

# The Role of Cognitive Fusion in Impaired Parenting: An RFT Analysis

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## ABSTRACT

Traditional behavioral accounts of impaired parenting have done much to elucidate the specific behavioral interactions between parents and children that play a role in developing and maintaining child misbehavior. Several highly praised behavioral treatments demonstrating efficacy across certain parent populations have been developed based on these theories. However, such approaches have been criticized for their insensitivity to the context of a given act or behavior, and their limited attention to the impact of parents' private events in their interactions with their children. Moreover, their demonstrated effects with parents struggling with psychopathology, poverty, or other stressors have been at best inconsistent. Relational Frame Theory (RFT) offers a comprehensive theoretical framework through which to extend existing behavioral models of impaired parenting; and to suggest new directions for treatment. RFT provides a model for elucidating the role of verbal processes and contextual variables in impaired parenting repertoires. This paper will address the role of parent cognition and cognitive fusion in the development and maintenance of maladaptive parenting, especially with regard to young children. A case conceptualization and intervention dually targeting skills deficits and parent verbal behaviors is presented. Mindfulness (defusion), acceptance, and values are discussed as key processes in treatment.

*Key Words:* Parenting, parent training, mindfulness, relational frame theory, acceptance.

## RESUMEN

*El papel de la fusión cognitiva en las interacciones problemáticas padres-hijos.* Las explicaciones conductuales tradicionales de los estilos educativos perjudiciales han hecho mucho por aclarar las interacciones conductuales específicas entre padres e hijos que tienen un papel importante en el desarrollo y mantenimiento de conductas perturbadoras en la infancia. Fundamentados en tales explicaciones, se han desarrollado diversos tratamientos muy considerados en tanto que han demostrado cierta eficacia a través de algunas poblaciones de padres. Sin embargo, tales aproximaciones han sido criticadas por su insensibilidad a los contextos en los que las conductas se producen y por su atención limitada en relación al impacto de los eventos privados de los padres sobre las interacciones con sus hijos. Más aun, los efectos obtenidos con padres que sufrían de psicopatología, pobreza, y otros estresores, han sido como mínimo inconsistentes. La Teoría de los Marcos Relacionales (RFT)

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ofrece un marco teórico comprehensivo a través del cuál es posible extender los modelos conductuales existentes respecto de los estilos educativos perjudiciales y ofrecer nuevas direcciones para el tratamiento. La RFT ofrece un modelo para elucidar el papel de los procesos verbales y las variables contextuales implicados en tales repertorios educativos. Este artículo se dirige al papel de las cogniciones de los padres y de la fusión cognitiva en el desarrollo y mantenimiento de estilos educativos desadaptativos, especialmente en el caso de niños pequeños. Se presenta una conceptualización de caso y una intervención dirigidas, doblemente, a los déficits en habilidades y al comportamiento verbal de los padres. Se discuten los procesos clave en el tratamiento: toma de conciencia (defusion), aceptación y valores.

*Palabras clave:* pautas de crianza, entrenamiento a padres, toma de conciencia, teoría del marco relacional, aceptación.

*Question 1:* What is the sound of one hand clapping?

*Answer:* The sound of one hand clapping is the sound of one hand clapping.

*Question 2:* What is the sound of one child misbehaving?

*Answer:* The sound of one child misbehaving is the sound of one child misbehaving.

*Question 3:* What is the sound of *my* child misbehaving?

*Answer:* The sound of "I can't control this child"; the sound of "I should be able to"; the sound of "I am a bad parent"; the sound of "I don't know what to do"; the sound of "I hate this child!"; the sound of "I shouldn't feel that way!"; the sound of my failure.

An Adapted Zen Koan for Parents

Social learning theorists posit that family interactions play an enormous role in developing and maintaining children's behavioral competencies as well as difficulties. Behavioral parent-training interventions, in general, assume that parents' direct manipulation of environmental contingencies significantly impacts child outcomes. Most behavioral and cognitive-behavioral therapies for children incorporate explicitly defined roles for their parents. Some require that parents alter disciplinary practices purported to maintain problematic behaviors. Others cast them as members of a team that encourages and supports a child progressing through sometimes challenging treatments (e.g., March & Mulle, 1998). Treatment efforts aimed at changing parenting behaviors, such as those developed by Sheila Eyberg (PCIT; Foote, Eyberg, & Schuhmann, 1998), Carolyn Webster-Stratton (The Incredible Years; 1996) and Rex Forehand (Helping the Noncompliant Child; McMahon & Forehand, 2003) have demonstrated efficacy in improving young children's behavior problems, such as non-compliance, tantrumming, and aggression. Such behavioral parent training programs are often hailed as crowning achievements in the field.

Contemporary behavioral parenting interventions are based on a sizeable body of empirical study concerned with interactions between parents and their children. Micro-social behavioral models have focused on discrete, sequenced links of operant

behavioral chains occurring between parent-child dyads. For example, the classic work of Patterson (1982) has defined maladaptive behavioral interactions as a coercive process. In this process, children and parents behave in an aversive, escalating, and circular exchange dictated by the probability of negative reinforcement. Such behavior also elicits similar rates and types of responding in other family members.

Recent studies suggest the importance of the family context in which such behaviors occur, for example, the relative reinforcement for other behaviors in addition to those perceived as aversive. Consistent with Herrnstein's matching law (1974), social learning data suggest that the rate of reinforcement a child receives for aggressive behavior in the context of reinforcement garnered by non-aggressive behavior predicts the frequency of aggressive acts. In other words, the relative functional value of a given response within an array of responses determines the frequency at which an individual engages in that response (Snyder & Patterson, 1995; Snyder & Stoolmiller, 2002). The methodology utilized in investigations of this sort, while innovative, may fail to fully describe the process by which parents may generate or impact antisocial behavior. This line of research, while illustrating apparently lawful relationships between parental reinforcement contingencies and child behavior, has been criticized for occurring "in a vacuum," without regard for broader or more varied contextual factors (Dumas, 1989). Although a skills-deficit may lie at the core of impaired parenting, one might also consider why it is that such deficits exist, in what contexts they tend to occur, and how those contexts might be manipulated to effect meaningful and pervasive changes.

#### TOWARDS A FUNCTIONAL CONTEXTUALIST MODEL OF PARENTING

What exactly is "context"? The term evokes a myriad of different images that necessitate widely varied levels of analysis—for example, one might consider a given behavior in the context of other behaviors, or a child within a family, or a family within a neighborhood, or a neighborhood within a culture at large. Context may be internal or external: mothers experiencing depression evaluate or respond to child behaviors more negatively in the context of a depressive episode than when they are not depressed (Querido, Eyberg, & Boggs, 2001; Lovejoy, Graczyk, O'Hare, & Neuman, 2000). Examining a child or family within a complete ecology requires addressing many different contexts, with multiple layers. Current treatment efforts treat context very differently across studies, making research into the contribution of each "context" formidable and at times confusing.

A particular philosophy of science, *functional contextualism*, holds that attention to the context of a particular behavior is essential to our ability to predict and manipulate that behavior. This approach is organized by three core premises: 1) That an act cannot be fully understood outside of both its current and historical contexts; 2) That this understanding must detail the function of an act within its particular context; and, 3) That this understanding must address the workability of a given act in the context of its purpose rather than based on the preanalytic "truth" of why it occurs (Hayes, Strosahl, & Wilson, 1999; Biglan & Hayes, 1996). In other words, there is more than one way to skin a cat: the "truth" of a given behavior lies in its functional properties rather than

its topography. In fact, the shape of a particular behavior becomes unimportant relative to its functional goals. Consider parents who desire to raise compliant children. Parenting behavior targeting compliance is “workable” only insofar as it results in parents’ experience of their child as compliant. For example, if a parent desires to attain a child’s compliance, he or she may verbally prompt the child to comply, state the direction in such a way to make compliance seem desirable, state the direction in the context of an ongoing stream of compliant acts (behavioral momentum), and so on. By the same token, a parent may attain “compliance” by failing to give any commands, or selectively ignoring acts of non-compliance, or encouraging other adults either to ensure compliance or to develop similar blind spots with regard to that child’s behavior. The paradox presented here is purposeful: even while the topographical consequence of a parent’s behavior may be non-compliance or at best, the absence of non-compliance, parents may *experience* that as compliance. The functional goal of each of these diverse and at times antithetical parenting behaviors is exactly the same: to experience one’s child as “compliant,” and minimize the experience of “noncompliance.” By halting our behavioral analysis at the observable topography of a particular behavior at the expense of its broader functional properties, we lose information that may be crucial to our ability to alter problematic behavior and foster the development of more adaptive repertoires. The information lost is simply this: the psychological functions of parenting events.

Similar to traditional behavioral thought and methodology, a functional contextualist approach finds “truth” in the extent to which the analysis allows for the prediction and influence of the behavior of interest, rather than being satisfied with a mere description, however detailed. At the heart of the functional contextualist approach is a theory about the role of language in human doings -and undoings. This approach posits that events acquire their psychological function through both directly experienced and verbally mediated events. Because humans are verbal creatures, we experience much of our world through verbal means. That is, the meaning of the events we encounter is often the result of complex verbal learning processes. Even directly experienced contingencies may have verbal functions. Thus, functional contextualist philosophy would suggest that we cannot fully describe parenting behavior without ascertaining the functional properties of parents’ experienced events during their interactions with their children. Nor can we expect to predict behavior -without elucidating the ways that those psychological functions are acquired through both direct and verbal learning processes.

One theoretical framework that promises a detailed treatment of the verbal context of impaired parenting is that of Relational Frame Theory (RFT). RFT offers an extension of traditional behavioral approaches to impaired parenting. It makes possible an analysis of parenting from a more complete functional contextualist perspective addressing the whole act of parenting in the context of proximal antecedents and consequences, but also within its larger, verbally mediated context. In doing so, it provides a model for elucidating the role of verbal processes in the development and maintenance of impaired parenting repertoires. Verbal relations in parent-child interactions have been left unexplored by traditional behavioral parenting paradigms. RFT will allow parenting researchers to venture into this terra incognita.

## THE ROLE OF VERBAL PROCESSES IN PARENTING

In general, RFT posits that verbal humans learn in more varied ways than non-verbal organisms. Creatures without language learn exclusively through direct contact with contingencies. However, humans also learn through contact with stimuli that have acquired their psychological functions as result of derived relational responding (Hayes, Fox, Gifford, Wilson, Barnes-Holmes, & Healy, 2001; Hayes et al., 1999; Wilson & Luciano, 2002). A core principle of RFT is that humans respond to events in terms of other events, and that such relational responding is under contextual control. Through a history of multiple exemplar training, certain contexts may come to occasion different densities of particular verbal relations than others. Moreover, such a history, occurring in a variety of contexts, allows relational responses to form purely functional classes of behavior (Hayes, et al., 2001; Luciano, Gómez, & Valdivia, 2002). In other words, related events' inherent properties become unimportant compared to the relations between the events themselves; and the contexts in which those events ultimately occur. For example, parents living in violent neighborhoods may think more frequently about protecting their children, and may feel more desperate to keep their children safe than parents in more benign surroundings. Denizens of violent neighborhoods may talk about violent events in the supermarket, hear about them on the news, see their sequelae in damaged property or the accounts of injured neighbors, or even directly experience them. In such a neighborhood context, coupled with multiple exemplars of danger, one might expect authoritarian disciplinary practices perceived as protective to increase in frequency, as indicated by one recent review (Kotchick & Forehand, 2002).

A key tenet of RFT is that while some responses are directly trained, some are derived. *Mutual entailment* refers to one element of this process. When a first relationship between two events is specified or directly reinforced, a second relationship within the same context will be derived or entailed. For example, a parent brings a child to a playground and the child climbs on the monkey bars. The child might say "I'm climbing!" and the child's exclamation becomes a part of that experience for the parent. Likewise, if a parent heard the word "climbing" in a different context, say at a business meeting during which a colleague used the phrase "climbing the corporate ladder," it might call to mind the image of this parent's' child at the playground. Thus, the relation between the word "climbing," and a specific experience of one's child climbing has been *entailed* in the absence of direct training.

*Combinatorial mutual entailment* refers to the process by which additional combined relationships among two or more events are derived. Suppose that a climbing child falls while a parent, perhaps unable to intervene, observes. The next time the pair go to a playground and the child climbs, the past experience of the child falling will be present for the parent. In addition, the next time a parent hears the word "climbing," the memory of the child falling, as well as any emotional, physiological, and behavioral correlates that it evokes will be present. Likewise, this experience will be present when the word "falling" is heard. What is clinically relevant here is that all of the members of a class take on the stimulus (psychological) functions of the other members of the class. In our example, just the spoken word "climbing" may come to elicit the actual

properties of one's child falling. This phenomena is called *transformation of psychological function*, and accounts for the human tendency to respond to our own phenomenological experience -whether direct or indirect, internal or external- as though it were "the real thing." The degree to which directly or verbally-mediated experienced events occasion the psychological properties of related events for parents is a function of the context in which the events occur.

The implications of relational learning and derived relational responding are many, and can be applied to all aspects of a parent's daily experience. For example, if a mother tells a child "Don't climb too high or you will fall," the child may take greater care on the monkey bars not because of direct experience, but because of the mother's utterance. Moreover, this caution may extend beyond the original monkey bars to all similar ones. Thus, this child may derive the relation between falling and *all* climbing structures without ever actually falling. Consider the evolutionary value of this phenomenon: in this case, the direct consequences of learning through a verbally mediated experience are less devastating than learning this particular lesson through direct experience.

The verbal relations framing parenting behaviors and parent-child interactions determine their meaning and functionality. Language gives humans the capacity to respond to words as though they are literally true, and the evolutionary advantages of this are crucial to developing parenting repertoires. For example, the playground warning given to parents, "Don't let him climb too high on the monkey bars or he might fall," may contain some functions of an actual experience of the child falling, such as increased heart rate, a tensing of muscles, imagined visions of the child falling, hypervigilance, and a protective direction given to the child: "That's too high! Climb down!" The relation between "climbing high" and "falling" is derived, and thank goodness, need not be directly experienced. Nonetheless, in the presence of such a relation, parents emit protective behaviors -such as an immediate dash to the climbing structure.

The transformation of stimulus functions allows parents to respond adaptively to thoughts of feared events in the absence of actually experiencing directly the harsh consequences of such events. Responding to thoughts in terms of particular literal content, to the exclusion of other directly and indirectly available psychological functions, is termed *cognitive fusion*. This ability is sensitive to context, allowing for variability and tailoring of response repertoires. The higher the child climbs, the harder the surface beneath the monkey bars, or the less developed the child's dexterity and balance, the more probable it is that protective action will be taken. Said another way, these conditions will set the occasion for the domination of the "danger/safety" functions of the child's climbing over other potentially available functions. For example, were the child on a lower bar, the parent might notice whether the child's clothes were dirty or not. The parent might think about what she and the child need to do later in the day. The parent might think about other play days she has had with the child. The parent might notice how the child's skills are improving. When the child climbs high on the bars, all of these other psychological may recede, and danger/safety functions might dominate. All of this may occur purely through verbal means, without the parent having had any direct experience with falls from the monkey bars. However, the extremity and magnitude

of parent responses mirror those occurring in the event of an actual fall, and are thus extremely effective in ensuring the child's safety. Likewise, if the parent becomes extremely alarmed, the child may become frightened both at that moment and in later climbing occasions, again without any actual experience of falling.

Through the learning experience described above, both parent and child have come to develop the following rule: Climbing too high results in falling. While on the playground, children have learned caution in their acrobatics and parents emit cautionary statements. These behaviors have begun to form a functional class focused on maintaining safety, all in the absence of a directly experienced fall. This is an example of how operant behavior becomes rule-governed. Making rules constitutes another pervasive activity of verbal humans. We make rules about everything. We even experience our selves verbally, thus we experience our selves is a function of verbal rules. Those rules become a context that influences the frequency and shape of emitted operant behaviors.

Research in rule-governed behavior has demonstrated that when behavior comes under the control of verbal rules, it become less sensitive to change result of direct contact with environmental contingencies. In other words, once we learn the rules, it becomes harder for us to learn from experience (e.g., Shimoff, Catania, & Matthews, 1981). Returning to our example above, parents may be so focused on children's safety that they may observe, but fail to recognize, their children's developing dexterity and confidence. Thus, parents may respond to extraordinarily competent high climbers with overprotection, despite their direct observation of their children.

This process bears resemblance to maladaptive behavior problems that are the hallmark of many forms of psychopathology: inflexible behavioral repertoires that persist despite directly experienced negative consequences (Hayes, et al., 1999; Wilson & Murrell, in press). It is also characteristic of many types of parenting deficits detailed in the literature. Parenting behavior also becomes a function of rules. For example, overwhelmed parents, despite presenting at clinics for treatment, may have developed the rule: "Because I am so overwhelmed, I don't have time to learn something new to manage behavior." Governance by this rule may leave parents insensitive to the fact that they may already be spending an inordinate amount of time redirecting, yelling, feeling stressed, and avoiding children, etc. Moreover, parents are likely insensitive to the fact that *these strategies aren't working in the long run, and may actually increase the probability that their children's behavior will continue to worsen.*

#### IMPAIRED PARENTING FROM AN RFT PERSPECTIVE

Behavioral parenting research suggests that difficult or non-compliant children come to embody aversive qualities for their parents. Research indicates that such parents often rely on coercive or acquiescent strategies to reduce non-compliance (e.g., Patterson, 1982). Traditional behavioral functional analysis would term this negative reinforcement: the removal of the aversive experience (non-compliance) increases the probability that parents will continue to engage in a particular behavior (acquiescence or coercion). An RFT approach concurs with this assessment, but attempts to elucidate the processes by which the non-compliance takes on aversive qualities, and why its absence may mollify

parents.

The ubiquity with which humans engage in verbal relations, coupled with the evolutionary advantage of responding to words as though they are the “real thing” can also get us into trouble. The fact that particular events can acquire psychological functions via their participation in relational networks may help elucidate the role of cognitions and emotions in maladaptive parent-child interactions. To illustrate the role of relational stimulus functions in parenting, consider the following relational frames that might be likely for an impaired parent (see Figure 1).

Although just a few relatively simple relational frames are presented here, their combination may result in complex transformations of psychological function. Consider a parent who tells her child to stop hitting her sister, followed by the child complying. Such a context may occasion the thought “I am a good parent,” since that relation is mutually entailed in frames #2, and “I am a good person” which is entailed by the combination of frames #2 and #3. Since the verbal description of parenting behavior (direction-giving) is in an if-then frame with the actual reinforcer of child compliance, it may also begin to acquire reinforcing qualities through that relation. As a result, parents may work harder to make opportunities to engage in behaviors that provide opportunities for “good parenting.” They may spend more time with their children, and during that time, may be more likely to engage their children, and hold them to high standards of behavior via appropriate limit-setting and supervision.

Similarly, if child non-compliance is observed, aversive psychological functions (beyond the aversive qualities of the misbehaving child) will result. Since bad child behaviors are the opposite of good child behaviors, frame #2 results in the functions inherent in being a “bad parent.” This combined with frame #3 results in the bad child behavior having the functions of “I am a bad person.” The final link in the series of behavior-behavior relations occurs if the thought “I am a bad person” is intolerable. In such a circumstance, behaviors that reduce this thought will be more probable. Behaviors

*Frame 1.* Actual good parenting behaviors, such as positive attention to appropriate child behaviors, or consistently ensuring compliance, are likely to reside in a *frame of coordination* with the words “good parenting.”

*Frame 2.* Good parenting behaviors are likely to be in an *if... then* frame with good child behaviors, for example, child compliance.

*Frame 3.* Good parent (both actual and verbal) is probably in a *frame of coordination* with “good person” or “a success.”

*Frame 4.* Thoughts such as “I can’t tolerate the idea that I’m a bad person” or “I’m a failure” (cognitions/accompanying affect/physiological responses) are likely to be in an *if... then* frame with behaviors that reduce these thoughts.

Figure 1. Relational frames that might likely for an impaired parenting..



perceived as immediately impacting troublesome child behaviors may be acquiescence to the child's demands or a dramatic and emotional escalation of demands on the child. This functional class may include withdrawing the demand, failing to ensure that the demand is followed, rationalizing the misbehavior, or escalating the intensity of the direction, meting out very harsh, punitive responses, and reasoning that higher intensity responding will ensure child compliance. Ironically, these responses to child non-compliance constitute what the behavioral literature has defined as characteristic of impaired parenting. Even though the goal of the interaction appears to be attaining child compliance (i.e., the immediate diminution of the interaction's aversive qualities), part of the stimulus control organizing this behavior is the relationally conditioned aversive present in the child's behavior (i.e., I am a bad parent/person/failure). To be entirely clear, we are not saying that the parent necessarily has these thoughts explicitly. They may or may not. Rather, the aversive functions of related aversive events are present in the child's behavior. To draw a parallel to classical conditioning, if a tone is paired with a shock, the tone "becomes" a shock as a psychological event. Similarly, all of the events related to "I am a bad person," such as social judgment and rejection, might be present in the child's behavior.

Note that the *absence* of non-compliance does not necessarily equal *compliance*: the functional class of behaviors inclusive of reducing non-compliance, as detailed above, may include maladaptive parenting behaviors. If parents attempt to remedy non-compliance in order to avoid "I am a bad person/parent/failure," such responding may negatively impact the quality of parenting repertoires, and also may undermine the outcome of behavioral parent training. Sometimes good parenting involves engagement in experiences that will give rise to feelings of incompetence (such as getting parent training). If feelings of incompetence must be avoided, parent engagement in skill building may be seriously compromised.

The process by which behaviors become rule governed is relevant here. If the rule is: "I can't tolerate my child's misbehavior," directly experienced negative consequences, such as highly charged episodes of public tantrums, are unlikely to constitute "teachable moments" that foster the development of more adaptive parenting repertoires. In addition, rules applied to aversive internal experiences may become problematic. A developing body of literature suggests that attempts to suppress or avoid painful internal content often result in the strengthening of that content (Clark, Winton, & Thynn, 1993; Clark, Ball, & Pape, 1991; Davies & Clark, 1998; Freeston, Ladouceur, Thibodeau, & Gagnon, 1991; Muris & Merckelbach, 1991; Wegner, Schneider, Carter, & White, 1987). Inherent in the rules are behaviors belonging to a functional class geared towards reducing contact with these aversives. Thus, parenting behaviors may serve the purpose of avoidance and manipulation of these painful psychological experiences.

For example, when parents see their small child behaving badly in a public place, a host of reactions might occur. They may experience the thought, "I am an incredible failure as a parent." When parents have this thought, and really experience it as true, they become insensitive to other events that surround them, except those relevant to immediate escape from that aversive thought. The thought, and the child's

behavior that occasion it, entirely dominate their reactions. Not only do parents become insensitive to other events in their environment, but they also become insensitive to other aspects of the child's and their own behavior. For example, the even fact that parents are having "the thought that I am a bad parent" is not present. There is no distinction between the thought and thinker. "I" as a conceptualized entity and "failure" are as one. When such relations are contacted, parents may engage in the same narrow repertoire with more vigor. As parents work harder and harder at this task and continue to fail, these failures may become the seeds of more self-evaluative frames, such as "I am a failure no matter what I do," or "I cannot impact my -child's behavior." Running such a treadmill may reinforce avoidance of such internal stimuli and their external relata (difficult situations with their children). Not only is it a problem to experience a child's non-compliance, but as attempts to avoid or diminish related evaluations about parenting competence continue to fail, that failure becomes a problem in and of itself. If such endeavors focus behavioral efforts, repertoires narrow and solidify, preventing the development of more adaptive behaviors. Unless parents are able to contact the function of their behavior in difficult moments with their children, addressing only overt behaviors in skills-building interventions may be problematic for some parents.

#### PARENTAL PSYCHOPATHOLOGY AND IMPAIRED PARENTING

Parents experiencing depression and anxiety appear to have a greater tendency to avoid painful internal experiences. Research has indicated that not only does becoming the mother of young children increase the risk of depression (Oyserman, Mowbray, Meares, & Firminger, 2003), but also that depressed mothers also appear more vulnerable to developing impaired parenting repertoires (Karlen-Lyons, Wolfe, Lyubchik, & Steingard, 2002; Lovejoy, Graczyk, O'Hare, & Neuman, 2002; Querido, Eyberg, & Boggs, 2001; Gelfand & Teti, 1990). A disproportionate number of parents presenting to clinics with non-compliant children also endorse depression, anxiety, or other stressors. Such presentations are thought to impact parenting behaviors. For example, depressed parents have been demonstrated to interact less positively and less often with their children than non-depressed parents (Lovejoy et al., 2002; Kurtz & Derevensky, 1994; Reis, 1989).

What might the behavior of a difficult child mean to a depressed parent? It depends on the verbal relations in which the behavior resides, in addition to what parents value. For example, if child misbehavior occurs in the frame "I'm a bad parent" and "I can't tolerate that I'm a bad parent/person/failure," then interacting with a difficult child may take on unbearably aversive qualities. Thoughts and feelings of hopelessness and helplessness are central to the phenomenon "depression." Interacting with a difficult child may elicit thoughts of hopelessness, failure, and heightened feelings of despair when attempted parenting strategies do not work. This despair may be magnified if parents value raising socially and behaviorally competent children, and if this value is at cross-purposes with striving to reduce their own distress. Thus, while depressed parents may seek parent training to improve their children's behavior, their functional goal may be simply to avoid their own painful psychological content, which has become

emblematic in their children via relational learning processes. This conceptualization may be useful in elucidating depressed mothers' pattern of less rich and less frequent positive parent-child interactions. When difficult children come to have aversive qualities, parents may begin to avoid interactions with them. This suggests that behavioral parent-training interventions should incorporate strategies to help parents accept their internal experiences of failure and negative self-evaluations.

#### TREATING PSYCHOLOGICAL PROCESS VS. CONTENT IN IMPAIRED PARENTS

Typically, behavioral paradigms approach parenting problems as skills deficits. However, our treatments may benefit from an exploration of why such skills deficits might exist, and barriers to skills acquisition, especially given the prevalence of depression and anxiety in the parents of behavior-disordered children. Traditional cognitive-behavioral parenting approaches to caregivers' negative self-evaluations might attack the rationality of the content of cognition as "distorted." From an RFT perspective, the presence of highly aversive functions inherent in the child's behavior is not the result of logic or rational deduction (e.g., child misbehavior = "I am a failure as a person"). Although the frames presented in Figure 1 look like a logical transformation of psychological function, it is critical to bear in mind that the processes are psychological rather than logical. The stimuli are not logically equivalent, but are *psychologically* equivalent. If a parent hears a phone ring then a few seconds later experiences their child's principal angrily detailing an incident of misbehavior, and this experience is repeated, the phone's ring will take on some of the psychological functions of the principal's diatribe. The parent might cringe when they heard the phone ring (conditioned elicitation), and might also terminate operant behaviors in which they were engaged (conditioned suppression) with the exception of operant behavior that helped them to escape or minimize the effects of the principal's voice (conditioned escape and avoidance). This increase in elicitation and narrowing of operant repertoire is what we expect in the presence of unconditioned or conditioned aversives. If we told the individual that the child's principal would no longer be making phone contacts, the conditioning would not go away immediately. Repeated trials in which the phone ring occurred without the principal's voice would result in decreases in elicitation and a general broadening of behavioral repertoire in the presence of the phone ring, including decreases in escape and avoidance and resumption of other operant repertoires (see Wilson & Murrell, in press, for a detailed account).

Similarly, the parent knowing by instruction or logic that they are not a failure as a person when their child misbehaves will have little psychological impact on the psychological functions of that misbehavior. What will have an impact will be prolonged exposure to the avoided events. Such exposure should theoretically result in decreased elicitation and greater flexibility in operant responding. The language of exposure to conditioned elicitors was developed in the context of direct respondent conditioning experimentation. We now know that events can become conditioned elicitors through relational conditioning. For example, Dougher, & Augustson (1997) showed that eliciting and extinction functions could transfer through equivalence relations. When one member of an equivalence class is given eliciting functions by direct pairing with an electric

shock, other members of the class also come to have those eliciting functions. From an Acceptance and Commitment Therapy (ACT) perspective, which is based on RFT, we describe procedures that lessen the behavior regulatory functions of events that have those functions as result of relational rather than direct conditioning histories as *defusion*, rather than exposure, in order to distinguish direct and relational learning processes involved (Hayes et al., 1999).

From an ACT perspective, when parents respond to thoughts in terms of their literal content, this is described as *cognitive fusion*. Interventions that capitalize on disconnecting thoughts from their relationally conditioned functions are called *defusion strategies*. Cognitive defusion is a special case of exposure. The purpose of exposure, in the traditional sense, is to create opportunities for an organism to experience a perceived aversive event until the conditioned elicitation is reduced and avoidance responses extinguish. This approach is sufficient in the analysis of directly conditioned aversive stimuli. In contrast, the purpose of cognitive defusion is to broaden behavioral repertoires with respect to stimuli that have acquired their psychological functions through relational (or verbal) learning processes (Wilson & Murrell, in press).

Below, we will provide a case conceptualization of a young child's noncompliance that will illustrate the clinical interventions used. We will also provide an RFT analysis of the processes that we believe are involved. Although details presented here are from an actual case, they are for illustrative purposes only: the utility of applying RFT principles to parenting behaviors and parent-child interactions remains an empirical question.

#### CASE CONCEPTUALIZATION

Andrew was a 6 year-old child referred for treatment by his parents for extremely aggressive behavior towards peers, teachers, and his mother. He was frequently destructive, stole, was often non-compliant with requests, had great difficulty sitting still, talked excessively, and had marked difficulty completing his schoolwork. His teacher reported no fewer than 12 episodes of hitting other kids every day. At age 6, he had already been suspended several times for aggression. Andrew had also made several threats to bring a gun to school.

His mother reported extreme embarrassment and a great deal of anxiety about her son's behavior and expressed her fear that she was unable to handle him or interact assertively with his teachers at school. As a result, she began limiting her forays out of the home with Andrew. She reported responding in a punitive manner to Andrew's misbehavior. The more embarrassed she felt, the more punitive she became. She stated that her disciplinary tactics, which included numerous scoldings and spankings, had no effect. Andrew's mother also began to neglect her own interests, such as working outside the home, watercolor painting, and enjoying rich relationships with her adult friends.

Andrew, an only child, lived at home with his mother and father. Andrew's mother is a homemaker, and his father works at a local factory on the night shift, sleeping during the day. Thus, Andrew's mother was responsible for most of his discipline and helping him with schoolwork. No family history of mental illness was

reported, although Andrew's mother reported a great deal of anxiety when she left the house, in social situations, and while driving the 60 miles to the nearest major town by herself.

During the initial session with Andrew and his mother, he was extremely active, and touched or tried to break a number of items in the office. His behavior appeared immature for his age -he crawled underneath the chairs, and often curled up in his mother's lap, repeatedly interrupting the conversation. Andrew exhibited extremely poor eye contact and stuck his fingers in his ears when questioned. Andrew's mother gave many directions without ensuring compliance, and appeared to grow increasingly agitated as her son's behavior worsened. When Andrew climbed into his mother's lap, she soothed him, and often responded by verbally admonishing him when he interrupted.

On-going measurement of parenting behaviors was accomplished through formal in-session behavioral observations of Andrew interacting with his mother. Initial behavioral observations revealed low rates of verbal reinforcement for appropriate behaviors, and a great deal of verbal attention paid to inappropriate behaviors ranging from mild to severe, and many directions given without regard for compliance. These observations revealed that much of Andrew's behavior was maintained by his mother's attention and failure to deliver consequences consistently. At least in part, Andrew's behavior was maintained at home both by his mother's attention, and may have been inadvertently exacerbated by her inconsistent delivery of consequences. Moreover, this pattern of behavior has resulted in a coercive cycle in which Andrew's misbehavior increases in severity, and his mother's punitive responses continue to escalate, or she withdraws the demands that she has placed on her son.

### *Intervention*

A combination of Acceptance and Commitment Therapy (ACT) and Parent-Child Interaction Therapy (PCIT) was used. PCIT, an empirically-supported behavioral intervention that strives to improve the relationship between parent and child via structured play activities and also coaches appropriate behavior management skills (i.e, planned ignoring, positive reinforcement, response cost, time-out) in-vivo, was used to address Andrew's misbehavior (Foote, Eyberg & Schuhmann, 1998). Components of ACT were used to address his mother's treatment motivation and compliance. Specifically, valuing, mindfulness training, defusing from aversive cognition, and acceptance/commitment were used in brief individual sessions with Andrew's mother prior to the in vivo coaching sessions characteristic of PCIT.

Valuing was used to dignify and focus treatment. It was meaningful for Andrew's mother to be a good parent to her son, and to help him lead a life in which he was successful in school, in work, and in his social relationships. Placing in this context her hard and sometimes embarrassing work in sessions allowed her to make the choice to commit fully to the training when it would have seemed much easier to quit. Values work was incorporated through experiential exercises in which Andrew's mother was asked to consider the following: "In a world where it is possible for you to choose what sort of life your son would have, what would that look like?" Through such exercises,

Andrew's mother envisioned a future larger than her own life, in which her son would go to college, be successful at his job, and be surrounded by friends who loved him. Contacting these thoughts also brought with them her ever-present worries that he would fail at all of these things, and that this failure, in fact was her and hers alone.

When moving in a valued direction, such verbal behavior is almost always at strength. Thus, increasing willingness to experience such content, and acceptance of the possibility of failure -both real and imagined, emerged as the next therapeutic steps. Simple techniques, such as asking, "In a world where it was possible to give your son the future that you want for him, if it had to come at the expense of your fears of failure or social discomfort, would you be willing to have those experiences?" Posed in such a way, she was able to actually experience a posture of willingness, although her next thought was "But that's impossible." Such instances often show up for clients during willingness exercises. Rather than engaging in a debate about what is/is not possible, such content, as well as any further thoughts, emotions, or physiological responses related to it, serves as a cue to incorporate whatever occurs for the client into the previously asked question.

Commitment exercises were incorporated into the treatment to facilitate both initial participation in the in vivo coaching sessions, as well as adherence to her newly gained strategies in the face of difficult, ongoing interactions during which her son was oppositional. To help Andrew's mother to conceptualize what was meant by "commitment," the following metaphor was used. She was given an example in which an armed man broke into her house and attempted to harm Andrew. When asked if anything would stop her from protecting her son, even the chance of her own death or serious injury, she said, "Of course not." The therapist replied, "That is what I mean by commitment. What would it look like to make that sort of commitment to continuing this work for Andrew?" Through the use of this metaphor, Andrew's mother was able to contact the gravity and solidity of such a stance in parenting her son in stressful or embarrassing situations. She was encouraged to stand up in the therapy room, make eye contact with the therapist, and state her commitment in a firm voice. In completing this exercise, she felt embarrassed, had the thoughts that she would be unable to keep such a commitment, that it was silly, that such an exercise didn't matter, and so on. She also realized that these were the same experiences that she had *when she was required to use behavioral parenting skills such as planned ignoring*. Her commitment to "do the next right thing" with Andrew allowed his mother to practice and improve her parenting skills, despite her while remaining mindful and accepting of doubts that she would be continue to use what she had learned over a long period, or in situations where his misbehavior was extremely embarrassing for her, such as in church, or other public situations. Again, willingness to take an open and accepting posture towards thoughts of failure paradoxically led to less failure. In later follow-up sessions, she repeatedly mentioned that metaphor as what she called to mind in order to stick to her planned ignoring, no matter what.

Mindfulness and defusion interventions were incorporated to address his mother's anxiety about Andrew's disturbing or embarrassing behaviors. When confronted with Andrew's misbehavior, his mother was plagued with thoughts that she had failed as a parent, that others would think she was incompetent, and that Andrew would never "get

better.” Her avoidance of such painful content appeared to culminate in more frequent demands and increasingly punitive attempts to control his misbehavior. Since much of Andrew’s behavior was maintained by attention, this exacerbated the problem. When his mother attempted to use planned ignoring, she contacted thoughts of her own incompetence, and terrible imagined futures for Andrew. Becoming mindful of her own feelings and behaviors allowed Andrew’s mother to recognize situations in which planned ignoring was required, and helped her to follow through with this procedure. An added benefit of using ACT in conjunction with PCIT was that the in vivo coaching sessions used in PCIT functioned as exposure and defusion sessions for her, in that she engaged in a behavior that was particularly anxiety-provoking (planned ignoring) in the service of helping her son grow to be a successful young man. During these sessions, she was asked to “observe” her thoughts and feelings about Andrew, his misbehavior, and their interaction. To facilitate this observation, a driving metaphor was used. She was instructed to imagine that she was driving on a long, straight desert highway. Her thoughts were imagined as though they were printed on billboards that grew larger and larger as she approached them, and as she passed them by, thoughts that followed showed up on upcoming billboards. In this way, she contact her thoughts as thoughts, rather than truths necessitating argument or avoidance. Paradoxically, her willingness to take an open, accepting and mindful posture with respect to this disturbing cognitive an emotional content, led to-increased feelings of competence, and ultimately improved parenting skills. Following treatment, including in vivo coaching sessions and monthly follow-up visits, Andrew’s mother reported an improvement in his behavior. Objective measures indicated that Andrew’s levels of aggression and non-compliant behavior were within normal limits. In addition, his mother reported a significant decrease in her own level of anxiety, and an increased sense of confidence and effectiveness in broader social interactions involving Andrew, such as those with his teachers. Finally, Andrew’s mother began to re-engage in valued pursuits in her own life, such as going back to work, and watercolor painting.

#### CONCLUSION

Verbal processes and contextual variables appear to play a role in the development of impaired parenting repertoires. At least one current study investigating verbal behaviors in parenting is currently underway, and it is our hope that many more will follow. Relational Frame Theory (RFT) provides a theory that clearly maps onto and extends existing behavioral models of impaired parenting. It also suggests new directions for treatment involving mindfulness and defusion as processes. Directions for research into how best to use RFT-based principles in conjunction with behavioral parent training approaches necessarily include developmental considerations and contextual factors. Because context is verbal, we have access to broader ecologies in which families operate -can tailor treatments to parents’ relationally conditioned representation of their environment, relationships, child’s behaviors, and so on. In addition, conceptualization of context as verbal provides the opportunity to tie both basic and applied research to a well-developed research methodology (see Hayes, Barnes-Holmes, & Roche, 2001;

Hayes & Berens, 2004, for a detailed account). This approach may also allow a more detailed treatment of parents who have characteristics that may attenuate their children's gains from more traditional behavioral approaches, namely, depressed or multistressed families. Because parental psychopathology is inherently addressed in this approach, it may be promising as a package treatment for both parents and their children. Current behavioral parent training interventions have been shown to impact maternal depression; however, more explicitly addressing experiential avoidance as it manifests in maladaptive parenting behaviors may help generate more consistent, broader improvements in this area.

#### REFERENCES

- Biglan, A., & Hayes, S.C. (1996). Should the behavioral sciences become more pragmatic? The case for functional contextualism in research on human behavior. *Applied and Preventive Psychology: Current Scientific Perspectives*, 5, 47-57.
- Clark, D., Ball, S. & Pape, D. (1991). An experimental investigation of thought suppression. *Behaviour Research and Therapy*, 29, 253-257.
- Clark, D., Winton, E. & Thynn, L. (1993). A further experimental investigation of thought suppression. *Behaviour Research and Therapy*, 31, 207-210.
- Davies, M.I. & Clark, D.M. (1998). Thought suppression produces a rebound effect with analogue post-traumatic intrusions. *Behaviour Research and Therapy*, 36, 571-582.
- Dougher, E.M. & Augustson, M.J. (1997). The transfer of avoidance evoking functions through stimulus equivalence classes. *Journal of Behavior Therapy and Experimental Psychiatry*, 28, 181-191.
- Foote, R., Eyberg, S., & Schuhmann, E. (1998). Parent-child interaction approaches to the treatment of child behavior problems. In T.H. Ollendick, & R.J. Prinz (Eds.), *Advances in clinical child psychology* (Vol. 20, pp. 125-151). New York: Plenum.
- Freeston, M., Ladouceur, R., Thibodeau, N., & Gagnon, F. (1991). Cognitive intrusions in a non-clinical population: I. Response style, subjective experience, and appraisal. *Behaviour research and therapy*, 29, 589-597.
- Gelfand, D.M. & Teti, D.M. (1990). The effects of maternal depression on children. *Clinical Psychology Review*, 10, 329-353.
- Hayes, S.C. & Berens, N.M. (2004). Why Relational Frame Theory alters the relationship between Basic and Applied Behavioral Psychology. *International Journal of Psychology and Psychological Therapy*, 4, 341-353.
- Hayes, S.C., Fox, E., Gifford, E.V., Wilson, K.G., Barnes-Holmes, D. & Healy, O. (2001). Derived relational responding as learned behavior. In S.C. Hayes and D. Barnes-Holmes (Eds.) *Relational frame theory: A post-Skinnerian account of human language and cognition*. (pp. 21-49). New York, NY, US: Kluwer
- Hayes, S.C., Strosahl, K.D. & Wilson, K.G. (1999). *Acceptance and commitment therapy: An experiential approach to behavior change*. New York: Guilford.
- Herrnstein, R.J. (1974). Formal properties of matching law. *Journal of the Experimental Analysis of*



*Behavior*, 21, 486-495.

- Karlen-Lyons, R., Wolfe, R., Lyubchik, A. & Steingard, R. (2002). Depressive symptoms in parents of children under age 3: Sociodemographic predictors, current correlates, and associated parenting behaviors. N. Halfon & K.T. McLearn (Eds.) *Child rearing in America: Challenges facing parents with young children*. (pp. 217-259). New York: Cambridge.
- Kotchick, B.A. & Forehand, R. (2002). Putting parenting in perspective: A discussion of the contextual factors that shape parenting practices. *Journal of Child and Family Studies*, 11, 255-269.
- Kurtz, L., & Derevensky, J.L. (1994). Adolescent motherhood: An application of the stress and coping model to child-rearing attitudes and practices. *Canadian Journal of Community Mental Health*, 13, 5-24.
- Lovejoy, M.C., Graczyk, P.A., O'Hare, E. & Neuman, G. (2002). Maternal depression and parenting behavior: A meta-analytic review. *Clinical Psychology Review*, 20, 561-592.
- Luciano, C., Gómez Becerra, I., & Valdivia, S. (2002). Consideraciones acerca del desarrollo de la personalidad desde un marco funcional-contextual [Considerations about personality development according to a functional-contextual viewpoint]. *International Journal of Psychology and Psychological Therapy*, 2, 173-197.
- MacMahon, R.J., & Forehand, R.L. (2003). *Helping the noncompliant child: Family based treatment for oppositional behavior*, 2<sup>nd</sup> Edition. New York: Guilford.
- March, J. & Mulle, K. (1998). *OCD in children and adolescents: A cognitive-behavioral treatment manual*. New York: Guilford.
- Muris, P., Merckelbach, H., & Horselenberg, R. (1996). Individual differences in thought suppression. The White bear suppression inventory: Factor structure, reliability, validity and correlates. *Behaviour Research & Therapy*, 34, 501-513.
- Oyserman, D., Mowbray, C.T., Meares, P.A., & Firminger, K.B. (2003). Parenting among mothers with a serious mental illness. In M.E. Hertzog & E.A. Farber (Eds.) *Annual progress in child psychiatry and child development: 2000-2001* (pp. 177-216). New York: Brunner-Routledge.
- Patterson, G.R. (1982). *Coercive family process*. Eugene, OR: Castalia.
- Querido, J.G., Eyberg, S.M., & Boggs, S.R. (2001). Revisiting the accuracy hypothesis in families of conduct-disordered children. *Journal of Clinical Child Psychology*, 30, 253-261.
- Reis, J. (1989). A comparison of young teenage, older teenage, and adult mothers on determinants of parenting. *Journal of Psychology*, 123, 141-151
- Shimoff, E. Catania, A.C., & Matthews, B.A. (1981). Uninstructed human responding: Sensitivity of low-rate performance to schedule contingencies. *Journal of the Experimental Analysis of Behavior*, 36, 207-220
- Snyder, J.J., & Patterson, G.R. (1995). Individual differences in social aggression: A test of a reinforcement model of socialization in the natural environment. *Behavior Therapy*, 26, 371-391.
- Snyder, J.J., & Stoolmiller, M. (2002). Reinforcement and coercion mechanisms in the development of antisocial behavior: The family. In J.B. Reid, G.R. Patterson, & J. Snyder (Eds.) *Antisocial behavior in children and adolescents: A developmental analysis and model for intervention* (pp. 65-100). Washington, DC: APA.
- Webster-Stratton, C. (1996) Early intervention with videotape modeling: Programs for families of children with oppositional defiant disorder or conduct disorder. In E.S. Hibbs & P. S. Jensen (Eds.) *Psychosocial treatments for child and adolescent disorders: Empirically based strategies*

*for clinical practice* (pp. 435-474). Washington, DC: APA.

- Wegner, D., Schneider, D., Carter, S., White, T. (1987). Paradoxical effects of thought suppression. *Journal of personality and social psychology*, 53, 5-13.
- Wilson, K.G., & Luciano, C. (2002). *Terapia de Aceptación y Compromiso (ACT). Un tratamiento conductual orientado a los valores*[*Acceptance and Commitment Therapy. A values-oriented behavioral treatment*]. Madrid: Ediciones Pirámide.
- Wilson, K.G., & Murrell, A.R. (in press). Values-centered intervention: Setting a course for behavioral treatment.

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