environments that meet their needs, some of the RAD symptoms resolve (Corbin, 2007). Both dynamics suggest cyclical elements that may be triggered or resolved based on the child's perceived levels of safety.

Cloitre et al. (2010) conceded that children with PTSD from abuse manifest classic interpersonal and emotion-regulation problems. They also acknowledged that these behavioral disturbances are exhibited more frequently than basic PTSD symptoms and are often manifested by reactivity and ready provocation, followed by difficulty in deescalating. Anger management was noted by Cloitre et al. as being one of the most functionally significant emotion regulation problems. Unfortunately, the participants studied by Cloitre et al. (2010) were all adults. These interpersonal, emotion regulation, and anger management problems are all manifested by children with RAD/DSED as well.

### **Comorbidity or the Effect of Clinician Bias in Diagnosis and Treatment?**

Luxenberg, Spinazzola, and van der Kolk (2001) cited the *DSM-IV Field Trial for PTSD*, which suggested that early childhood interpersonal trauma can have particularly pervasive impacts on a child's emerging personality and social development. They expressed concern that psychiatric populations are comprised of 40% to 70% of individuals with histories of childhood trauma, and yet trauma-related disorders in this population remain grossly underdiagnosed. Luxenberg et al. identified a number of disturbances in such individuals: affect regulation, attention or consciousness, self-perception, relationships, somatization, and meaning. They.

posited that including the child's trauma history in the case conceptualization and treatment planning adds a depth and insight that often brings about significant resolutions of the dysfunctional behaviors. They also elaborated that taking time to investigate and evaluate the child's trauma history yields a different mindset for the clinician to approach treatment from. This may explain the variances in how children diagnosed with PTSD are conceptualized and treated, compared to those with RAD/DSED.

### **Therapeutic Protocols for Early Childhood Trauma**

The diagnosis of PTSD has been proposed as a means to categorize many of the fundamental clinical features that are present in survivors of abuse (Classen et al., 2001). When the maltreatment is by a caregiver, it is often sufficient to satisfy the criterion of pathogenic care required for a diagnosis of RAD/DSED, too. Many children who are abused or neglected are subsequently adopted after their biological parents' rights are terminated due to such abuse or neglect. Recognizing these children's PTSD in such cases is critical to helping the new parents understand the children's emotional needs and head-off any behavioral disturbances. This is especially true since the literature shows that children's "reactive" behaviors only resolve once the child's trauma has been addressed.

### **Attachment Disorders**

Despite a 30+ year history of RAD in the diagnostic manuals, Buckner, Lopez, Dunkel, and Joiner (2008) lamented that there is no empirically supported treatment for RAD. Allen (2011) noted that there is a deficiency of research on attachment patterns or behaviors for school-age children, which has created an "empirical vacuum" that serves as a "breeding ground for the misapplication of attachment theory to the treatment of maltreated school-age children" (p. 14). Buckner et al. (2008) posited that one avenue of treatment of children with RAD that may be

particularly promising is the use of treatments that have been successfully used to decrease similar problematic behaviors in children. This is where evidence-based practices become especially relevant to this issue.

Chaffin et al. (2006) concurred, claiming that most of what is believed about RAD is derived from anecdotes, case studies, and attachment theory. Chaffin et al. advocated that treatment approaches for these children should focus primarily on caregiver and environmental stability, child safety, consistent structure, and nurture. These are the same services that are empirically recognized treatment protocols for children with PTSD.

Buckner et al. (2008) expounded on the behaviors of children with RAD to include impulsivity, hypersexuality, homicidal and suicidal ideation, and classic Conduct Disorder symptoms (e.g., lying, stealing, destruction of property, fire setting, and cruelty to children or animals). These behaviors are common among institutionalized children. Brown, McCauley, Navalta, and Saxe (2013) evaluated the efficacy on institutionalized children of Trauma Systems Therapy (TST), which Ellis et al. (2012) defined as a comprehensive approach to treating PTSD. Brown et al. found that of the 142 children sampled, 69% had significant histories of neglect, 63% had been physically abused, and 47% had been sexually abused. These experiences are the embodiment of PTSD ... and yet these children are often relegated to impersonal, institutional, congregate care, with little viable opportunity to overcome their trauma.

### **Empirical, Evidence-Based Treatment**

Treatment planners, such as the series edited by Arthur E. Jongsma, Jr., and colleagues, are compiled of evidence-based practice interventions for a myriad of mental health disorders. These resources give validity to treatment protocols and approaches. *The Adolescent Psychotherapy Treatment Planner* (Jongsma, Peterson, McInnis, & Bruce, 2014a), for example,

does not include any recommended treatment protocols for attachment disorders, RAD, or DSED. In addition, the section on “adoption” does not provide any meaningful interventions that would reasonably relate to a child with RAD or DSED.

There is, however, a section for PTSD.<sup>4</sup> Interventions #19-24 in that section relate to training the parents on interactive techniques that encourage positive behavior and discourage negative behavior, manage disruptive behaviors, teach them how to identify problem behaviors, and log their own reactions to the child’s behaviors to ascertain whether those responses were effective or not. The overall goals and objectives of this parent management training (PMT) are to decrease the child’s aggression and noncompliant attitudes and behaviors by refining parental skills in dealing with their child’s maladaptive behaviors. During PMT, parents are taught to recognize the child’s maladaptive schemas, communicate expectations and consequences effectively, use positive reinforcement for appropriate behaviors, ignore maladaptive attention-seeking behavior, and use consistent consequences for inappropriate or disruptive behaviors (Sukhodolsky, Smith, McCauley, Ibrahim, & Piasecka, 2016).

Buckner et al. (2008) reported that Behavior Management Training (BMT)---which includes an element of parent training---has proven efficacious with RAD children, as well. It is crafted to provide caregivers with relevant psychoeducation about childhood misconduct, while providing new parenting skills they can use to establish proper boundaries, increase compliance, decrease disruptive behavior, and establish proper disciplinary systems. This aligns directly with Jongasma et al.’s (2014a) evidence-based PMT interventions for adolescents with PTSD. Chaffin (2008) commented on Buckner et al.’s case study, after acknowledging that named PMT

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<sup>4</sup> Unfortunately, *The Child Psychotherapy Treatment Planner* (5th ed; Jongasma et al., 2014b) is silent in all of these areas and does not provide any evidence-based treatment options for children with RAD/DSED/PTSD.

programs are among the best evaluated and most effective clinical treatments currently available for childhood behavioral problems (see also Pearl, 2009; Potier & Day, 2007; Salmon, Dadds, Allen, & Hawes, 2009). PMTs have been proven equally effective among diverse family demographics (Spielfogel, Leathers, Christian, & McMeel, 2011).

Muratori et al. (2016) stressed the importance of positive parenting with this population (see also Scheeringa, Myers, Putnam, & Zeanah, 2015). One factor that may account for the inconsistent positive outcomes with the RAD/DSED population may be at least in part explained by the deficit of trauma-informed practices incorporated into treatment, including PMT (Stewart, Leschied, Dunnen, Zalmanowitz, & Baiden, 2013, p. 132). Luxenberg, Spinazzola, Hidalgo, Hunt, and van der Kolk (2001) likewise detailed that the first phase in any treatment for traumatic stress should focus on psychoeducation for both the child and his or family members to address the areas of affect dysregulation, dissociation, and disturbances in self-perception.

Chaffin et al. (2006) reviewed 70+ studies relating to improving early childhood attachment and found that the interventions that increased the parents' sensitivity to the child's distress were also those that were most effective in improving the child's attachment security. They elaborated that parent skills training and goal-directed behavioral focus were especially effective in general child interventions; not just those geared toward attachment problems. This is mirrored by Hodgdon et al.'s (2015) study of fostered/adopted children using ARC (attachment, self-regulation, and competency) to focus on core targets, such as caregiver affect, and key subskills, including normalization and validation psychoeducation, identifying challenging situations, building self-regulation and -monitoring skills, and enhancing self-care (see also Leathers, Spielfogel, McMeel, & Atkins, 2011). Josephson (2008) determined that family interventions are effective and should replace the concept of mere family therapy because

of the necessary interactions, overlap, and connectivity of the individual and communal family members, with special focus on PMT.

### **Gaps Identified and Rationale for Additional Research**

There is a significant amount of additional research that was identified as potentially relevant to this literature review. For example, Zeanah et al. (2016) boldly claimed that their solitary study on Bucharest orphans showed that the emotional withdrawal features of RAD disappear once institutionalized children are placed with families. Hundreds of other studies, however---and the sheer number of adoption dissolutions and youth relegated to RTCs---refute this. Time and length constraints prevented this author from addressing many supplementary studies not addressed herein. A reference list of such research is available upon request.

The current research, however, does not adequately evaluate whether and to what extent RAD/DSED and PTSD are correlated. Additional research should also be conducted to evaluate the dynamic created when clinicians and new caregivers perceive and conceptualize a RAD child as “broken” (with no hope for healing), versus a PTSD child as simply traumatized (with hopes for healing). Future research should also investigate whether and to what extent the “reactive” behaviors manifested in children with RAD and/or DSED resolve once the child’s PTSD resolves. It is conceivable, based on the totality of the literature discussed above (including empirical treatments), that once the PTSD is treated successfully, the behaviors associated with the attachment comorbidities will resolve as well, since these behaviors evidence ongoing triggers involving the children’s perceived lack of safety and trust, or maladaptive behaviors and schemas developed post-adoption.

### **Conclusion**

Despite the copious research on both RAD/DSED and PTSD, there is a wide chasm. One side of the research views children with PTSD as victims of the trauma they endured; the other side perceives children with RAD/DSED as malevolent products of pathogenic care. There is tremendous disconnect and disagreement between experts in the converging fields of attachment and traumatic grief. The variance in the two nosologies appears to play a significant role in the clinicians' treatment approaches. The parental responses---both positive and negative---appear to be the single-most critical element to the outcomes in these children's lives ... and those can be heavily influenced by the treating clinician's personal perspective and conceptualization. In light of the facts that RAD/DSED children meet the diagnostic criteria of PTSD, and there is empirical evidence-based treatment for PTSD, this literature review raises possible merit of future researchers studying whether RAD/DSED are extensions or comorbidities of PTSD from Early Childhood Trauma (PTSD-ECT). The dichotomy between how both populations are perceived and conceptualized by mental health experts and parents, and how that affects treatment outcomes---as well as any comorbidity between the disorders---also cry out for further research.

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