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Mutual Regulation in the Context of Inconsolable Crying: Promoting Tolerance to Distress

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1. Introduction

All parents face a new stressor when an infant joins the family; most have not likely faced the intense and evocative stimuli of an infant in their care crying for prolonged durations. For most parents, their infant's crying takes up a small portion of a day, and as parents learn the cues or signals specific to their infant they become more effective at soothing a cry and preventing situations likely to trigger another bout. Indeed, one might summarize a common conceptualization of crying thusly: Something has triggered the infant's cry, the cry signals a specific need, parents should respond with the appropriate remedy to stop the cry, and parents should learn from these experiences to anticipate and prevent their infant's future distress (Barr, Hopkins, & Green, 2000). Our broader social awareness of crying and our culturally influenced beliefs about parents' role in their infants' cries are communicated explicitly through direct and often verbal means, and through implicit, unspoken exchanges. Parents (perhaps irrationally) fear the demands of the public – *why can't you keep your baby quiet?* – just as they dread the pointed glares shot to them when their infant cries in public. Both types of communication convey a social attitude towards crying: It is the parents' role to meet the needs of their infant to keep crying to a minimum.

As an example of these everyday social pressures, I sat in a waiting area while my car was serviced, checking the grammar in this manuscript on my laptop computer. A father cradled his young infant in his arms nearby and told me his son was 10 weeks old. The infant's limbs were drawn into his body, his eyes clamped tightly shut against the sun pouring through the skylights overhead. In the course of more than 20 minutes, the father maintained a series of soothing behaviors and furtive glances to the 10 or so adults waiting with us. Despite his son's quiet, light sleep and occasional coos, the father shushed and hummed constantly, slightly jiggling his baby while he sat. When the baby grunted or murmured, his father's vocalizations were louder, he rose to his feet and paced, bouncing the baby a bit more vigorously, while glancing up at the rest of us from a lowered gaze. The baby remained in a light sleep, but his father was clearly concerned that his son stay quiet – a goal he achieved – his behaviors were gentle, affectionate, and calming to observe.

For the majority of families, as described in the father-son example above, the social expectations for soothing their infants are readily met; parents are capable of soothing their infants most of the time and are eager to reduce their infants' distress. [A particularly helpful and succinct description of the preoccupation with and fears that arise with the birth of a child concerning parenting, see Stern's (2004) writing on the "motherhood constellation".] In early infancy, this is largely accomplished through the parent's use of soothing techniques, and increasingly over time, "to scaffold an infant's regulatory capacities" by supporting the infant's self-soothing efforts (Tronick, 2007, p.9). But for a portion of families whose infants cry inconsolably, the social expectation that they are responsible for their infant's distress should they fail to soothe a cry is burdensome and unreasonable; for them, the presumption that all cries *can be soothed* if the parent knows what to do is faulty and potentially hurtful, as it places the responsibility for knowing how to soothe a cry - and the guilt for failing to do so - solely on the parent. Papousek and von Hofacker (1998), and Levitzky and Cooper (2000) found that mothers of inconsolably crying infants felt shameful and inadequate in social situations when they could not soothe their infant. By way of definitions, between 16% and 29% of infants experience excessive crying (St. James-Roberts & Halil, 1991) starting as young as 3 weeks of age, peaking in duration at 2 months and decreasing to normal amounts of crying by 3 months of age (Barr, 1990b; Brazelton, 1962). International consensus on the criteria for above-normal or excessive amounts of crying in otherwise healthy infants comes from Wessel and colleagues' (1954) "rule of 3s": crying and fussing for more than 3 hours a day, for more than 3 days a week, for more than 3 weeks. The frequency and duration of crying described by this criterion is extreme, but even parents enduring fewer than 3 weeks of a lot of crying are also at risk for emotional dysregulation - while these clinical criteria are useful for describing infant behavior, there is no consistent characteristic used to predict which parents will be able to cope effectively with the demands of caring for an infant who cries or fusses even average amounts - less than an hour -each day (even when the amount of crying is at its peak during the first 12 weeks of life; Barr, 1990a). The causes for excessive crying remain complicated; there are instances of physiological etiology (i.e., lactose intolerance; Marklund, Ahlstedt, & Nordstrom, 2007), gastrointestinal reflux (Henry, 2004), and prenatal teratogenic exposure (Phillips, Sharma, Premachandra, Vaughn, & Reyes-Lee, 1996), and efforts to establish the contribution of temperament - i.e., irritability or soothability - but this is made complicated by temperament's instability at this young age; and all of this is further confounded by neonates' immature neurobehavioral system, characterized by vast changes in metabolism, thermoregulation, and immunology (Papousek, Schieche, & Wurmser, 2008). Once physiologic causes have been ruled out, infants' excessive cries can be classified as inconsolable - without cause.

Distinct from colic or more general irritability, inconsolable crying is normative for 16% - 29% of the population (St. James-Roberts & Halil, 1991), for simplicity's sake, we can consider this 1 in 5 infants. It occurs without cause, does not signal a specific need or a particularly notable level of physical discomfort, and is considered benign (Miller & Barr, 1991; Stifter & Braungart, 1992). Crying, even at the intense levels associated with inconsolable crying or for prolonged durations, does not put infants at risk - babies can cry vigorously for extended lengths of time without injury - leading to the common prevention slogan in Shaken Baby Syndrome interventions "Crying can't hurt a baby, shaking can". Hence, locating the *problem* of inconsolable crying within the infant is a misinterpretation of

the situation. There is nothing wrong with the infant, no problem to be solved, no cure to apply – it is a social convention that needs adjustment. Supporting an inconsolable infant is difficult, stressful, tiring, but normative (St. James-Roberts, 2007) and should not be pathologized because doing so intensifies the pressure parents' feel to perform their role as soothing caregivers who should intuitively know what to do to effectively calm their baby (Barr, 1993; Stern, 2004).

The social convention for interpreting an infant's cry should be expanded to include the possibility that infants' cries are not always indicative of problems to be solved. Instead, the focus should shift to how caregivers with inconsolable infants respond. If caregivers fail to regulate their own reactions to their infant's cry and respond harshly, they risk injury to the infant or establishing dysfunctional patterns of interaction with long-term, deleterious socioemotional consequences for the child (Tronick, 2007). Parents with infants who cry excessively are likely to spend incredible amounts of the day and night cycling through soothing attempts for their crying infant "while at the same time neglecting their own needs to a critical degree" (Papoušek, 2008, p.90). This failure to regulate the self creates a frantic, exhausted, and forlorn parent who is, in turn, less available to meeting their infant's needs in supportive ways.

With regards to parents' self-regulation, objective measures of precisely how many hours the baby cries inconsolably are relatively immaterial; the focus needs to be on how well the parent copes with crying in any perceived long duration. There is evidence (as summarized by Crouch, Skowronski, Milner, & Harris, 2008), that parents who perceive their infant's cries as excessive are more likely to respond abusively, however, since the majority of families with inconsolably crying infants survive these early months safe, healthy, and with secure, responsive parent-infant interactions in place, clearly there is more to consider than the frequency, duration, or intensity of the infant's cry. Parent characteristics that interfere with responsivity in the infant-parent dyad include depression, addiction, and other psychopathology that results in barriers to emotional availability, parent-child intersubjectivity, and parent self-regulation (Beeghly, & Tronick, 1994; Easterbrooks, Biesecker, & Lyons-Ruth, 2000; Kogan & Carter, 1996; Steina et al., 2010; Trevarthen & Aitken, 2001; Tronick, 2007). Targeting parents who struggle with pathologic obstacles to adaptive dyadic function is a necessary and effective intervention strategy. A focus on secondary prevention approaches based on caregiver demographics or pathology, however, discounts the normative population of parents whose only risk indicator for future failures in dyadic regulation lies within the infant (in the case of normative excessive crying, for example) or within the interaction between infant and parent itself.

As Papoušek (2008) states: "Chronic stress, severe exhaustion, and overstrain may elicit defense mechanisms, including reduced initiative, feelings of powerlessness, burnout, and emptiness, which for a time inhibit the parents' intuitive readiness to respond. Intense negative affects and/or entanglement in insoluble conflicts may so absorb the parents that they no longer perceive their baby's signals" (p.69). There is widespread recognition that an infant inconsolably crying places the parent-infant relationship at risk for dysregulation (as in "persistent mother-infant distress syndrome", Barr, 1998; specific studies presented by Crouch, Skowronski, Milner, & Harris, 2008; Howell, Mora, & Leventhal, 2006; Maxted, et al., 2005; Papousek & von Hofacker, 1998 ; Raiha, Lehtonen, Saleva, & Korvenranta, 2002; more broad literature reviews summarized by Lieberman, 2004; National Research Council

Institute of Medicine, 2000; Tronick, 2007). Accordingly, attention must be paid to the set of skills that we argue are teachable and may serve as protective for the dyad as they mutually regulate one another through an incredibly challenging but normative stretch of time – the peak of infant crying in the first 2-3 months of life (Barr, 1990b, Brazelton, 1962).

1.1 Mutual regulation predicated on self-regulation

Mutual regulation describes dyadic interactions that work towards the goal of reciprocity between parent and infant through affect regulation (Brazelton, Kowalski, & Main, 1974). This approach acknowledges the contribution of the infant as an actor in the dyad with a differentiated affective system, but also acknowledges that often reciprocity is not achieved. As a result, the focus in mutual regulation research is on how the dyad navigates the negative affect of mis-matched states, and how parent and infant regulate one another to experience the positive affect from reciprocity. In order for the dyad to repair any mis-match, each actor must regulate his or her responses thereby further developing and reinforcing the skills required to communicate with dyadic partners. Over time, the impact of infant-parent mutual regulation on self-regulatory skill has significant impact on the child's socioemotional outcomes.

The most comprehensive considerations of many of the socioemotional difficulties children might manifest acknowledge the power of the affective communication between infant and caregiver (Tronick, 2007). The interactions parents and infants share are bi-directional, giving both actors a sense of who they are and who their partner is, as in Charles Horton Cooley's (1998) "looking glass self", and involve interpersonal/behavioral and intrapsychic/subjective aspects (Stern, 2004). Infants learn intersubjectivity as they build mental representations, or schemas for themselves, objects, and their environment, including the social world. Similarly, parents adapt their existing schemas to accommodate their role as parents. For both members of the dyad, ideas about how relationships work and their impact on the self is an on-going process; in other words, the formation of internal working models begins with interactions in early infancy and continues to shift ever so slightly with an accumulation of interactions over hours, days, weeks, and years (Pietromonaco, & Barrett, 2000). These blueprints for relationships have predictive value across the lifespan and shape expectations and behavior in the interpersonal world (Bowlby, 1982), and while they are fairly consistent over time (Waters, Merrick, Treboux, Crowell, & Albersheim, 2000), they are still flexible and can change with the input of new experiences (Pietromonaco, & Barrett, 2000). Nonetheless, most clinical theories and intervention approaches acknowledge the power of early experiences and the preference to adjust maladaptive relationship patterns early in life to relieve suffering in the present and prevent long-term problems (Sameroff, 2004).

In early infancy, dyadic interactions rely heavily on the skills and resources of the parent – skills and resources that are each heavily taxed by the demands of caring for a new baby. The more available, attentive, and creative a parent can be in meeting their infant's needs, the more likely it is that the dyad will spend time in positive interactions that are synchronistic, mutual, and rewarding. Parents are more likely to have these qualities when they are caring for themselves by self-regulating – they are more likely to observe their infant's cues, interpret them accurately, and attempt multiple responses to bring a distressed, fussy, or disengaged baby back into a more rewarding shared space.

The shared goal that humans strive for from infancy onward is a positive experience in the interpersonal world (Leary, 2004). Infants, with their not-yet-developed self-regulatory capabilities, spend the majority of their time in exchanges that are not inherently rewarding (Tronick, 2007) – states of mis-match between infant signals and caregiver responses that represent the earliest form of miscommunication between individuals. Infants are often inconsistent in their communicative gestures, parents are similarly often poor interpreters of these seemingly random cues, leading them to respond to the infant with behavior that overwhelms, frustrates, or otherwise dysregulates the infant (Tronick, 2007).

Indeed, the research on the coordination of parent-infant interactions illustrates that the majority of dyadic exchanges are not coordinated (see Fogel, 1982; Haley & Stansbury, 2003; Lester, Hoffman, & Brazelton, 1985 as examples). For our purposes, this literature yields a singularly import finding for parent-infant interactions: the reparation of these communicative mis-steps is the telling interpersonal moment (as described by Kogel & Carter, 1996). In other words, the prototypical social exchange between caregiver and infant may be uncoordinated, but any impact this miscommunication may have is dwarfed by the relieving experience of its positive resolution: when an infant fusses to signal she is cold in the night, and her father responds by further exposing the infant to change her soiled diaper, her distress may increase and her father may feel alarmed, confused, or frustrated. But when the father pulls the child to his chest, tucking a blanket around her, she is likely to become warm, comforted, and relaxed – a rewarding snuggle for both members of dyad follows. Tronick's (2007) belief is that this repaired interaction conveys more powerful information to both the daughter and the father about their relationship and themselves than the initial mismatch. He asserts that mutual regulation is predicated on effective self-regulation – particularly of the parent – and that the infant's ability to engage with the inanimate world is predicated on the endogenous, subjective social engagement patterns learned through mutual regulation with a parent (drawing on the work of Mary Ainsworth concerning exploration away from the attachment figure).

1.2 Intervention considerations

Intervention approaches for low-risk families with inconsolably crying babies (those not identified as “at risk” by dint of open cases with Child Protection Services agencies, have no history of mental illness, poverty, or addiction, for example) are rare in the United States as higher risk groups tend to garner more public and fiscal attention. The most common intervention for low-risk families is a brochure lost among the coupons for free diapers and formula passed on to parents upon discharge from the hospital with their newborn (see American Academy of Pediatrics, 2003, for a common example). Although the materials themselves are well designed and provide psychoeducation on infant injuries and crying, they do not target the specific skills sets that all parents will need to develop in response to their infants crying (e.g. self monitoring, emotion regulation, and distress tolerance skills).

After otherwise adaptive and resilient families have identified their struggle with their infant's cry – most often to a pediatrician, as infant mental health struggles during the postnatal period are still largely considered under pediatric purview (Sameroff, 2004) – and physiologic causes for the infant's distress have been ruled out, they are often told there is nothing to do but wait until the 3rd or 4th month after birth, when inconsolable crying typically abates (Barr, 1990a). Inconsolable crying may be a short term struggle, but there is

a good deal of risk to the dyad and infant if the parent becomes dysregulated (acutely, in the instance of shaking or otherwise abusing an infant, and chronically in the establishment of dysfunctional relationship patterns – both of which are considered in depth, below). The most readily available advice given to parents in this group is to “take a break” from their infant for a few minutes. The implication is that parents should be taking care of themselves, monitoring their emotions, and practicing their personal coping techniques to remain calm, safe caregivers for their infants – and to do so in 10 minutes or less during a cry bout. Often, these implications are not explicit, nor is guidance given on how to cope with the demands of an inconsolable infant (as found in the otherwise laudable period of PURPLE crying materials; NCSBS, 2004).

1.2.1 Acute risk for the mutually dysregulated dyad

Inconsolable crying has been identified as a risk factor for child abuse of many types, including violent shaking (Levitzky & Cooper, 2000; Reijneveld, van der Wal, Brugman, Hira Sing, & Verloove-Vanhorick, 2004). A significant portion of the infant death rate each year in the United States is accounted for by traumatic head injuries, including infants who die as a result from the injuries sustained from violent shaking (i.e., Shaken Baby Syndrome [SBS]). Shaking an infant younger than 2 years of age results in often-fatal brain injury plus a plethora of secondary injuries caused by gripping the infant during violent shaking (broken ribs, and bruising on the torso and extremities, plus retinal tears and bleeding in the eye; Jentzen, 2001). Research on the perpetration of SBS has identified only one consistent predictor – an infant’s inconsolable cry (Lee & Barr, 2007; Barr, Trent, & Cross, 2006).

The case of SBS is extreme, and the consequences of that particular mechanism of injury are particularly lethal, but there are many other missteps parents might take when faced with the fatigue, stress, and other demands of caring for an inconsolably crying infant. As noted by Papoušek and colleagues (2008), infants who cry inconsolably are often paradoxically soothed for short periods of time by stimulating activities (for example, being held while bouncing on an exercise ball, or vigorous rocking in a rocking chair). These caregiving responses to a cry might distract the infant from the intense physiologic rhythm of a cry, but do not provide the organizing qualities the infant needs to settle into either a calm alert state or to down-regulate into the drowsy and deeper sleep states. Thus, strategies effective for halting a cry are not necessarily long-term solutions that support infant self-regulation and can leave the dyad in a frustrating cycle of short periods of calm between periods of fussing or full blown crying bouts (Papoušek et al., 2008).

Parents are at an increased risk for more impulsive, poorly considered responses when their emotion regulation flags, when inattention to or inability to cope with the accumulation of frustration, exhaustion, anger, loneliness, and desperation build in the course of days or weeks of inconsolable crying. When parents are run ragged by their often ineffective attempts to calm a perpetually distressed infant, their responses can become increasingly less nurturing long before their actions become less safe. Even the more seemingly benign response of leaving the child alone for periods of time to rest or emotionally regroup, for example, can set the stage for a pattern of neglectful interaction that can negatively impact how the infant grows to view him or herself and the social world.

1.2.2 Chronic risk for the mutually dysregulated dyad

Infants with generally positive internal working models for themselves and the social world are better prepared to encounter challenging situations later in life and adapt to them successfully, including the ability to work within the challenging context to change the environment itself (Goldhaber, 2000). The qualities that compose these adaptive worldviews are considered in current research programs, but generally build upon a sense of trust in the social world (particularly in caregivers during infancy; i.e., Erikson, 1950). These infants learn that the social world will not be dysregulating, and that intimate relationship partners can be relied upon to respond to distress sensitively and promptly when needed; this gives them a sense of confidence in the environment (Sroufe, 1996) and builds emotional and communicative self-efficacy (as summarized by Goldhaber 2000; Tronick, 2007). Additionally, caregivers who remain emotionally available to their infants by attending to their own needs model these skills for their children, thereby communicating that distress is resolvable and often temporary, that a full range of even intense emotions is a healthy part of social life, and that individuals are capable of manipulating their own affective experiences. In essence, children who observe their parents' adaptive self-regulation learn attitudes and behavior that support their own abilities to engage in a healthy interpersonal life (Leary, 2004). Without experienced others (including parents, siblings and, later, peers and mentors) to model good self-regulatory skill and scaffold infant's own regulatory attempts, and without a sense of trust in their caregivers and the environment as partners in mutual regulation while working towards shared goals, infants lack the confidence to explore their world, to advocate for themselves when they are distressed, or to offer help to peers when they perceive distress in others. These infants are necessarily using their self-regulatory resources on negative affect all the while learning they are ineffective communicators, helpless in interactions with their unavailable and unreliable parents (Tronick, 2007).

2. Strategies to support mutual regulation

There is considerable evidence that social interactions give individuals tremendous amounts of information about themselves across the lifespan. The management of dyadic social interactions is a particularly crucial skill set that supports positive exchanges and repairs to unsuccessful or asynchronous ones. Tronick (2007) includes these skills and the identity implications of both rewarding and unrewarding dyadic interaction between infants and their mothers in his description of a Mutual Regulation Model (MRM). We believe that many of the skills used to regulate parent-infant interactions are teachable, as the early intervention literature on parenting suggests, and that improving parent self regulation is part of the skill set that serves to support dyadic interaction. Cognitive coping mechanisms used to regulate distress when caring for infants are the favored regulatory skill (Russell, Alpert, & Trudeau, 2009). Caregivers of all sorts (babysitters and those in other near-parent roles) describe using coping strategies that predominantly involve mental activity – like counting to ten, and mentally escaping to a “happy place” – and this preference or reliance on cognitive engagement to distract or contain emotional distress is at the root of many therapeutic approaches, including cognitive behavioral therapies (CBT) such as dialectical behavior therapy (DBT). Dialectical Behavior Therapy (DBT) targets emotion regulation as a crucial mechanism for change in behavioral outcomes (Axelrod, Perepletchikova, Holtzman, & Sinha, 2011) and overall psychological well-being.

Emotion regulation is dependent on self monitoring skills because without the ability to take stock of how we feel, both psychologically and physically, we lack information about how to alter our behavior or work to change our environment. In particular, self monitoring skills lead to better distress tolerance and emotion regulation practices which help us adapt to challenging circumstances - and, possibly, even to change those circumstances (Linehan, 1993a; Linehan, 1993b). When a parent is calm and in control of their affect, engaged with their infant, and has the energy/cognitive resources to try new responses to their infant's cues, new patterns of interaction emerge, creating the possibility for less tension, fear, and frustration within the infant-parent dyad. We begin this section with a deeper examination of DBT as an empirically tested tool for supporting parents facing the challenges of their newborn child.

Dialectical Behavior Therapy (DBT), a widely used empirically supported treatment developed by Dr. Marsha Linehan to address the needs of patients with Borderline Personality Disorder (BPD), has been applied to multiple populations to help individuals to develop emotion regulation, self-soothing, mindfulness and crisis management (Linehan, 1993a; Linehan, 1993b). There is a growing body of empirical work demonstrating the effectiveness of DBT for a range of populations (for further information on DBT adaptations for adolescents and children, we suggest Klein, & Miller, 2011 and Perepletchikova, Axelrod, Kaufman, Rounsaville, Douglas-Palumberi, & Miller, 2010, respectively) across a variety of psychiatric needs including ADHD, substance use, suicide risk, PTSD, and eating disorders (Davenport, Bore, & Campbell, 2010; Axelrod, Perepletchikova, Holtzman, & Sinha, 2011; Harned, Chapman, Dexter-Mazza, Murray, Comptois, & Linehan, 2008 or Kotler, Iancu, Efroni, & Amir, 2001; Koons, Robins, Tweed, Lynch, et al., 2001; Safer, Telch, & Agras, 2001 or Telch, Agras, & Linehan, 2001). Although these techniques were first developed to address the symptoms of some of the most difficult to treat client populations, many of the basic tools are useful to *anyone* and appear to target the very vulnerabilities that many new parents face when dealing with an inconsolable infant.

The primary targets of DBT most relevant to parenting infants are: Core Mindfulness, Emotion Regulation, and Distress Tolerance (Linehan, 1993a; Linehan, 1993b). (The fourth target of DBT, Interpersonal Effectiveness, is useful with individuals with chronic emotional dysregulation and crisis, but may not apply to new parents as a whole.) The skill modules in each do not require advanced training in DBT, many of them could be adapted for self-learning if there were additional reinforcers to maintain practice and provide personalized consultation (such as through meetings with a visiting nurse, pediatrician, therapist, or through self-study support groups). DBT combines psychoeducation, specific cognitive techniques, behavioral practice, and mindfulness. The goal of this approach is to help the new parent to feel validated in their experience of distress, and to take a problem-solving stance - not on solving the inconsolable crying, but on solving how it causes parents to get dysregulated. For an identified high-risk group (such as parents with anger management or impulse control problems, or those who have previously engaged in infant abuse), it may make sense to implement DBT closer to its original format with individual, and group clinical support.

2.1 Core mindfulness

The first target in DBT is Core Mindfulness (Linehan, 1993a; Linehan, 1993b). As noted by Lynch, Chapman, Rosenthal, Kuo, and Linehan (2006), this skill set is based on the premise

that individuals have to build self-monitoring skills in order to maintain being present in the moment of “crisis” and not reacting impulsively (in the extreme this could be shaking the infant) or shutting down (in the extreme this is depression, withdrawal, neglect). The belief is that all individuals are of two minds- Emotional Mind and Reasonable Mind. The vulnerability lies in being too far in one extreme. When fully in Emotional Mind, we are vulnerable to becoming flooded by our feelings, to act impulsively, and to cause others to feel dysregulated in relationship to us. When fully in Reasonable Mind, we are vulnerable to disregarding our own and other’s feelings. DBT teaches the concept of “Wise Mind,” a regulated place between Emotional Mind and Reasonable Mind. “Wise Mind” is the area of regulation needed to manage the emotional, cognitive, and physical demands of parenting *any* infant. Identifying triggers and contributing factors to being more in emotional mind (such as high pitched screaming, feeling hopeless, lack of sleep, lack of self-care, being alone), and using cognitive and behavioral strategies to help regulate and return to the balanced state of “Wise Mind” are the goals to coping with an infant’s distress.

Core Mindfulness skills combine two sets of skills: “what” skills and “how” skills (Linehan, 1993a; Linehan, 1993b). The “what” skills are learning to observe, describe and participate with awareness. An assumption is that participating without awareness is characteristic of impulsive and mood dependent behavior. Generally, observing, describing, and participating is only necessary when learning a new behavior- such as how a novice piano player learns how to play the piano by paying close attention to their hands and fingers, they may count beats out loud or name the keys and chords they are playing. As skills improve, the observing and describing cease to be necessary. But, if a habitual mistake is learned, they may have to revert to the observing/describing to learn a new pattern. Teaching parents to observe/describe/participate in their world helps to build awareness and is a building block for developing self-monitoring skills and self-regulation.

The “how” skills have to do with *how* to attend, describe and participate. Taking a non-judgmental stance helps to eliminate self-blame and negative beliefs such as “I am a bad mother” and offers the opportunity to observe/describe/participate in their experiences without reinforcing negative self-talk. One “how” skill is “Focus on the Moment,” it is useful in avoiding the rumination about past negative experiences and ascribing the same outcomes to current ones- such as having had three bad nights of bouts of inconsolable crying and responding in the present to the infant with the thoughts, fears, frustration, and belief that it will happen again. “Focus on the Moment” helps to ground the parent in the current moment and to allow the parent to respond as if the situation was novel- often leading to calmer, more creative, and more patient responses to their infant.

2.2 Emotion regulation: Self-monitoring

Many people attempt to regulate their emotions by telling themselves not to feel what they feel. This oversimplification results in an emotionally invalidating environment that requires people to smile when they are unhappy, be nice when they are angry, and bottle up their feelings until they are so overwhelmed and vulnerable that they are flooded (resulting in depression, rage, and other forms of extreme dysregulation). Emotion regulation, the second target area of DBT, is best taught through the framework of emotional self-validation (Linehan, 1993a; Linehan, 1993b). These skills are taught through a combination of

psychoeducation about emotional states and conscious self-practice. In the case of intervening with parents of infants with inconsolable crying, it may make sense to target dominant negative emotional states: hopelessness, fear, anger, and emotional exhaustion. The core tenant of emotion regulation skills is to build self-monitoring. Conscious practice and “homework” assignments increase individual’s awareness and monitoring of emotions and, then, inherent in increased awareness and monitoring is increased *action* to regulate.

The Emotion Regulation target in DBT (Linehan, 1993a; Linehan, 1993b) counters emotion dysregulation with 4 skills: 1) Identifying Emotions. Many emotional experiences go unnoticed in the course of day, some of these are fleeting, mild experiences that do not warrant examination or any particular response; but forming the habit of noting and articulating what emotions feel like is an important precursor to having some agency over behavior when feelings are intense and/or unpleasant. 2) Increasing Mindfulness to Current Emotions. This involves practicing experiencing emotions without judging or trying to inhibit, block or distract from those feelings. Judging leads to guilt, anger, anxiety, and impulsivity. If an individual is feeling sad, it is important to make space and time to feel sad. 3) Increasing Positive Emotional Events includes consciously finding ways to increase positive experiences and being mindful of positive moments. This is often accomplished by keeping a daily journal only of the positive experiences of the day. 4) Reducing Vulnerability to Dysregulation, which has two parts. First is to Identify Triggers and Vulnerabilities, for example recognizing that caffeine makes me edgy, or that not feeling supported makes me angry; and second, to Make a Self-care Plan to Reduce Triggering Situations and Personal/Situational vulnerabilities, by avoiding coffee or talking to my partner about alternating care for the baby every half-hour during crying jags.

2.3 Distress tolerance

The third target area taught in DBT is Distress Tolerance (Linehan, 1993a; Linehan, 1993b). These skills address crisis survival when emotion regulation has failed. The mantra for these times is *Make it through the moment without making the situation worse, but hopefully making it better*. Distress Tolerance skills build off of the core mindfulness tenets. Most mental health approaches focus on changing distressing events and circumstances. They often ignore the concepts of acceptance and learning how to *tolerate* distressing emotions. Parents with inconsolable infants cannot always change the events and circumstance of their distress, and thus need skills to manage their emotions effectively. These skills are about accepting current reality both in the situation and in oneself without judging, and taking specific action to reduce the risk of acting impulsively (Davenport, Bore, & Campbell, 2010). Distress tolerance skills focus on several specific strategies. At any given time one may or may not work. Parents are taught to develop a repertoire of skills to try when they have reached the proverbial “end of their rope.” There are three main categories of skills that are useful and relevant to parents with infants: 1) Distraction Skills, 2) Improving the Moment, and 3) Self-soothing Skills.

3. Conclusion

Parenting a newborn will involve periods of high-stress that challenge all parents to adapt their self care routines. This component of the transition into the role of “parent” can be

supported through two pathways: First, we believe the cultural expectations that *good* parents know how to keep their infant calm and have the skills to do so are harmful to families because all babies cry, and some cry excessively – this is not a reflection on parenting skills but a normative experience (Barr, 1990a). Human service professionals can play an important role in disseminating messages that normalize this experience for parents and encourage communities to be more supportive of families with infants. Second, we believe the growing empirical evidence for the emotion regulation benefits of DBT in clinical populations can lend concrete skills to all parents of infants – even normative, high functioning families may benefit from the lessons learned across 20 years of DBT practice. Although the empirical literature on DBT outcomes is currently centered on clinical populations, future research would be wise to consider the protective distress tolerance and emotion regulation skills gained by normative populations faced with life-expectant stressors (as in the case of the transition to parenthood). Through the use of three target areas of DBT, parents can learn to self-regulate more effectively, co-regulate more effectively, and manage the distressing experience of having a crying infant without becoming dysregulated and risking injury to their child.

4. References

- American Academy of Pediatrics (2003). *Prevent Shaken Baby Syndrome* [Brochure]. American Academy of Pediatrics, 141 Northwest Point Blvd., Elk Grove Village, IL, 60007.
- Axelrod, S. R., Perepletchikova, F., Holtzman, K., & Sinha, R. (2011). Emotion regulation and substance use frequency in women with substance use and borderline personality disorder receiving dialectical behavior therapy. *American Journal of Drug and Alcohol Abuse*, 37, 37-42.
- Barr, R. G. (1990a) The normal crying curve: what do we really know? *Developmental Medicine and Child Neurology*, 32, 356-362.
- Barr, R. G. (1990b). The 'colic' enigma: Prolonged episodes of a normal predisposition to cry. *Infant Mental Health Journal*, 11, 340-348.
- Barr, R. G. (1993). Normality: A clinically useless concept; the case of infant crying and colic. *Journal of Developmental and Behavioral Pediatrics*, 14, 264-270.
- Barr, R. G. (1998). Crying in the first year of life: Good news in the midst of distress. *Child: Care, Health and Development*, 24, 425-439.
- Barr, R. G., Hopkins, B., & Green, J. A. (Eds) (2000). *Crying as a Sign, a Symptom, & A Signal*. Mac Keith Press
- Barr, R. G., Trent, R. B., & Cross, J. (2006). Age-related incidence curve of hospitalized Shaken Baby Syndrome cases: Convergent evidence for crying as a trigger to shaking. *Child Abuse & Neglect*, 30, 7-16.
- Beeghly, M., & Tronick, E. Z. (1994). Effects of prenatal exposure to cocaine in early infancy: Toxic effects of the process of mutual regulation. *Infant Mental Health Journal*, 15, 158-175.
- Bowlby, J. (1982). *Attachment and loss: Vol. 1. Attachment* (2nd ed.). New York: Basic Books.
- Brazelton, T. B. (1962) Crying in infancy. *Pediatrics*, 29, 579-588.
- Brazelton, T. B., Koslowski, B., & Main, M. (1974). The origins of reciprocity: The early mother-infant interaction. In M. Lewis & M. Rosenblum (Eds.), *The effect of the infant on its caretaker: The origins of behavior* (pp. 49-76). New York: Wiley
- Cooley, C. H. (1998). *On self and social organization*. Chicago, IL: University of Chicago Press

- Crouch, J. L., Skowronski, J. J., Milner, J. S., & Harris, B. (2008). Parental response to infant crying: The influence of child physical abuse risk and hostile priming. *Child Abuse & Neglect*, 32, 702-710.
- Davenport, J. Bore, M., & Campbell, J. (2010). Changes in personality in pre- and post-dialectical behavior therapy borderline personality groups: A question of self-control. *Australian Psychologist*, 45, 59-66.
- Dimeff, L. A. & Koerner, K. (Eds.) (2007). *Dialectical Behavior Therapy in clinical practice: Applications across disorders and settings*. New York: Guilford Press
- Easterbrooks, M. A., Biesecker, G., & Lyons-Ruth, K. (2000). Infancy predictors of emotional availability in middle childhood: The roles of attachment security and maternal depressive symptomology. *Attachment & Human Development*, 2, 170-187.
- Erikson, E.H. (1950). *Childhood and society*. New York: Norton.
- Fogel, A. (1982). Early adult-infant interaction: Expectable sequences of behavior. *Pediatric Psychology*, 7, 1-22.
- Goldhaber, D. E. (2000). *Theories of human development: Integrative perspectives*. Mountain View, CA: Mayfield Publishing Co.
- Harned, M., Chapman, A., Dexter-Mazza, E., Murray, A., Comptois, K. A., & Linehan, M. M. (2008). Treating co-occurring axis I disorders in recurrently suicidal women with borderline personality disorder: A 2-year randomized trial of dialectical behavior therapy versus community treatment by experts. *Journal of Consulting and Clinical Psychology*, 76, 1068-1075.
- Haley, D. W., & Stansbury, K. (2003). Infant stress and parent responsiveness: Regulation of physiology and behavior during still-face and reunion. *Child Development*, 74, 1534-1546.
- Henry, S. (2004). Discerning differences: Gastroesophageal reflux and gastroesophageal reflux disease in infants. *Advances in Neonatal Care*, 4, 235-247.
- Hirvikoski, T., Waaler, E., Alfredsson, J., Pihlgren, C., Holmstron, A., Johnson, A., et al., (2011). Reduced ADHD symptoms in adults with ADHD after structures skills training group: Results from a randomized controlled trial. *Behavior Research and Therapy*, 49, 175-185.
- Howell, E., Mora, P., & Leventhal, H. (2006). Correlates of early postpartum depressive symptoms. *Maternal and Child Health Journal*, 10, 149-157.
- Jentzen, J. M. (2001). Pathological findings in fatal Shaken Impact Syndrome. *Journal of Aggression, Maltreatment, & Trauma*, 5, 199-224.
- Klein, D. A., & Miller, A. L. (2011). Dialectical behavior therapy for suicidal adolescents with borderline personality disorder. *Child and Adolescent Psychiatric Clinics of North America*, 20, 205-216.
- Kogan, N., & Carter, A. S. (1996). Mother-infant reengagement following the still-face: The role of maternal emotional availability in infant affect regulation. *Infant Behavior and Development*, 19, 359-370.
- Koons, C. R., Robins, C. J., Tweed, J. L., Lynch, R. R., et al., (2001). Efficacy of dialectical behavior therapy in women veterans with borderline personality disorder. *Behavior Therapy*, 32, 371-390.
- Kotler, M., Iancu, I., Efroni, R., & Amir, M. (2001). Anger, impulsivity, social support, and suicide risk in patients with posttraumatic stress disorder. *Journal of Nervous and Mental Disease*, 189, 162-167.

- Leary, M. R. (2004). The sociometer, self-esteem, and the regulation of interpersonal behavior. In R. F. Baumeister & K. D. Vohs (Eds.), *Handbook of self-regulation: Research, theory, and applications* (pp 373-391). New York: Guilford Press.
- Lee, C., & Barr, R. G. (2007). Age-related incidence of publicly reported Shaken Baby Syndrome cases: Is crying a trigger for shaking? *Journal of Developmental & Behavioral Pediatrics*, 28, 288-293.
- Lester, B., Hoffman, J., & Brazelton, T. B. (1985). The rhythmic structure of mother-infant interaction in term and preterm infants. *Child Development*, 56, 15-27.
- Levitzky, S., & Cooper, R. (2000). Infant colic syndrome—Maternal fantasies of aggression and infanticide. *Clinical Pediatrics*, 395-400.
- Lieberman, A. F. (2004). Child-parent psychotherapy: A relationship-based approach to the treatment of mental health disorders in infancy and early childhood. In A. J. Sameroff, S. C. McDonough, & K. L. Rosenblum (Eds.), *Treating parent-infant relationship problems: Strategies for intervention* (pp.97-122). New York: Guilford Press.
- Linehan, M.M. (1993a). *Cognitive-behavioral treatment of borderline personality disorder*. New York: Guilford Press.
- Linehan, M.M. (1993b). *Skills training manual for treating borderline personality disorder*. New York: Guilford Press.
- Lynch, T. R., Chapman, A. L., Rosenthal, M. Z., Kuo, J. R., & Linehan, M. M. (2006). Mechanisms of change in dialectical behavior therapy: Theoretical and empirical observations. *Journal of Clinical Psychology*, 62, 459-480.
- Marklund, B., Ahlstedt, S., & Nordstrom, G. (2007). Food hypersensitivity and quality of life. *Current Opinion in Allergy and Clinical Immunology*, 7, 279-287.
- Maxted, A., Dickstein, S., Miller-Loncar, C., High, P., Spritz, B., Liu, J., & Lester, B. (2005). Infant colic and maternal depression. *Infant Mental Health Journal*, 26, 56-68.
- Miller, A. R. & Barr, R. G. (1991). Infantile colic: Is it a gut issue? *Pediatric Clinics of North America*, 38, 1407-1423.
- National Center on Shaken Baby Syndrome (2004). *Period of PURPLE crying*. Ogden (UT): National Center on Shaken Baby Syndrome.
- National Research Council Institute of Medicine (2000). *From neurons to neighborhoods: The science of early childhood development*. Washington, D.C.: National Academy Press
- Papousek, M., & von Hofacker, N. (1998). Persistent crying in early infancy: A non-trivial condition of risk for the developing mother- infant relationship. *Child: Care, Health, and Development*, 24, 395-424.
- Papousek, M., Schieche, M., & Wurmser, H. (Eds.). (2008). *Disorders of behavioral and emotional regulation in the first year of life: Early risks and intervention in the developing parent-infant relationship* (K. Kronenberg, Trans.). Washington, D.C.: Zero to Three.
- Perepletchikova, F., Axelrod, S. R., Kaufman, J., Rounsaville, B. J., Douglas-Palumberi, H., & Miller, A. L. (2011). Adapting dialectical behavior therapy for children: Towards a new research agenda for pediatric suicidal and non-suicidal self-injurious behaviors. *Child & Adolescent Mental Health*, 16, 116-121.
- Phillips, R. B., Sharma, R., Premachandra, B. R., Vaughn, A. J., Reyes-Lee, M. (1996). Intrauterine exposure to cocaine: Effect on neurobehavior of neonates. *Infant Behavior & Development*, 19, 71-81.

- Pietromonaco, P. R., & Barrett, L. F. (2000). The internal working models concept: What do we really know about the self in relation to others? *Review of General Psychology*, 4, 155-175.
- Raiha, H., Lehtonen, L., Saleva, K., & Korvenranta, H. (2002). Excessively crying infant in the family: Mother-infant, father-infant and mother-father interaction. *Child: Care, Health, and Development*, 28, 419-429.
- Reijneveld, S., van der Wal, M., Brugman, E., Hira Sing, R., & Verloove-Vanhorick, P. (2004). Infant crying and abuse. *Lancet*, 364, 1340-1342.
- Russell, B. S., Alpert, L., & Trudeau, J. J. (2009). Child abuse prevention during infancy: Intervention implications for caregivers' attitudes towards emotion regulation. *Journal of Human Behavior in the Social Environment*, 19(5), 540-553.
- Safer, D., Telch, C. F., & Agras, W. S. (2001). Dialectical behavior therapy for bulimia nervosa. *American Journals of Psychiatry*, 158, 632-634.
- Sameroff, A. J. (2004). Ports of entry and the dynamics of mother-infant interventions. In A. J. Sameroff, S. C. McDonough, & K. L. Rosenblum (Eds.), *Treating parent-infant relationship problems: Strategies for intervention* (pp. 3-28). New York: Guilford Press.
- Sroufe, L. A. (1996). *Emotional development: The organization of emotional life in the early years*. New York: Cambridge University Press.
- Steina, A., Artechea, A., Lehtonen, A., Craskeb, M., Harveyc, A., Counsell, N., & Murray, L. (2010). Interpretation of infant facial expression in the context of maternal postnatal depression. *Infant Behavior & Development*, 33, 273-278.
- Stern, D. N. (2004). The motherhood constellation: Therapeutic approaches to early relational problems. In A. J. Sameroff, S. C. McDonough, & K. L. Rosenblum (Eds.), *Treating parent-infant relationship problems: Strategies for intervention* (pp. 29-42). New York: Guilford Press.
- Stifter, C. A. & Braungart, J. (1992). Infant colic: A transient condition with no apparent effects. *Journal of Applied Developmental Psychology*, 13, 447-462.
- St. James-Roberts, I. (2007). Helping parents to manage infant crying and sleeping: A review of the evidence and its implications for services. *Child Abuse Review*, 16, 47-69.
- St. James-Roberts, I. & Halil, T. (1991). Infant crying patterns in the first year: normative and clinical findings. *Journal of Child Psychology and Psychiatry*, 32, 951-968.
- Telch, C., Agras, W. S., & Linehan, M. M. (2001). Dialectical behavior therapy for binge eating disorder. *Journal of Consulting and Clinical Psychology*, 69, 1061-1065.
- Trevarthen, C., & Aitken, K. J. (2001). Infant intersubjectivity: Research, theory, and clinical applications. *Journal of Child Psychology & Psychiatry*, 42, 3-48.
- Tronick, E. (2007). *The neurobehavioral and social-emotional development of infants and children*. New York: Springer.
- U.S. Department of Health and Human Services, Administration for Children and Families, Administration on Children, Youth and Families, Children's Bureau (2010). *Child Maltreatment 2008*. Available from http://www.acf.hhs.gov/programs/cb/stats_research/index.htm#can
- Waters, E., Merrick, S., Treboux, D., Crowell, J., & Albershiem, L. (2000). Attachment security in infancy and early adulthood: A 20-year longitudinal study. *Child Development*, 71, 543-562.
- Wessel, M. A., Cobb, J. C., Jackson, E. B., Harris, G. S., & Detwiler, A. C. (1954). Paroxysmal fussing in infants sometimes called "colic." *Pediatrics*, 14, 421-434.



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