Collaborative Problem Solving: Is Empathy the Active Ingredient?

Kevin Ashworth, Sara Tapsak, & Susan Tinsley Li School of Professional Psychology, Pacific University

Collaborative Problem Solving (CPS) is a cognitive-behavioral model that has gained popularity in the last decade as a promising treatment option for children with Oppositional Defiant Disorder-type (ODD-type) behaviors and aggression. Collaborative Problem Solving aims to help caregivers identify a child's skill deficits, understand the role of triggers in maladaptive behaviors, and implement a framework for communicating with a child. While multiple studies provide empirical support for the use of CPS in a variety of settings, only one experimental study has been conducted to date that compares CPS to a well-established parent-training program (Barkley's Behavior Management Program; BBMP). Furthermore, no studies have attempted to identify the mechanisms of change in CPS for ODD-type behaviors and aggression. Based on current literature and clinical experience, the authors hypothesize that the effectiveness of CPS for ODD-type behaviors and aggression across a range of treatment settings is likely due to its focus on empathy. In the current article, the authors develop a conceptual model of empathy as a mechanism of change in CPS for ODD-type behaviors and aggression based on relevant literature on CPS and empathy as well as clinical illustrations. Moreover, the authors present a design to empirically test this hypothesis.

Collaborative Problem Solving (CPS) is a cognitivebehavioral intervention for children with symptoms of Oppositional Defiant Disorder (ODD), such as defiance, disobedience, and hostility towards authority figures (Greene Collaborative Problem Solving is being increasingly recognized as an effective therapeutic modality for working with children with ODD-type behaviors and aggression. Within the last decade CPS has emerged as a dominant treatment modality in residential, day-treatment, and inpatient psychiatric facilities throughout the United States to address these types of behaviors. Research in several different settings supports CPS as an effective treatment option for children with ODD-type behaviors and aggression (Epstein & Saltzman-Benaiah, 2010; Greene et al., 2004; Greene, Ablon, & Martin, 2006; Martin, Krieg, Esposito, Stubbe, & Cardona, 2008; Stewart, Rick, Currie, & Rielly, 2009). However, despite the growing evidence for the effectiveness of CPS for children with ODD-type problems, there is currently a dearth of evidence elucidating the mechanisms of change in the CPS model, which limits the validity of the model as an efficacious treatment option. To our knowledge, there is no formal model of change that explains the mechanisms of CPS, although some authors have theorized that "Plan B" conversations (described below) are essential (Greene & Ablon, 2006; Greene et al., 2004). We hypothesize that the empirical support afforded to CPS is largely the result of a focus on empathy, accomplished through the identification of the child's lagging skills and the use of empathic skills by adults. This theoretical article investigates the use of empathy in CPS as a primary change mechanism, above and beyond the other components of the model (i.e., training of skill deficits and identifying triggers to problem behaviors), by providing a rationale for the role of empathy based on a literature review, as well as our clinical experience using the model. To support our claim, we first introduce CPS, outline its principal components, and review current research that supports CPS' effectiveness. We then present our hypothesis for empathy as a mechanism of change within the model, as well as literature on the role of empathy in the therapeutic process, its influence on the parent-child relationship, impact on effective communication, and use by mental health staff. Next, we provide clinical illustrations based on our clinical experiences, propose a model for empathy as a primary mechanism of change in CPS, and end with a discussion of the limitations of this paper.

Fourth, there is the potential for benefits outside the realm of psychotherapy. Specifically, knowing about the process by which maladaptive functioning changes into adaptive functioning may reflect upon the processes underlying different forms of psychopathology and healthy functioning in general.

Collaborative Problem Solving

Collaborative Problem Solving was developed over a decade ago and introduced in Ross Greene's *The Explosive Child*, most recently published in 2010. Greene highlighted the differences between CPS and traditional behavioral models for working with children who have ODD-type behaviors. He emphasized the importance of recognizing these behaviors as secondary to skill deficits in different areas of ability. He provided a collaborative method of

Kevin Ashworth, M.A., Sara Tapsak, M.S., and Susan Tinsley Li, Ph.D., School of Professional Psychology, Pacific University, Hillsboro, OR.

Correspondence concerning this article should be addressed to: Sara Tapsak, Pacific University School of Professional Psychology, 190 SE 8th Ave. Hillsboro, OR 97123. Email: sara.tapsak@pacificu.edu.

communication with children and understanding their concerns, based on a transactional model which posits that problem behaviors result from the incompatibility between characteristics of children and their adult caregivers, instead of employing conventional interventions for behavior change. Specifically, Greene (2010) shifted the emphasis in this treatment from reward and punishment strategies as contingencies in traditional behavioral therapies (Durlak, Fuhrman, & Lampman, 1991) to understanding the role of triggers in maladaptive behaviors (Greene, 2010).

As part of this shift, a component of the model is to teach parents to think differently about their children's behaviors through the identification of specific skill deficits in the areas of flexibility/adaptability, frustration tolerance, and problem solving, and therefore, viewing maladaptive behaviors as the byproduct of these lagging skills required for coping and problem solving (Greene & Ablon, 2006). There are three identified goals of intervention in CPS: (1) to significantly reduce the frequency, intensity, and duration of problem behaviors; (2) to help adults have their expectations met; and (3) to teach cognitive skills that are lacking in the child (Green & Ablon, 2006). The specific components of CPS employed to achieve these goals are described in detail below.

Components of CPS

While Greene (2010) described the two primary tenets of CPS as understanding lagging skills and solving problems collaboratively, we have identified three main components of the model: identifying lagging skills (i.e., skill deficits), identifying the triggers of problem behaviors, and implementing what the authors term the "plans framework" (see Figure 1).

Identifying skill deficits is the first component and step of implementing CPS. Skill deficits are assessed in the domains of executive skills, language-processing skills, emotion regulation skills, cognitive flexibility skills, and social skills. The developers of CPS assert that this assessment helps caretakers understand that the child's behavior is not intentional or purposeful. Furthermore, this step identifies the skill deficits that need to be further developed in the child. After determining skill deficits, the second step of CPS is to identify the triggers and pathways of the problem behaviors. In this way, CPS strongly focuses on the recognition of antecedents of behaviors and this is typically done using a pathway inventory (created by the developers of CPS) and situational analyses. Identifying the pathways and triggers is a continuous and ongoing process in an effort to reveal the precipitating factors of current problem behaviors. After the first two steps are completed, consensus is reached with the caretakers about the current understanding of the child's skill deficits and the triggers of problem

The third step of CPS is implementing the plans framework. According to the developers of CPS, adults have three basic, distinct options for how they choose to respond to

problems or unmet expectations. As described below, these problem solving strategies are termed Plan A, Plan B, and Plan C. All three options can be effective responses depending on the adult's goals and the needs and abilities of the child. In understanding these options, the developers of CPS contend that adults can begin to categorize and understand their own behavior and reevaluate and prioritize expectations in aid of decreasing problem behaviors, improving interactions between the adult and child, and improving skill deficits.

'Plan A' occurs when an adult imposes his or her will on a child, typified by such statements as, "Follow my directions or else" or "It's my way or the highway" (Greene, 2010, p. 43). Greene and Ablon (2006) state that traditional parenting approaches usually operate from a Plan A perspective, often resulting in explosive behavior episodes and an escalation in parental intensity. For children with ODD-type behaviors, this type of interaction typically leads to an episode in which the child can become defiant, hostile, and/or aggressive, potentially damaging the parent-child relationship. important to note that Greene and Ablon (2006) support the use of Plan A in situations involving safety concerns. This is in contrast to 'Plan C,' which involves the parent dropping his or her expectation temporarily, with the aim of decreasing the likelihood of explosive behavior in the moment. Plan C is indicated when there is no time for confrontation or conversation; an additional goal of plan C is to reintroduce the dropped expectation at a later time.

'Plan B' is the ideal problem solving strategy of CPS and is a proactive approach designed to assist a child in meeting an adult's expectations (Greene & Ablon, 2006). This is done when the child is less frustrated and ample time is available to figure out what got in the way of the child meeting the original expectation. Plan B is divided into three steps: (1) empathy (plus reassurance); (2) definition of the problem; and (3) invitation to problem solve the issue. The first step of empathy involves listening to the child's concern, making the child feel understood, and acknowledging that the child has a legitimate concern. This is generally done by making a neutral observation such as, "I noticed you didn't do the dishes last night. What's up?" The neutral statement allows the child to feel less defensive and more open to a dialogue about why he or she was unable to meet the expectation. The empathy step requires the adult to listen to what the child has to say and show his or her understanding by repeating the child's concern. By listening and responding with empathy, the adult displays a willingness to understand the child's perspective. The emphasis on empathizing with the child's experience is crucial and represents a shift away from modification traditional behavior approaches, contingencies are not unilaterally employed (Greene, 2010).

Collaborative Problem Solving also proposes that identified skill deficits are improved through Plan B conversations, which facilitate learning of cognitive skills through appropriate parent modeling (Green & Ablon, 2006).

CPS Model Components Executive Language Social Cognitive **Emotion** Identify Identify regulation skills processing skills inflexibility agging skills triggers to deficits deficits deficitss deficits problem nathways behaviors Adult Problem response behavior Plans Framework Plan A Plan C Plan B Step 1. Empathy: Attempt to understand the child's concern by listening (e.g., "I see you just threw a chair, what's up?" and reflecting (e.g., "You're mad and frustrated, that sucks.") Impose adult expectations Drop expectations ("Do this or else") (For now) Step 2. Define the problem: Express adult concerns and restate child's concern (e.g., "Ok you're mad. My concern is that someone could get hurt when you throw the chair, and it scares me.") Step 3. Invitation: Invite the child to help develop solutions Goals: Goal: satisfactory to both parties (e.g., "So what's a way you can let Impose adult will, child safety Reduce problem behavior me know you're mad and not scare me?") and choose a solution. Goal: Reduce problem behaviors and teach skill deficits. Outcomes: Outcome: Avoid problem behavior, adult Outcomes: Decreased problem behavior, Increase in problem behavior expectation not met improved lagging skills, and met parent expectations (i.e., improved parent-child relationship).

Figure 1. CPS model components. The three core components include identifying lagging skills pathways, identifying the triggers of problem behaviors, and implementing what the authors term the "plans framework" (Plans A, C, and B)

The second step of Plan B is when the adult provides his or her concerns (i.e., expectations). The problem is now considered defined, as both parties have presented their respective concerns. The third and final step of Plan B consists of the adult inviting the child to collaboratively brainstorm solutions to the problem in a way that is possible and satisfactory to both people. For example, the adult might ask the child, "So what is a way that you can watch your favorite show (child's concern) and be able to complete your chores (adult's concern)?" A discussion then occurs until they reach a mutual solution that addresses both the child's concern and the parent's concern. Although the basic tenets

of CPS appear somewhat simple, implementing a Plan B conversation is complex. The first two steps of a Plan B conversation focus on connecting with the child and understanding his or her concern. Therefore, without the incorporation of empathic skills neither of these tasks could be successful, making the inclusion of empathy in the conversation seemingly essential.

Empirical Support for CPS

Evidence to support CPS as an effective model for working with aggression, explosiveness, depression, anxiety, and

suicidality in children and adolescents is ample (Epstein & Saltzman-Benaiah, 2010; Greene et al., 2004, 2006; Martin et al., 2008; Stewart et al., 2009). However, the mechanisms of change within it have yet to be defined (Callaghan, Follette, Ruckstuhl, & Linnerooth, 2008). To our knowledge, only one experimental study (Greene et al., 2004) has shown CPS to be as effective as or more effective than Barkley's Behavior Management Program (BBMP), a well-established parent-training program (Barkley, 1997).

Outpatient Studies

Greene et al. (2004) provided support for the utility of CPS with an outpatient population, highlighting the model's dual focus on parenting skills and cognitive deficits in children and comparing it to BBMP. Outcomes were measured using the Parenting Stress Index (PSI; Abidin, 1995), Parent-Child Relationship Inventory (PCRI; Gerard, 1994), Clinical Global Impression (CGI; National Institute of Mental Health, 1985), and the Oppositional Defiant Disorder Rating Scale (ODDRS), an unpublished rating scale developed by Greene to measure parent-child conflict. The CPS group demonstrated statistically significant improvement from pre-treatment to post-treatment on the PSI and PCRI. As the ODDRS is an unpublished rating scale, normative data are unavailable and therefore clinically significant change was used to measure outcomes. The CPS group produced clinically significant change from pre-treatment to posttreatment and at 4-month follow-up. Additionally, scores on the CGI at post-treatment and at 4-month follow-up identified treatment group (CPS vs. BBMP) as a significant predictor, with the CPS group showing a significantly greater degree of improvement compared to the BBMP group.

Epstein and Saltzman-Benaiah (2010) evaluated the feasibility and effectiveness of CPS among parents of children with both Tourette syndrome and ODD. Following the implementation of CPS, significant changes were seen on the Eyberg Child Behavior Inventory (ECBI; Eyberg & Pincus, 1999), a parent rating scale that assesses the intensity and frequency of disruptive behaviors at home, indicating that parents reported fewer and less intense disruptive episodes, as well as a reduction in stress (Epstein & Saltzman-Benaiah, 2010).

Mixed Inpatient-Outpatient Study

Stewart et al. (2009) demonstrated the effectiveness of CPS in reducing explosive behavior in a nine-bed residential treatment program. Significant differences were seen in the number of "meltdowns," as defined by scores on the Conners Parent Rating Scale (Conners, 1997), reported at pre- and post-treatment. Furthermore, these improvements continued at 6-month follow-up. Improvements in social skills were also seen post-treatment; however, they decreased at follow-up, suggesting that these skills require more continuous reinforcement (Stewart et al., 2009). These improvements mirror the philosophy of CPS, which is to improve the communication and relationship between parent and child. Stewart et al. (2009) contended that the changes observed in

the study provide support for the effectiveness of CPS with a residential population. Although significant changes were not found in all study domains (i.e., improved academic performance, enhanced community participation), those directly related to CPS (e.g., social skills, decreasing meltdowns, and parent stress) were positively impacted (Stewart et al., 2009).

Inpatient Studies

Greene and colleagues (2006) investigated the use of CPS in reducing seclusion and restraint incidents in a child inpatient psychiatric hospital. The number of seclusions and restraints decreased significantly after its implementation. In the nine months prior, the unit documented 281 episodes of restraints. Following the 15-month CPS training period, the unit documented one incident of restraint. Because this was a quasi-experimental study, however, not all extraneous variables were controlled for. Martin et al. (2008) attempted to replicate the aforementioned results by evaluating the effectiveness of CPS in reducing seclusion and restraint in a 15-bed child psychiatric inpatient unit. They collected data for three years prior to CPS implementation, six months during, and 18 months afterward. After CPS implementation, the rate of restraint dropped from 263 incidents per year to seven incidents per year, with the mean duration of restraint decreasing from 41 to 18 minutes per incident. Seclusion incidents decreased from 432 to 133 per year.

Summary of Empirical Support for CPS

The empirical support for **CPS** warrants acknowledgement within the field for its effectiveness in a wide range of treatment settings. Within a relatively short time, the body of literature discussing CPS has grown and includes support for its use in both outpatient and inpatient settings. Although initially developed to address explosive behavior in outpatient populations (Greene et al., 2004), it is becoming increasingly well known for its utility in reducing seclusion and restraint within inpatient populations (Greene et al., 2006; Martin et al., 2008), as well as an effective model for parenting programs (Epstein & Saltzman-Benaiah, 2010).

Empathy as the Putative Mechanism of Change in CPS

We believe it important, given the climate of evidenced based treatments, to attempt to understand the mechanisms of change underlying CPS in order to critically evaluate its effectiveness. Empathy is clearly present in the implementation of CPS, both before and within a Plan B conversation. Before a Plan B conversation can take place, the adult must examine what areas of cognitive ability are lagging for the child (the first component of CPS) by evaluating language processing, emotion regulation, cognitive flexibility, executive, and social skills. With this examination and understanding, the adult is better able to develop empathy for the child and to view maladaptive behavior as the result of underdeveloped skills rather than malicious intent. Inherent in identifying lagging skills, CPS allows adults to see

COLLABORATIVE PROBLEM SOLVING AND EMPATHY

maladaptive behavior empathically (Greene & Ablon, 2006). For example, believing that a child is refusing to attend school due to his or her anxiety (i.e., a deficit in emotion regulation) is fundamentally different than assuming that he or she lacks motivation, is lazy, or is oppositional. Given the latter assumption, the adult will probably attempt to 'motivate' the oppositional child by invoking contingencies (i.e., "If you don't do (X), then...") to help precipitate the child's return to school. The former assumption requires adults to shift their understanding of the child, which will likely change how they approach the problem and includes the use of empathic skills (e.g., reflective listening, validation of child's emotions, and perspective taking) during Plan B conversations.

Although no research has been published on the mechanisms of change in CPS, we hypothesize that the focus on empathy is indeed the reason that CPS has gained both empirical and experiential support. Specifically, we hypothesize that the creation of empathy through the identification of lagging skills and the explicit use of empathic skills by adults is responsible for improvements in the parent-child relationship and decreased problem behaviors, above and beyond the training of skill deficits and identifying triggers to problem behaviors. This paper seeks to conceptualize the effectiveness of CPS in the context of its focus on empathy. By examining the current literature on the construct of empathy, we believe that our conceptualization is plausible.

Empathy in Psychotherapy

Empathy can be defined as a shared understanding of thoughts and emotions between two people or groups of people (Pedersen, 2008). As Carl Rogers stated, "Empathy is the therapist's sensitive ability and willingness to understand the client's thoughts, feelings, and struggles from the client's point of view... It is this ability to see completely through the client's eyes, to adopt his frame of reference" (Rogers, 1980, p. 85). Empathy is essential in conveying caring and understanding to clients (Rogers, 1975) and has long been considered a necessary component for psychotherapy to be successful in most, if not all, therapeutic modalities (Anderson, Ogles, Patterson, Lambert, & Vermeersch, 2009; Rogers, 1975). Castonguay and Beutler (2006) echo Carl Rogers' view that the fundamental tenets of empathy are positive regard, listening, and warmth, and see these as the bases of the therapeutic relationship. The literature defining and exploring empathy in a therapeutic context is extensive (Greenberg, Watson, Elliott, & Bohart, 2001; Martin, Garske, & Davis, 2000; Preston & de Waal, 2002; Rameson & Lieberman, 2009), and therapeutic benefits are seen when responses and empathic approaches psychotherapy are utilized (Rogers, 1975).

In a meta-analysis, Greenberg et al. (2001) found that empathy was the single best predictor of positive outcomes in therapy. Further, they identified four factors that serve as mediators between empathy and positive therapeutic outcomes: (1) empathy as a relationship condition, in which

feeling understood helps clients feel safe and increases client satisfaction; (2) empathy as a corrective emotional experience, in which an empathic relationship may help to strengthen the self; (3) empathy and cognitive-affective processing, in which empathy helps promote exploration and meaning and facilitates emotional reprocessing; and (4) empathy and the client as active self-healer, in which empathy helps engage the client and promotes active participation (Greenberg et al., 2001).

Parental Empathy

In addition to the general support for empathy as an important ingredient in psychotherapy, the presence of parental empathy has been implicated in positive outcomes for children. Active listening and empathic responding by parents communicates to children a genuine valuing of and interest in their concerns (Kohut, 1977, 1984). By developing a shared connection through empathy, it is possible that the child sees the adult as a collaborator in a shared valued outcome as opposed to a competitor for power (Pedersen, Trumpeter, Watson, O'Leary, and Weathington 2008). (2008) studied the relationship between perceived parental empathy and love-inconsistency, narcissism, self-esteem, and depression. They found that perceived parental empathy was associated with healthy self-development and adaptive selffunctioning in young adults. Schaffer, Clark, and Jeglic (2009) examined the relationship between empathy, parenting, and antisocial behavior in young adults. Their results supported the conclusion that empathy was an important predictor of decreased antisocial behavior.

Parental empathy has also been shown to be correlated with at least neutral or positive attitudes towards children (Moran & Diamond, 2008). Goubert et al. (2005) defined two types of empathic responses in people who witness distress in others. An empathic concern response is one in which the observer is focused on the distress of another person. In contrast, an empathic distress response is one in which the observer is focused on his or her own experience of distress. Both types of responses are associated with helping behavior; however, only the empathic concern response helps to comfort and calm the person in distress, whereas the empathic distress response serves to calm the observer (Goubert et al., 2005). Penner et al. (2008) demonstrated the association between parental empathy and positive benefits for children undergoing oncology treatment. They reported that increased parental empathic concern was associated with less pain and distress in children. Utilizing empathic concern instead of empathic distress helped parents focus on the medical procedure and their child's wellbeing rather than attending to potential complications and the invasiveness of the procedure. In addition, the empathic concern response helped to ease parental anxiety and distress about the situation (Penner et al., 2008).

Empathy and Parent-child Communication

Parental reactions influence children's emotional responses (Fabes, Leonard, Kupanoff, & Martin, 2001).

Additionally, disapproving parents likely teach their children that their feelings are wrong and invalid (Fabes et al., 2001). By providing empathic responses to a child's distress, parents validate a child's concerns and are better able to reduce the intensity of the distress experienced by the child. In an attempt to understand the accuracy (or lack thereof) in empathic conversations between parents and adolescents, Sillars, Smith, and Koerner (2010) identified misattributions made between parents and teens when conversing. found that parents were more focused on the interaction process of the conversation and teens were more focused on the content of the discussion. Furthermore, parents and teens were both unable to identify areas of similarity and difference with respect to positive and negative attributions toward one another when engaging in a heated discussion. findings provide support for the importance of finding common ground through empathic statements and validating comments. Similarly, Sillars, Koerner, and Fitzpatrick (2005) reported that parents who were better able to understand their child's self-concept (i.e., use empathy) were more likely to communicate openly and frequently with their child. Furthermore, high parent-child relationship satisfaction was associated with parental understanding of the child's selfconcept (Sillars et al., 2005).

Empathy and Mental Health Staff

As parents are not the sole providers of care to children, especially in cases of significant behavior problems, it is worthwhile to explore the role of empathy in residential and The use of empathy within these psychiatric settings. settings, specifically between staff members and their patients, is not well understood in the literature. However, of effective and positive predictors psychiatric hospitalizations exist and follow a common theme. Coleman. Paul, and Schatschneider (2007) reported that the amount of attention provided to patients on psychiatric units predicted better outcomes, such as lower chronicity of illness and patient effectiveness. For the amount of attention provided to patients to impact outcomes, staff must be trained in "sociallearning procedures" (Coleman et al., 2007), which are likely to encompass skills such as effective communication and empathy. The use of empathy, respect, and communication skills are paramount in the relationship between a psychiatric staff member (e.g., a social worker, nurse, or aide) and patient, particularly because of the power differential between the two parties (Holm, 2002). One obstacle to empathy can be the lack of knowledge about rules for expressing feelings (Keefe, 1976; Strayer, 1987). Keefe (1976) reported that one must permit oneself to be free from biases (i.e., stereotyping) that limit empathic responses, a skill that allows patients to elicit empathy from the psychiatric staff. This skill is likely taught during academic training and may not be available to the untrained psychiatric staff member. The delivery of empathy depends not only on the staff member's ability to understand and acknowledge a patient's feelings, but also on their motivation to be empathic (Holm, 2002; Suchman, Markakis, Beckman, & Frankel, 1997).

Summary of Empathy

The empirical literature on empathy is vast (Greenberg et al., 2001; Martin et al., 2000; Preston & de Waal, 2002; Rameson & Lieberman, 2009; Rogers, 1975). It is clearly established that empathy is associated with positive outcomes in therapy (Angus & Kagan, 2007; Elliott, Bohart, Watson, & Greenberg, 2011). Empathy is a necessary component of psychotherapy and has a greater influence on positive therapeutic outcomes than any other factor (Greenberg et al., 2001). It is often the first skill taught to new clinicians (Morrison, 1995), developed through training and practice, and is reported to be the core value to which therapists return when stuck or struggling with a difficult case (Holm, 2002; Waller, 2009). For psychiatric staff, empathy is integral to a positive staff-patient relationship (Holm, 2002). It is also associated with increased communication between parents and children (Sillars et al., 2005), healthy psychological development in children (Trumpeter et al., 2008), and overall changes in the ways in which parents interact with their children (Moran & Diamond, 2008; Sillars et al., 2005, 2010). In addition to mental health staff, parents are often involved in the treatment process with their children and effective communication between adult and child requires empathy through listening, respect, and understanding. Unlike many traditional treatments for children, which primarily involve behavior modification techniques, CPS brings empathy to the forefront as an integral part of the intervention. Through our clinical experiences, the positive impact of the creation of empathy and the use of empathic skills within CPS has been evident. Therefore, two case vignettes are offered in the subsequent section.

Clinical Illustrations

Clinical practice often serves as the real-world test of the effectiveness of theories and interventions. The following clinical examples, informed by the authors' own experiences of working with the model, anecdotally illustrate the significance of empathic skills in the implementation of CPS. These two examples highlight the value of empathy within CPS in clinical practice.

Vignette 1. The following is a typical case of an adolescent on an inpatient psychiatric unit. Prior to the implementation of CPS, the general staff consensus and goal was patient safety. Historically, staff perceived safety as synonymous with control. Therefore, when a patient was not following directions (such as being out of his or her room during "room time"), staff would subsequently demand that the youth comply and follow directions without protest. On occasion, the redirection to return to his or her room would incite frustration in the youth, which would decrease the likelihood that he or she would comply with the request. A conflict would often arise and the youth (who likely struggled with emotion regulation, as most patients on the unit do) would begin shouting, swearing, and/or crying. In response, the staff would continue to direct the patient with verbal commands, elicit more staff, and if necessary physically

COLLABORATIVE PROBLEM SOLVING AND EMPATHY

guide the youth back to his or her room. Following the implementation of CPS through staff trainings and clinical supervision, however, staff began shifting their attitude about the meaning of safety, patient compliance, and empathy. Although patient safety continued to be a priority, it was no longer synonymous with control. Thus, when a youth would exit their room during "room time," a similar direction might be given, "Please stay in your room during room time." A typical response may have been, "No! Room time sucks!" In accordance with the CPS model, the staff now responded with, "Room time sucks? How come?" With the understanding that empathizing with the youth's concern is paramount, in this case through reflective listening, the staff took time to listen to and understand the youth's perspective. This approach decreased the youth's frustration and increased the odds that he or she would engage in a dialogue with the staff member. In the authors' opinion, the use of empathic skills enabled staff to demonstrate understanding of the youth's perspective regarding room time.

Vignette 2. A single mother who attended a CPS parenting class facilitated by one of the authors reported that she had struggled to find any help for her 12-year-old adopted son. She described his behavior as violent and aggressive, explaining that she was victim to his abuse and that he had recently punched her in the face, resulting in a broken nose. The mother sat quietly through the hour and a half class taking notes. At the end of the class she asked, "Do you think this would really work for my kid?" The author recommended that she return the following week to learn more. After five weeks of consistent attendance in the class. she reported improvement in her son's behavior and specifically noted a decrease in his aggressive behavior. Per her report, she had learned to set expectations while understanding her child's abilities and most importantly had learned to inquire as to why a behavior occurred, instead of assuming she understood, suggesting an overall increase in empathy for her child. She reported that she had learned to better understand her child and therefore had developed insight into his chronic frustration. She reported that by attempting to understand his perspective she was able to ignore her own assumptions and connect with her son. This understanding and communication style were the catalysts in helping her problem-solve with her child, while at the same time establishing a safe and consistent environment.

In our experience, these two examples reflect common outcomes obtained by the implementation of CPS. Amid learning the model, identifying lagging skills, and learning to collaboratively problem-solve, CPS fostered adults' abilities to empathize with children and is arguably responsible for the shifts in their attitudes and behaviors. Once parents and staff were able to view a child as frustrated, depressed, anxious, and/or confused (instead of manipulative, oppositional, defiant, or aggressive), they changed their interaction style, tone of voice, and assumptions about the child. We believe

that enhanced understanding and the use of these empathic skills are what increase an adult's ability to effectively communicate and problem-solve with a child, subsequently promoting behavior changes in the child. The next section proposes a conceptualization of empathy as a primary mechanism of change in CPS, as well as recommendations for how this assertion may be empirically tested.

Proposed Mechanism of Change and Future Research

As previously stated, CPS consists of three components (lagging skills assessment, triggers identification, and the plans framework; see Figure 1). Despite empirical support on the utility of the model in various settings, there are currently no studies that have dismantled CPS, leaving the consumer unclear as to which components are necessary to effectively achieve desired outcomes (for example, a decrease in ODD-type behaviors or an improvement in the parent-child relationship). Based on our clinical experience working with the model in both inpatient and outpatient settings and our review of literature on empathy, we believe that a primary mechanism of change within CPS is empathy, which is created by having adults both understand the child's lagging skills and utilize empathic skills.

In CPS, empathy allows adults to better understand a child's behavior and shift the way they think about them, consequently affecting how they respond to the child's problem behaviors. By identifying lagging skills in the child, adults are able to appreciate the skills necessary to be successful in life (e.g., social skills, ability to problem solve, frustration tolerance, etc.) and are less likely to view these issues as motivational in nature. Thus, the understanding of lagging skills aids adults in developing empathy for children. With this understanding, adults are in turn more likely to respond to their child in empathic ways (i.e., employ empathic skills) by listening, reflecting back and validating the child's concerns, and attempting to understand his or her perspective. If this occurs, we argue that the child will feel understood, less defensive, and will therefore be more likely to follow adult directives. Therefore, the identification of lagging skills (i.e., empathy through increased understanding of child's lagging skills) in conjunction with adult implementation of empathic skills (e.g., reflective listening, validation of child's emotions, and perspective taking), which is the first step in a Plan B conversation, accounts for the aforementioned desired outcomes (see Figure 2).

In order to empirically evaluate the mechanisms of change in CPS, future research could dismantle CPS and examine isolated components. We offer two avenues for doing this. First, the following three treatment groups could be implemented: (1) CPS in its entirety; (2) CPS without Plan B's empathy piece; and (3) CPS with *only* Plan B's empathy piece. Outcome measures could include frequency, intensity, and duration of problem behaviors, as well as ratings of parental stress to assess the parent-child relationship.

Additionally, a regression analysis could be run on the group implementing CPS in its entirety, examining outcome measures to determine to what extent various components of the model account for outcomes. Isolating CPS components and evaluating outcome measures in this way could establish a clearer understanding of the role of empathy within the model.

Limitations

We have identified three important limitations to the claims presented in this paper. First, our argument relies heavily on our clinical experiences working with the CPS model and on literature describing the positive impact of empathy more While clinical experience is important in generally. furthering understanding, evaluating effectiveness, and inciting future research, it has the inherent limitation of lack of experimental control. Consequently, our perceptions of the role of empathy as the change mechanism and literature asserting the value of empathy may have caused us to disregard other explanations of the positive outcomes we observed. In addition, these outcomes were not validated by objective measures. Despite this limitation, our clinical experiences raise the important question of what the role of empathy is in CPS.

A second limitation is that although we argue that empathy is a primary mechanism of change and accounts for desired outcomes above and beyond the other components of CPS, we do not offer hypotheses as to the specific role empathy may play in the model (e.g., as a mediator, moderator, or the sole curative factor). Expanding our hypothesis to account for the specific types of influence empathy may have would help to better direct future research.

Finally, it is unlikely that empathy serves as a primary

mechanism of change when the goal of CPS is to improve a child's cognitive skills (Green & Ablon, 2006). For example, the authors of CPS state that engaging in Plan B conversations improves skill deficits in the child through the experiences of articulating concerns, considering different solutions to problems, and reflecting on outcomes of solutions implemented (Green & Ablon, 2006). We do not suggest that empathy components (such as understanding lagging skills and use of empathic skills) would explain improvement in cognitive skills and as such, our hypothesis is unlikely to explain this change. However, this identifies another area of

Conclusion

the CPS model that merits further investigation.

This article develops a rationale for empathy as a primary mechanism of change in CPS based on available literature on CPS and empathy in psychotherapy, as well as the authors' clinical experiences. The reviewed literature provides support for the promise of CPS as an effective treatment modality for ODD-type behaviors and aggression in a wide array of treatment settings. Additionally, our clinical experiences have demonstrated that it can be an effective

Primary Mechanism of Change: Empathy Model

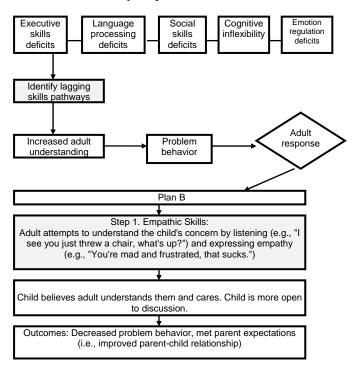


Figure 2. Empathy (denoted by gray coloring) is represented within CPS through the identification of lagging skills and in the implementation of empathic skills.

dyadic intervention for parent-child interactions, as well as an effective systemic model for creating change in residential and inpatient settings. Collaborative Problem Solving engenders a climate of empathy by creating understanding within adults that lagging skills may be responsible for a child's problem behaviors, and requires that adults utilize empathic skills to respond to a child's behavior. With this knowledge and skill set, adults can shift their expectations of interactions to understand what is going on for the child and respond in empathic ways, instead of attempting, often unsuccessfully, to control the child's disruptive behaviors.

Empathy in its own right has been shown to increase communication, change staff's and parents' interactions with children, and is associated with healthy psychological development (Moran & Diamond, 2008; Sillars et al., 2005, 2010; Trumpeter et al., 2008). It can change how adults interact with children and can increase the likelihood that children feel understood and supported by adults. Given the overwhelming evidence of harsh parenting/discipline, low nurturance, and the use of punishment in the etiology of disruptive behavior disorders (Bailey, Hill, Oesterle, & Hawkins, 2009; Rothbaum & Weisz, 1994; Thompson, Hollis, & Richards, 2003), empathy may have a direct impact on improving parent-child relationships and subsequently increase behavioral compliance.

COLLABORATIVE PROBLEM SOLVING AND EMPATHY

Collaborative Problem Solving reflects the value of empathy within its conceptualization of underdeveloped skills as the cause of problem behaviors and by having adults respond with empathic skills (Greene et al. 2004, 2006; Martin et al., 2008). Therefore, the use of empathy arguably creates a fundamental shift in adults' perceptions of children, leading to positive outcomes. If the use of empathy is a primary mechanism of change within the model, then perhaps it is largely responsible for the success of CPS. Collaborative Problem Solving is gaining empirical support and children, families, and organizations are benefitting from the implementation of this model. Prudent scientific questioning would dictate, however, that understanding the mechanisms of change within the model is necessary for future replication. generalization, and implementation. It is our hope that future research will seek to clarify the claims presented here.

References

- Abidin, R. R. (1995). *Parenting Stress Index manual* (3rd ed.). Lutz, FL: Par, Inc.
- Anderson, T., Ogles, B. M., Patterson, C. L., Lambert, M. J., & Vermeersch, D. V. (2009). Therapist effects: Facilitative interpersonal skills as a predictor of therapist success. *Journal of Clinical Psychology*, 65, 755-768. doi:10.1002/jclp.20583
- Angus, L., & Kagan, F. (2007). Empathic relational bonds and personal agency in psychotherapy: Implications for psychotherapy supervision, practice, and research. *Psychotherapy: Theory, Research, Practice, Training,* 44, 371-377. doi:10.1037/0033-3204.44.4.371
- Bailey, J. A., Hill, K. G., Oesterle, S., & Hawkins, J. D. (2009). Parenting practices and problem behavior across three generations: Monitoring, harsh discipline, and drug use in the intergenerational transmission of externalizing behavior. *Developmental Psychology*, 45, 1214-1226. doi:10.1037/a0016129
- Barkley R. A. (1997). *Defiant children: A clinician's manual for parent training*. New York, NY: Guilford Press.
- Callaghan, G. M., Follette, W. C., Ruckstuhl, L. E., & Linnerooth, P. J. N. (2008). The Functional Analytic Psychotherapy Rating Scale: A behavioral psychotherapy coding system. *The Behavior Analyst Today*, *9*, 98-116. Retrieved from http://www.baojournal.com/BAT% 20Journal/BATissues.html
- Castonguay, L. G., & Beutler, L. E. (2006). Common and unique principles of therapeutic change: What do we know and what do we need to know? In L. G. Castonguay & L. E. Beutler (Eds.), *Principles of therapeutic change that work* (pp. 353-370). New York, NY: Oxford University Press.
- Coleman, J. C., Paul, G. L., & Schatschneider, C. W. (2007). Impact of staff attention on predicting post-discharge community tenure of psychiatric inpatients. *Psychological Services*, *4*, 306-315. doi:10.1037/1541-1559.4.4.306
- Conners, K. C. (1997). Conners' Rating Scales Revised:

- User's manual. Toronto: Multi-Health Systems.
- Durlak, J. A., Fuhrman, T., & Lampman, C. (1991). Effectiveness of cognitive-behavioral therapy for maladapting children: A meta-analysis. *Psychological Bulletin*, 110, 204-214. doi:10.1037/0033-2909.110.2. 204
- Elliott, R., Bohart, A. C., Watson, J. C., & Greenberg, L. S. (2011). Empathy. *Psychotherapy*, 48, 43-49. doi:10.1037/a0022187
- Epstein, T., & Saltzman-Benaiah, J. (2010). Parenting children with disruptive behaviours: Evaluation of a collaborative problem solving pilot program. *Journal of Clinical Psychology Practice*, *I*, 27-40. Retrieved from http://jcpp.scarthmckillop.ca/index.html
- Eyberg, S., & Pincus, D. (1999). Eyberg Child Behavior Inventory & Sutter-Eyberg Student Behavior Inventory Revised. Odessa, FL: Psychological Assessment Resources.
- Fabes, R. A., Leonard, S. A., Kupanoff, K., & Martin, C. L. (2001). Parental coping with children's negative emotions: Relations with children's emotional and social responding. *Child Development*, 72, 907-920. doi:10.1111/1467-8624.00323
- Gerard, A. B. (1994). *Parent–Child Relationship Inventory* (*PCRI*) manual. Los Angeles: Western Psychological Services.
- Goubert, L., Craig, K. D., Vervoort, T., Morley, S., Sullivan, M. J. L., Williams, A. C. de C., . . . Crombez, G. (2005). Facing others in pain: The effects of empathy, *Pain*, *118*, 285-288. doi:10.1016/j.pain. 2005.10.025
- Greene, R. W. (2010). *The explosive child.* New York, NY: Harper.
- Greene, R. W., & Ablon, J. S. (2006). *Treating explosive kids: The collaborative problem-solving approach*. New York, NY: Guilford Press.
- Greene, R. W., Ablon, J. S., & Martin, A. (2006). Use of Collaborative Problem Solving to reduce seclusion and restraint in child and adolescent inpatient units. *Psychiatric Services*, *57*, 610-612. doi:10.1176/appi.ps.57.5.610
- Greene, R. W., Ablon, J. S., Monuteaux, M. C., Goring, J. C.,
 Henin, A., Raezer-Blakely, L., . . . Rabbit, S. (2004).
 Effectiveness of Collaborative Problem Solving in Affectively Dysregulated Children With Oppositional-Defiant Disorder: Initial Findings. *Journal Of Consulting And Clinical Psychology*, 72, 1157-1164.doi:10.1037/0022-006X.72.6.1157
- Greenberg, L. S., Watson, J. C., Elliott, R., & Bohart, A. C. (2001). Empathy. *Psychotherapy*, *38*, 380-384. doi:10. 1037/0033-3204.38.4.380
- Holm, U. (2002). Empathy and professional attitude in social workers and non-trained aides. *International Journal of Social Welfare*, 11, 66-75. doi:10.1111/1468-2397.00197
- Keefe, T. (1976). Empathy: The critical skill. *Social Work*, *21*, 10-14. doi:10.1093/sw/21.1.10

- Kohut, H. (1977). *The Restoration of the Self.* New York, NY: International Universities Press.
- Kohut, H. (1984). *How Does Analysis Cure?* Chicago, IL: University of Chicago Press.
- Martin, D. J., Garske, J. P., & Davis, M. K. (2000). Relation of the therapeutic alliance with outcome and other variables: A meta-analytic review. *Journal of Consulting and Clinical Psychology*, 68, 438-450. doi:10.1037/0022-006X.68.3.438
- Martin, A., Krieg, H., Esposito, F., Stubbe, D., & Cardona, L. (2008). Reduction of restraint and seclusion through collaborative problem solving: A five-year prospective inpatient study. *Psychiatric Services*, *59*, 1406-1412. doi:10.1176/appi.ps.59.12.1406
- Moran, G., & Diamond, G. (2008). Generating nonnegative attitudes among parents of depressed adolescents: The power of empathy, concern, and positive regard. *Psychotherapy Research*, *18*, 97-107. doi:10.1080/10503300701408325
- Morrison, J. (1995). *The first interview: Revised for DSM-IV*. New York, NY: Guilford Press.
- National Institute of Mental Health. (1985). CGI (Clinical Global Impression Scale). *Psychopharmacology Bulletin*, 21, 839-844. Retrieved from http://www.medworksmedia.com/
- Pedersen, R. (2008) Empathy: A wolf in sheep's clothing? *Medicine, Health Care and Philosophy*, 11, 325-335. doi:10.1007/s11019-007-9104-0
- Penner, L. A., Cline, R. J. W., Albrecht, T. L., Harper, F. W. K., Peterson, A. M., Taub, J. M., & Ruckdeschel, J. C. (2008). Parents' empathic responses and pain and distress in pediatric patients. *Basic and Applied Social Psychology*, 30, 102-113. doi:10.1080/01973530 802208824
- Preston, S. D., & de Waal, F. B. M. (2002). Empathy: Its ultimate and proximate bases. *Behavioral and Brain Sciences*, *25*, 1-72. doi:10.1017/S0140525X02000018
- Rameson, L. & Lieberman, M. (2009). Empathy: A social cognitive neuroscience approach. *Social and Personality Psychology Compass*, 3, 94-110. doi:10. 1111/j.1751-9004.2008.00154.x
- Rogers, C. (1975). Empathic: An unappreciated way of being. *The Counseling Psychologist*, 5, 2-10. doi:10.1177/001100007500500202
- Rogers, C. (1980). A way of being. Boston, MA: Houghton Mifflin.

- Rothbaum, F. &Weisz, J. R. (1994). Parental caregiving and child externalizing behavior in nonclinical samples: A meta-analysis. *Psychological Bulletin*, *116*, 55-74. doi:10.1037/0033-2909.116.1.55
- Schaffer, M., Clark, S., & Jeglic, E., (2009). The role of empathy and parenting style in the development of antisocial behaviors. *Crime and Delinquency*, 55, 586-599. doi:10.1177/0011128708321359
- Sillars, A., Koerner, A., & Fitzpatrick, M. A. (2005). Communication and understanding in parent–adolescent relationships. *Human Communication Research*, *31*, 102-128. doi:10.1093/hcr/31.1.102
- Sillars, A., Smith, T., & Koerner, A. (2010). Misattributions contributing to empathic (in)accuracy during parent-adolescent conflict discussion. *Journal of Social and Personal Relationships*, 27, 727-747. doi:10.1177/0265407510373261
- Strayer, J. (1987). Affective and cognitive perspectives on empathy. In N. Eisenberg & J. Strayer (Eds.), *Empathy and Its Development* (pp. 218-244). Cambridge, UK: Cambridge University Press.
- Stewart, S. L., Rick, J., Currie, M., & Rielly, N. (2009). Collaborative problem-solving approach in clinically-referred children: A residential program evaluation. Unpublished manuscript, Department of Applied Research and Education Child and Parent Resource Institute, London, Ontario, Canada.
- Suchman, A. L., Markakis, K., Beckman, H. B., & Frankel, R. (1997). A model of empathic communication in the medical interview. *Journal of American Medical Association*, 8, 678-682. doi:10.1001/jama.1997. 03540320082047
- Thompson, A., Hollis, C., & Richards, D. (2003). Authoritarian parenting attitudes as a risk for conduct problems. *European Child and Adolescent Psychiatry*, 12, 84-91. doi:10.1007/s00787-003-0324-4
- Trumpeter, N. N., Watson, P. J., O'Leary, B. J., & Weathington, B. L. (2008). Self-functioning and perceived parenting: Relationships of parental empathy and love inconsistency with narcissism, depression, and self-esteem. *Journal of Genetic Psychology*, 169, 51-71. doi:10.3200/GNTP.169.1.51-71
- Waller, G. (2009). Evidence-based treatment and therapist drift. *Behaviour Research and Therapy*, 47, 119-127. doi:10.1016/j.brat.2008.10.018