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Author manuscript

Clin Child Fam Psychol Rev. Author manuscript; available in PMC 2017 September 01.

Published in final edited form as:

Clin Child Fam Psychol Rev. 2016 September; 19(3): 236–258. doi:10.1007/s10567-016-0210-5.

# Distilling Common History and Practice Elements to Inform Dissemination: Hanf-Model BPT Programs as an Example

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#### Abstract

There is a shift in evidence-based practice toward an understanding of the treatment elements that characterize empirically-supported interventions in general and the core components of specific approaches in particular. The evidence-base for Behavioral Parent Training (BPT), the standard of care for early-onset disruptive behavior disorders (Oppositional Defiant Disorder and Conduct Disorder), which frequently co-occur with Attention Deficit Hyperactivity Disorder, is wellestablished; yet, an ahistorical, program-specific lens tells little regarding how leaders, including Constance Hanf at the University of Oregon, shaped the common practice elements of contemporary evidence-based BPT. Accordingly, this review summarizes the formative work of Hanf, as well as the core elements, evolution, and extensions of her work, represented in Community Parent Education (COPE; Cunningham, Bremner, & Boyle, 1995; Cunningham, Bremner, Secord, & Harrison, 2009), Defiant Children (DC; Barkley 1987; Barkley, 2013), Helping the Noncompliant Child (HNC; Forehand & McMahon, 1981; McMahon & Forehand, 2003), Parent-Child Interaction Therapy (PCIT; Eyberg, & Robinson, 1982; Eyberg, 1988; Eyberg & Funderburk, 2011), and the Incredible Years (IY; Webster-Stratton, 1981; 1982; 2008). Our goal is not to provide an exhaustive review of the evidence-base for the Hanf-Model programs; rather, our intention is to provide a template of sorts from which agencies and clinicians can make informed choices about how and why they are using one program versus another, as well as how to make inform flexible use one program or combination of practice elements across programs, to best meet the needs of child clients and their families. Clinical implications and directions for future work are discussed.

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Conflicts of Interest

The authors declare that they have no conflict of interest.

Compliance with Ethical Standards

Research Involving Human Participants

This is a review paper and, therefore, includes human subjects research reported by other research groups, as well as research by the authors. For research conducted by the authors and previously reported elsewhere, all procedures performed in studies involving human participants were in accordance with the ethical standards of the institutional and/or national research committee and with the 1964 Helsinki declaration and its later amendments or comparable ethical standards. Additionally, informed consent was obtained from all individual participants included in the authors' research reported here.

#### **Keywords**

Hanf-Model; Behavioral Parent Training; Behavior; Dissemination; Practice Elements; Review

There is much discussion and debate in the clinical literature regarding the mounting need to expand and improve the quality of mental health service delivery (Insel & Gogtay, 2014; Kazdin, 2015; Ramsey, Lord, Torrey, Marsch, & Lardiere, 2016; Richards, 2015). For example, approximately one fifth of children (i.e., 15 million) in the United States alone meet criteria for a mental health disorder (Burns, Hogwood, & Mrazek, 1999; Kazak et al., 2010). Yet, estimates suggest that the vast majority (up to 75%) of youth in need of care do not receive evidence-based mental health services, with as many as 80% of families who start treatment dropping-out prior to completion of services (Gomby, 2000; Masi et al., 2013; Ringel & Sturm, 2001; Weisz, Jensen, & McLeod, 2005).

There may be no better example of the challenge of untreated mental health issues in children than early or childhood onset (3 to 8 years old) disruptive behavior disorders (DBDs), defined as Oppositional Defiant Disorder and Conduct Disorder, which often cooccur with Attention Deficit Hyperactivity Disorder (e.g., August, Realmuto, MacDonald III, Nugent, & Crosby, 1996; Larson, Russ, Kahn, & Halfon, 2011; Merikangas, Nakamura, & Kessler, 2009). Fourteen-percent or 8,315,000 youth in the United States, for example, have a behavior disorder (see Perou et al., 2013, for a review), which, in turn, makes DBDs among the most common reasons children are referred to mental health care (see Merikangas, Nakamura, & Kessler, 2009, for a review). Importantly, several models explain the etiology of early-onset behavior disorders [e.g., Bridging Model (Shaw & Bell, 1993); Cascade Model (Dodge et al., 2009); Early Onset Type (Moffitt et al., 2008)]; however, central to each is the tenet that the primary psychosocial factor that increases a child's genetic and/or temperamental vulnerability is the coercive cycle of parent-child interaction (e.g., Dishion, Patterson, & Kavanaugh, 1992; Snyder & Patterson, 1995; Snyder, Schrepferman, & St. Peter, 1997; also see McMahon & Forehand, 2003; Patterson, 2005; Reitman & McMahon, 2013, for reviews).

Briefly, the coercive cycle describes a maladaptive pattern of parent-child interaction in which a child learns that an escalation of problem behavior is functional in that the parent will eventually "give in" (e.g., child asks for a candy bar, parent says "no", child escalates whining and pleading, parent says "no, wait until after dinner", and, finally, child has a tantrum and parent gives in to the request). In the short-term, the parent has alleviated everyone's anxiety and frustration by giving in to the child; however, in the long term a parent trapped in the coercive cycle grows increasingly frustrated with the child's behavior, as well as with his or her own ineffectiveness. As the child's behavior continues to escalate each time the parent attempts to (re)gain control and authority, the coercive cycle ultimately exacerbates the child's disruptive behavior, as well as a family's vulnerability for harsh parenting and even maltreatment. Building upon formative behavioral research on the coercive cycle and related developmental, clinical, and behavior constructs, three groups in the United States initiated research that would come to be collectively referred to as Behavioral Parent Training (BPT; also called Parent Management Training or PMT) with the

aim of disrupting the maladaptive pattern of parent-child interactions implicated in early onset behavior disorders: Gerald Patterson in the Department of Psychology at the University of Oregon (and later the Oregon Social Learning Center), Robert Wahler in the Department of Psychology at the University of Tennessee, and Constance Hanf at the University of Oregon Medical School (now the Oregon Health and Science University) (see McMahon & Forehand, 2003; Patterson, 2005; Reitman & McMahon, 2013, for reviews).

Importantly, findings suggest that BPT, which targets the parent-child interaction and, in turn, uses the parent as the mechanism of change, is more effective than any other treatment approach to date (see Chorpita et al., 2011; Leijten, Raaijmakers, Castro, & Matthys, 2013; Reyno & McGrath, 2006, for reviews). Indeed, the magnitude of the effect of BPT treatment has been called relatively "robust", yielding moderate effects for improvements in parenting (d=.45) and child behavior (d=.42) at post-treatment (see Lundahl, Risser, & Lovejoy, 2006, for a review). In turn, BPT is now considered the standard of care for families of children with early onset DBDs (see Comer, Chow, Chan, Cooper-Vince, & Wilson, 2013; Furlong, McGilloway, Bywater, Hutchings, Smith, & Donnelly, 2012; Michelson, Davenport, Dretzke, Barlow, & Day, 2013, for reviews). Yet, less than 20% of youth in need of BPT receive treatment, and this percentage is even lower for the highest-risk families, including low-income families who are overrepresented in statistics for DBDs (Farahmand, Grant, Polo, Duffy, & DuBois, 2011; Kazdin, Holland, & Crowley, 1997). Even when care is sought by families of children with DBDs there is typically a significant lag, with the median delay as long as four years among those currently receiving services (Wang et al., 2005; also see Comer et al., 2014, for a review). Finally, those families receiving services for their children's DBD rarely receive evidence-based care, with potentially more emphasis on medication management, which has limited effect in this age range, relative to therapy (see Comer et al., 2014, for a review).

Of course, these disappointing statistics are due to a range of factors, including accessibility (e.g., cost, transportation) and acceptability (e.g., stigma associated with mental health care); however, another major factor is availability or the extent to which an evidence-based treatment such as BPT is used within front-line service settings (Shapiro, Prinz, & Sanders, 2015; also see Comer et al., 2014; Kendall & Beidas, 2007 for a review). Notably, primary reasons that clinicians identify for their reluctance to implement evidence-based treatments in general, including BPT, are insufficient time, resources, or agency support to adopt complex treatment manuals which they believe may indeed inadequately address the complex needs of the children and families in their caseloads (Aarons, Miller, Green, Perrott, & Bradway, 2012; Addis, Wade, & Hatgis, 1999; Borntrager, Chorpita, Higa-McMillan, & Weisz, 2009; Comer et al., 2014; Mazzucchelli, & Sanders, 2010). On one hand, skepticism regarding BPT in particular may be exacerbated by the wide availability of programs, including those with an evidence-base as well as those without, which may make informed decision-making about whether to use a BPT program and, if so, which program even more difficult to navigate (see Garland, Hawley, Brookman-Frazee, & Hurlburt, 2008; Shaffer, Kotchick, Dorsey, & Forehand, 2001 for reviews). Alternatively, among those open to training in and implementing BPT, the sense that there is only one "correct" choice may pose a challenge given the diverse range of presenting issues, children, and families (see Garland et al., 2008, for a review).

Clinician hesitation about the range of evidence-based BPT programs, however, may be allayed, at least in part, by a richer understanding of the common underlying history and practice elements. Importantly, attention to the commonalities underlying evidence-based treatments is not new. Chorpita and colleagues (Chorpita & Daleiden, 2009; Chorpita, Daleiden, & Weisz, 2005) have talked about the "distillation" of evidence-based treatments for a wide range of child and adolescent presenting issues. Similarly, the Centers for Disease Control and Prevention (CDC; 2014) has developed a web-based interface which highlights parenting "essentials" for caregivers of young children in general, while Garland and colleagues (2008) talked about the "common elements" of evidence-based practice for children with disruptive behavior disorders in particular. As such, this review focuses on one tradition, the Hanf-Model of BPT, to distill the underlying history guiding contemporary programs, as well as the similarities and differences in the practice elements that evolved from Hanf's early work. In turn, we hope that this approach provides an example from which agencies and clinicians, including those already using a BPT program in general or a Hanf Model program in particular, as well as those new to BPT, can make informed choices about how and why they may use one program relative to another, as well as how to flexibly use a program or combination of practice elements across programs, to optimally meet the needs of their clients.

## **Historical Context of the Hanf Model BPT Programs**

Historical accounts indicate that Constance Hanf received her doctoral psychology degree from Pennsylvania State University in 1961. She then became a Resident in Medical Psychology in the Department of Medical Psychology at the University of Oregon Medical School (now Oregon Health & Science University). It was there, as a faculty member from 1963 to 1979 in the "Crippled Children's Division" (now known as the "Child Development and Rehabilitation Center"), that she contributed to the development of a conceptual and practical model for treating behavioral issues, informed by family systems theory (i.e., parent-child dyad), social learning theory (i.e., child behavior that develops, is maintained, and/or exacerbated in the context of the parent-child relationship), and operant conditioning (i.e., processes by which parental responses to children increase and/or decrease adaptive and maladaptive behavior) that has come be to be known as BPT (Hanf, 1969a). Importantly, Hanf's use of her conceptualization of child behavior and, in turn, her treatment model evolved in the context of direct clinical work, as well as the training of clinicians, rather than research (Reitman & McMahon, 2013). As such, descriptions of her work cited here are largely from unpublished treatment manuals and papers handed down from one generation of her trainees to the next generation of their own trainees and students. In turn, Hanf had a substantive, albeit likely unintended, impact on treatment development research, particularly in the area of child behavior disorders (e.g., Jones et al., 2013; McMahon & Forehand, 2003; Reitman & McMahon, 2013).

In particular, the influence of Hanf's conceptualization of problem behavior, treatment recommendations, and clinical work and training, can be seen in the programs which are now collectively referred to as Hanf Model BPT programs: *Community Parent Education Program* (COPE; Cunningham, Bremner, Secord, & Harrison, 2009), *Defiant Children* (DC; Barkley, 2013), *Helping the Noncompliant Child* (HNC; McMahon and Forehand, 2003),

Parent Child Interaction Therapy (PCIT; Eyberg & Funderburk, 2011), and the Incredible Years (IY; Webster-Stratton, 2008). Importantly, Hanf's legacy with regard to the training history of her mentees was discussed by Reitman and McMahon (2013) and, as such, will only be mentioned briefly here. First, Rex Forehand, who later developed HNC with his then graduate student, now Robert McMahon, studied with Hanf as an intern during 1970 to 1971. Then, Shelia Eyberg, author of PCIT, which emphasizes theory consistent with Hanf's original approach (e.g., social learning theory), as well as attachment based theory (see Herschell, Calzada, Eyberg, & McNeil, 2002 for a review), completed her Ph.D. at University of Oregon with Stephen Johnson, an early influence in parent training as well, and then completed a clinical internship, postdoctoral fellowship, and started her academic career as an Assistant Professor at Oregon Health Sciences Center. Eyberg, who was a colleague of Hanf, also published with other parenting researchers in the field, including Carolyn Webster Stratton, as well as Ruth Matazzaro, also at Oregon. From 1975 to 1977, Charles Cunningham and Russell Barkley both finished their internships under the mentorship of Hanf and went on to develop their own interventions, COPE and DC, respectively. Lastly, IY's Carolyn Webster-Stratton received her training under the supervision of Hanf's mentee, Kate Kogan. Importantly, this review is not intended to provide an exhaustive account of the early work of Hanf or a systematic review of the literatures associated with each of the contemporary Hanf Model programs. Instead, we aim to build upon the prior summary by Reitman and McMahon (2013), as well as the original work of Hanf, by detailing her formative work, the nuances of the contemporary programs, as well as extensions and emerging applications for a wide range of children and families

#### Primary Presenting Issues Targeted by Hanf and Hanf-Model Programs

Although not well discussed or even perhaps known by some, Hanf's original program was actually developed for families (most often mothers) of children who had developmental disabilities (e.g., speech and language disorders, cerebral palsy, severe hearing problems, or other neurological or medical conditions). In the pilot study (Hanf, 1968), the problem behaviors identified by the mothers included "self-help activities" (e.g., difficulties with getting dressed), "continuous disruptive, destructive behavior" (e.g., destroying objects), "attention-seeking" (e.g., pulling on clothing), "cries continuously", "play activity" (e.g., difficulty with playing independently), and "negative, noncompliant behaviors" (e.g., refusal to comply with instructions). Consistent with our understanding of behavior disorders more generally, Hanf's work focused on helping parents to navigate behavioral issues common among children with developmental disabilities, including acknowledgment that problem behaviors emerge and are exacerbated in the context of maladaptive parent-child interactions.

Those influenced by Hanf extended her formative work to more explicitly target behavior disorders and symptoms as the primary presenting issue, rather than her original focus on developmental disabilities. For example, Barkley's DC was originally adapted to specifically address the needs of families with children who had ADHD (Barkley, 1981, as cited in McMahon & Forehand, 2003), but the program has since expanded to target "defiance" more broadly (Barkley, 1987; 1997; 2013). In its first iteration, Cunningham's COPE was also first utilized with parents of children who had ADHD (Cunningham, Bremner, &

Secord-Gilbert, 1993); however, it was then applied to disruptive behavior disorders in general (Cunningham, Bremner, & Boyle, 1995; Cunningham et al., 2009). Consistent with a more general focus on problematic behavior, rather than a specific disorder, HNC (Forehand & McMahon, 1981) targets "noncompliance" in young children, which it views as a keystone behavior for decreasing behavior disorders more broadly, while PCIT was developed "for the treatment of a broad range of childhood disorders" (Eyberg & Robinson, 1982, p. 131). Similarly, IY was originally conceived of as a parenting group for a "nonclinic population" experiencing child behavior problems (Webster-Stratton, 1981).

There are now several reviews of the literature that highlight the efficacy of BPT for behavioral issues (see Shaw, 2013, for a review). Generally, analysis of findings across studies suggest that BPT yields statistically and clinically significant reductions in behavior problems among young children, relative to non-BPT programs, with cascading reductions in delinquency and criminality in adolescence and adulthood as well (see Piquero, Farrington, Welsh, Tremblay, & Jennings, 2009, for a review). The magnitude of treatment effects for BPT tend to be small to moderate, with some effect size variability based on the country in which BPT was conducted, the size of the sample, and demographics of the family (see Leijten, et al., 2013; Lundhal, Risser, & Lovejoy, 2006; Piquero et al., 2009, for reviews). With regard to demographics in particular, some work suggests that BPT may be less effective for socioeconomically disadvantaged families, a pattern attributed to the fact that low income families are more likely to experience acute and chronic stressors that challenge engagement in and completion of treatment and, in turn, limit the promise of treatment benefit (see Jones et al., 2013; Leijten et al., 2013; Lundahl et al., 2006, for reviews). That said, we also know that if low-income families complete treatment, research suggests that they are equally likely to benefit from BPT as higher income families at posttreatment, particularly when behavior problems are severe. Treatment effects, however, may be more likely to wane over time for low income families, even among those who complete treatment, again likely due to the family and related stressors that may not only exacerbate behavioral issues, but compete with caregivers' ability to continue effectively using BPT skills after treatment ends (Jones et al., 2013; Lundahl et al., 2006; Shaw, 2013).

#### Age Range Targeted by Hanf and the Hanf-Model Programs

With regard to age range, Hanf's original program was designed for young children, which she defined to include children in the 2- to 7- year old age range (as described in Hanf & Kling, 1973; also see Reitman & McMahon, 2013; McMahon & Forehand, 2003, for reviews). Building upon Hanf's foundational focus on young children, the contemporary Hanf-Model programs also, at least initially, were developed to intervene with families of young (i.e., approximately 3 to 8 years old) children as well (e.g., DC; Barkley, 2013; HNC; McMahon & Forehand, 2003; PCIT, Eyberg & Funderburk, 2011). Although there is relatively less evidence to support their efficacy relative to research with young children, there have been upward and downward developmental extensions of Hanf's work, including iterations for infants/babies (PCIT; Bagner, Rodriguez, Blake, & Rosa-Olivares, 2013; Kohlhoff, & Morgan, 2014; McNeil and Hembree-Kigin, 2010; IY; Webster-Stratton, 2011), pre-adolescents (e.g., COPE; Cunningham et al., 2009; DC; Barkley, 2013; PCIT; see Chaffin et al., 2004; Franco, Soler, & McBride, 2005; McNeil & Hembree-Kigin, 2010; IY;

Webster-Stratton, 2011), and, finally, adolescents (e.g., COPE; Cunningham et al., 2009; Defiant Teens; Barkley & Robin, 2014).

#### Instructional Techniques Used by Hanf and Hanf-Model Programs

In her original treatment program, Hanf relied on role playing, modeling, viewing videotapes of themselves or of other caregivers (in the case of Hanf's work, mothers), and discussion of any suggestions raised by mothers (Hanf & Kling, 1973, p.11). Each of the treatment sessions began with a 5-minute "test period" which consisted of data collection regarding the mother-child dyad's interactions and behaviors during the standard situations. Building upon the assessment period, the mothers were taught the new skills in the absence of the child. Once the training of was completed, the child returned to session so that the mother could implement the skills with her child. While practicing, the mother received coaching via the "Bug-in-the-Ear" (i.e., microphone and earpiece which allows therapist to observe and coach parent-child interaction via one-way mirror) regarding the interactions and her use of the strategies. At the end of the session, a written homework assignment was given in an effort to help the mother generalize the skills.

Contemporary programs rely on these core strategies developed and implemented by Hanf, but the techniques used by contemporary programs have evolved as well. While didactic instruction is a fundamental part of traditional BPT, establishing even more of a balance between didactics and collaboration is now recommended and encouraged (Chronis, Chacko, Fabiano, Wymbs, & Pelham Jr, 2004). For example, Barkley (2013) recommends taking a Socratic questioning approach to the material, whenever possible, in an effort to "help parents consider themselves an important part of the process of engineering programs for their children instead of feeling like fools or simpletons who must receive direct lecturing" (p. 75).

Modeling and role-playing, central to Hanf's original program, are present to some extent in all of the Hanf-Model programs. Modeling, for example when the therapist provides an example of using the parenting skill, can occur in vivo or be pre-recorded. Both COPE (Cunningham et al., 2009) and IY (Webster-Stratton, 2008; 2011) are known for using video models to present a parenting strategy. For example, COPE utilizes what is referred to as "coping modeling problem solving" (CMPS; Cunningham, Davis, Bremner, Dunn, & Rzasa, 1993) which consists of group members identifying the parenting errors depicted in the videos and then generating alternative strategies.

While modeling consists of the parent observing the application of the parenting skill, a role-play allows the parent to directly practice using the strategy with the therapist, other group members, or inanimate objects (e.g., Mr. Bear in PCIT; Eyberg & Funderburk, 2011). In IY where children are typically not included in the group sessions, for example, the parents practice the skills in triads, with each person taking on the role of parent, child, and observer, in a fusion of modeling and role-playing (Webster-Stratton, 2011). In Hanf Model programs that explicitly incorporate the child, the therapist can use the training technique of "guided practice" or the process whereby the therapist provides prompts and feedback immediately to the parent as he or she interacts with the child (Roberts, 2008). Guided practice can occur as part of role-play with the child (if the therapist directs the action of the

child) or during unstructured interactions when the parent is practicing the skills, which is also known as "coaching" (Shanley & Niec, 2010). HNC (McMahon & Forehand, 2003) and PCIT (Eyberg & Funderburk, 2011) both explicitly incorporate guided practice as core components of their programs, requiring the child to be present at all (HNC) or most (PCIT) sessions, while COPE and DC do not require, but encourage, opportunities for parents to practice the skills with their child under the therapist's supervision when possible (Barkley, 2013; Cunningham et al., 1995).

One final key element related to skill acquisition is home practice. Each of the Hanf-derived interventions regularly assigns homework to the parents, although the specifics vary based on the program's content. All of the programs have parents practice using positive attention skills in response to the child's prosocial or desired behavior at home with their child daily, typically during set time periods ranging from approximately 5 (e.g., PCIT) to 15 (e.g., HNC) minutes. For example, in HNC (McMahon & Forehand, 2003), it is recommended that parents set aside 15 minutes per day to practice their positive attention skills, with the addition of new skills added to home practice as the program progresses. In addition, the programs have the parents practice consequences for maladaptive or not acceptable behavior, outside of session. For example, after learning about a token economy in DC's (Barkley, 2013) Step 4, the parents are to implement the system at home in order to problem solve with the therapist at the following session. Also consistent across programs with regard to home practice, caregivers are customarily provided with handouts on which to record their activities to review at their next session. Building upon the HNC (McMahon & Forehand, 2003) example above, parents are given a series of handouts that describe the nuances in the positive attention skills that they are learning in session, as well as a log to record the days and times that they practice the skills and their perceptions regarding their thoughts and feelings about the practice.

#### Parenting Skills Taught by Hanf and Hanf-Model Programs

As originally conceived by Hanf, her core treatment components focused on a set of parenting skills designed to increase positive attention for appropriate child behavior, remove parental attention for inappropriate child behavior, and implement more effective instructions and consequences for noncompliance (see McMahon & Forehand, 2003; Reitman & McMahon, 2013; Jones et al., 2013, for reviews). "Child's Game" or the child directed interaction was used exclusively as the context for teaching the foundational skill set in Stage I of Hanf's program. Mothers were taught to contingently use positive reinforcement via the skills of "Attends-Follows" and "Rewards". Attends-Follows consisted of the mother "notices, looks at, imitates, follows, describes C's [child's] activity or production while introducing no new approach" (Hanf & Kling, 1973, Table II). The program delineated three different types of Rewards: "Labeled", "Unlabeled", and "Physical". A Labeled Reward was defined as a "verbal or physical cue of pleasure or liking of the exact act just performed by C [child]" (Hanf & Kling, 1973, Table II). In contrast, Unlabeled Rewards were considered "nonspecific comments or gestures of liking and approving following some C [child]-behavior" (Hanf & Kling, 1973, Table II). Physical Rewards were operationalized as positive physical gestures such as a kiss, hug, or pat on the arm/head. During "Child's Game", mothers were instructed to be interested in their child's

activities, but also to not introduce anything new to the play (i.e., changing of the play was to occur at the child's prerogative). They were to avoid questions and commands and encouraged to imitate only the child's past or current actions. Hanf did not explicitly have a skill she called "Ignoring"; however, parents were taught not to react (i.e., "wait with no concern") when the child was engaging in behavior that did not merit Attends-Follows or Rewards, which clearly informed the development of the "Ignoring" skill discussed in the contemporary Hanf Model programs.

Stage II was designed to teach mothers how to a) give fewer, but more explicit, "Commands", b) use Rewards contingently upon compliance to Commands, and c) implement the "TRIAD", a sequence of what Hanf referred to as aversive consequences to noncompliance (Hanf, 1969b). Mothers were instructed to give directives in "simple language, using a clear, 'non-angry', non-imperious tone of voice and accompanying each request with gestures wherever possible" (Hanf & Kling, 1973). They were informed of the distinction between "Direct", specific instruction (i.e., orders, requests, directives), and "Indirect", posed as a question or stated as subjective or conditional, Commands (Hanf & Kling, 1973). During the context of Stage II and "Mother's Game", once a mother made her request, if the child did not (or was not beginning to) comply after 5 seconds, the TRIAD was used to obtain compliance. The sequence consisted of three consequences: 1) a "Warning", 2) a "Time Out" (T.O.) period, and 3) a "Spanking". The Warning was issued as an "if...then..." contingency statement, such as "if you don't [instruction], then you'll [consequence; typically go to T.O.]. If the child continued to be non-compliant, the mother was then coached to immediately send the child to Time Out; however, there was not a specified length of time for Time Out. Rather, after the child had "been quiet and on the chair for a very long (to C [child]) time" (Hanf & Kling, 1973, p. 19), the mother released the child from Time Out and reissued the original command. If the child complied, mothers were coached to respond with a "neutral, yet friendly" comment of "that's it". The mother then returned to using positive attention. If the child did not remain in Time Out, the mother was instructed to administer 2 firm spanks to the child's bare buttocks. Prior to this occurring for the first time, the child was given a single warning of the consequence of leaving Time Out.

Consistent with research demonstrating the lack of efficacy of spanking with children with behavior disorders (see Benjet & Kazdin, 2003; Ferguson, 2013, Larzelere, 2000, for reviews), spanking as a consequence has disappeared from the contemporary Hanf-Model BPT programs; however, other skills Hanf used in her program have been incorporated with some nuances across programs (McMahon & Kotler, 2008; Reitman & McMahon, 2013). For example, regarding the positive attention skills (i.e., Hanf's Attends-Follows and Rewards), programs use different labels and may also focus more or less explicitly on various nuances of the child's behavior. For example, in HNC, McMahon and Forehand (2003) delineate two types of Attends: describing overt behavior (e.g., "You are putting the red block on the blue block") and emphasizing desired prosocial behavior (e.g., "You are sharing the toys"). In IY (Webster-Stratton, 2008), there are also two main types of parental "Coaching", one of which closely aligns with Hanf's and HNC's Attends, "descriptive commenting", which is remarking on the child's actions, while the other, "persistence coaching", extends the commentary to include naming the child's internal state (e.g., "You

are staying calm"); however, three other types of coaching are also explicitly incorporated into skills training in IY: Academic (e.g., parental statements about child's counting), Social (e.g., statements about child's sharing), and Emotion (e.g., describing and labeling of child's emotions). In contrast, the Attending skill in PCIT, which is referred to as "Behavior Description", is not further specified (Eyberg & Funderburk, 2011).

With respect to positive feedback to the child (i.e., Hanf's Rewards), all of the programs acknowledge three general types: specific verbal statements (e.g., "I like when you hand me the block"), non-specific verbal statements ("Good job"), and physical (e.g. high five); however, the terminology used, and focus placed on, this skill varies across programs. For example, in HNC (McMahon & Forehand, 2003) terminology, the three types of positive feedback are referred to as "Rewards" (i.e., labeled verbal, unlabeled verbal, and physical), with a focus placed on the advantages of labeled verbal rewards (McMahon & Forehand, 2003); however, PCIT (Eyberg & Funderburk, 2011) uses the terms Labeled Praise, Unlabeled Praise, and Positive Touch and, like HNC, emphasis is placed on the use of Labeled Praises in particular. Additionally, PCIT (Eyberg & Funderburk, 2011) highlights the use of Reflections (i.e., repetitions or phrases of the child's statements), parental imitation of child's activity (e.g., both parent and child building towers), and parental enjoyment. These skills, in conjunction with the previously mentioned skills (praise and behavior description) create the PCIT acronym PRIDE (praise, reflect, imitate, describe, and enjoy, which has also been referred to as enthusiasm).

In terms of managing misbehavior, all of the programs now include a more formalized version of Ignoring, which again builds upon Hanf's "wait with no concern" coaching, and giving effective Commands. In general, these skills are similarly described across all the programs (see manuals for more specific information; COPE; Cunningham et al., 1995; DC; Barkley, 2013; HNC; McMahon & Forehand, 2003; PCIT; Eyberg & Funderburk, 2011; and IY; Webster-Stratton, 2008). With respect to Hanf's Clear Instructions, it seems to be generally recommended across programs to engage the child's attention before issuing a command one at a time, using a firm but polite, neutral tone of voice. Additionally, there seems to be agreement that the directive should be positively stated (i.e., a "do" command rather than a "don't" command) using simple language and gestures as necessary and that the instruction should be kept brief and developmentally appropriate. If a rationale or explanation is to be provided, the Hanf-Model programs consistently suggest that it should occur either before the command or after the child's compliance. Additionally, Barkley (2013) recommends having the child repeat the command to ensure the child understands.

There seems to the greatest variability between the programs with regard to the implementation of Hanf's Time Out sequence. In particular, COPE (Cunningham et al., 1995) utilizes a less structured approach to this consequence; although Hanf's basic elements are present (i.e., clear instruction, time for compliance, warning if noncompliance, Time Out for continued defiance), parents determine their own specific process (e.g., preferred Time Out duration, amount of quiet time necessary for release). In contrast, the other four Hanf-Model programs recommend a more specific sequence akin to Hanf. After the parent issues a command, the programs encourage the parents to provide positive

attention (e.g., PCIT specifies a Labeled Praise; HNC specifies a Labeled Verbal Reward, IY simply states Praise) to the child for compliance within 5 seconds.

If the child is noncompliant (e.g., 5 seconds have elapsed since the command), the next step for the parents in all five of the Hanf-Model programs is to provide what can be generally referred to as an "if-then" warning. Although not necessarily explicit in all of the programs, Barkley (2013) advises that parents verbally count backwards from 5 once the command has been given to get them in the habit of this waiting period during initial practice sessions (i.e., other programs would suggest parents count silently or internally). If the child adheres to the warning, the programs generally recommend that the same positive attention should be provided as if compliance occurred to the initial command. If, after the warning is provided the child remains disobedient, the programs generally agree on Time Out as a consequence.

The programs differ to some extent, however, with regard to Time Out length, with variations ranging from 3 minutes (HNC; McMahon & Forehand, 2003; PCIT; Eyberg & Funderburk, 2011) to a variable time based on the child's age (DC; Barkley, 2013; IY (Webster-Stratton, 2008), and amount of quiet time necessary for release, with periods as short as 5 seconds (PCIT; Eyberg & Funderburk, 2011) and up to 2 minutes (IY; Webster-Stratton, 2008). However, regardless of the differences, the underlying rationale remains that release from Time Out is contingent on the child being in control and regulated. After the parent releases the child from Time Out, the programs suggest that the initial command be repeated. If the child is now compliant, the parent is typically prompted to either respond with positive attention (HNC; IY) or a neutral tone of voice (DC; PCIT). In PCIT, after the neutral acknowledgement, the parent then issues a second command that is followed by enthusiastic labeled praise for compliance. For DC, the parent is instructed to reinforce the next positive behavior the child demonstrates.

Across the programs, there are relatively consistent suggestions for how to handle the child if he or she refuses to go to or stay in Time Out. For example, with PCIT the primary backup is the Time Out room for 1 minute, as well as 5 seconds of quiet (Eyberg & Funderburk, 2011). The other interventions also include this as a suggestion, but also offer additional alternatives such as additional time in the Time Out chair (COPE; Cunningham et al., 2009; DC; Barkley, 2013; HNC; McMahon & Forehand, 2003; and IY; Webster-Stratton, 2008), Privilege Removal (COPE; Cunningham et al., 2009; DC; Barkley, 2013; HNC; McMahon & Forehand, 2003; and IY; Webster-Stratton, 2008), or Fines (e.g., deducting tokens; COPE; Cunningham et al., 2009; and DC; Barkley, 2013). Similarly, the programs send a consistent message in terms of the use of an immediate Time Out for aggressive behavior, although the terminology for this varies. For example, in HNC (McMahon & Forehand, 2003), the terminology used is "Standing Rules", which are if-then statements that result in an immediate Time Out; however, in PCIT (Eyberg & Funderburk, 2011) the language used is "House Rules". Yet, in IY (Webster-Stratton, 2008), "Household Rules" refers to formal statements regarding the child's expected responsibilities and general behavior. These can be short-term (i.e., arising as needed based on particular situations) or long-term (i.e., typically established in advance and generally deal with family routines).

While there is great of consistency in the breadth of parenting skills covered in the Hanf-Model programs, there are some more program-specific skills that extend beyond Hanf's original work as well. Token Economies (i.e., when a child earns a "token" such as a poker chip, sticker, or point that is later exchanged for a reward), for example, are considered a core component of 3 of the 5 interventions (COPE, DC, and IY). Barkley (2013), as one example, recommends using a Token Economy as a motivator for improving behavior for children who may be less responsive to social attention and a more powerful method of reinforcement is required. Interestingly, IY does not recommend the use of a response-cost procedure (i.e., removal of earned tokens as a penalty), reportedly in an effort to help parents keep rewards separate from discipline strategies (Webster-Stratton, 2008). Other Hanf Model programs may include token economy/response cost as a back-up for consideration. For instance, in PCIT (Eyberg & Funderburk, 2011), information about a Token Economy is provided at the last session as part of a larger discussion regarding other discipline strategies, but it is not a key part of the program.

In addition to Token Economy, teaching parents to develop and use a Daily Report Card system (i.e., a home-based reward system contingent upon school performance) is an explicit component of COPE (Cunningham et al., 2009) and DC (Barkley, 2013), but not the others. Although Barkley (2013) considers the session on daily report cards optional in his program, he nonetheless advises covering the material in the event future school behavior problems arise. A daily report card system certainly can be a convenient method for not only managing the child's classroom behavior, but also for sharing information between teachers and parents (Barkley, 2013). That said, the other Hanf-Model programs may have supplementary material to the manual reserved for families for whom coordination with teachers and schools may be most relevant. HNC (McMahon & Forehand, 2003), for example, recommends assessing for the need of a school-based intervention based on the severity of any behavioral problems, then, provides references for the therapist's consideration.

In summary, the Hanf Model programs have many similarities in the skills that are taught to caregivers, as well as some nuances within and across programs. Accordingly, we suggest that an important aspect of training in and flexible use of Hanf Model BPT programs is that the therapist be thoughtful about the function of the skill (e.g., the function of Attends is to increase parental positive attention to child behavior the parent wants to see or see more) and, equally importantly, the parent understands the function of the skill as well. That is, one can imagine that a skill such as Attends (e.g., "you are putting the red block on the blue block"), for example, may feel uncomfortable and even trivial, to parents if they do not understand the rationale behind and function of the skill and, in turn, they may be less likely to practice at home or even return to treatment. Understanding the range of skills and function of each skill should also help therapists to flexibly tailor treatment to increase the probability that parents will use the skills in session and at home and, in turn, children will be most likely to optimally benefit from services. For example, it is theoretically important to note that the primary rationale cited by Hanf, as well as the contemporary Hanf-Model program authors, for Time Out is the removal of attention as a consequence for mis- or maladaptive behavior. To this point, we are not aware of research that suggests that for a 4year-old child a 3-minute (e.g., HNC) versus a 4- minute (e.g., DC and IY) Time-Out is

differentially effective. Until such a time that this question is answered empirically, it seems most important that a parent is comfortable following through with at least one of the evidence-based Time-Out approaches (i.e., Time Out will certainly not be effective if a parent will not do it), so a therapist may consider flexibly use the Time-Out procedure accordingly. Similarly, we are not aware of data suggesting that adding a Token Economy for older children (e.g., 7 or 8) in HNC or PCIT, which is not an explicit part of either program, would be contraindicated and, as such, may be a useful resource for families either at home and/or in the classroom and "borrow" that parenting skill from DC, for example. Consistent with work in the broader psychotherapy literature (see Lambert & Shimokiwa, 2016 for a review), any treatment plan, including flexible use of Hanf Model BPT programs as suggested here, should be evaluated to determine if the treatment plan is associated with continual and optimal improvement in parent-child interactions and, in turn, child behavior. A nice example of precisely this approach was documented by Fabiano and colleagues (2009) who acknowledged that in their study of fathers of children with ADHD they primarily used the COPE program, but incorporated elements from other programs as well based on their conceptualization of their target population and presenting issues.

#### **Session Sequence and Structure**

Hanf's treatment progressed in two phases (i.e., Stages I and II) and was mastery-based. In particular, the goals of Stage I were "to increase the desirability of M's [mother's] as a source of socially-given reinforcement to C [child]" and "to increase C's spontaneous interaction with M" (Hanf & Kling, 1973, p.2). Advancement to Stage II was determined by predefined criteria which Hanf considered as an indication that the mother grasped Stage I skills: 1) use Attends/Follow skills for at least 40 seconds per minute and 2) demonstrate an unspecified but steady increase in the number of Rewards compared to personal baseline numbers over 3 consecutive sessions. The Stage II intervention was reportedly developed and initiated by Hanf's team because it became apparent to them that, when tasked with directing the play, the mothers were often unable to maintain consistent control and instead resorted to parallel play (Hanf, 1969b). The termination criteria for Stage II were 1) a 50% decrease in the ratio between Commands issued and child's compliance and 2) the child continued to interact with the mother for at least 40 seconds per minute. However, according to Hanf & Kling (1973, p. 12), mothers were prompted to "think about and then suggest their own termination date using as their criteria their continuous, contingent, and flexible use of the new behavior repertoires".

Of the contemporary Hanf-Model programs, HNC and PCIT most closely adhere to the two-stage and mastery-based criteria originally developed and used by Hanf. The first phase, referred to as "Differential Attention" in HNC (McMahon et al., 2010) and "Child Directed Interaction" in PCIT (Eyberg & Funderburk, 2011), focuses on appropriate use of social attention by the parent. The second phase, termed "Compliance Training" in HNC (McMahon et al., 2010) and "Parent Directed Interaction" (Eyberg & Funderburk, 2011) in PCIT, addresses effective limit setting. These models also demonstrate parallels with regard to mastery criterion; however, while HNC has separate mastery coding criteria for each of the skills, PCIT uses summary criterion for Child and Parent Directed Interactions, respectively. Regarding positive attention skills, HNC requires an average of 4 or more

rewards plus attends per minute, with at least 2 rewards per minute (McMahon & Forehand, 2003); for PCIT, the parent must use 10 behavior descriptions, 10 reflective statements, and 10 labeled praises in 5 minutes (Eyberg & Funderburk, 2011). During these time periods, the parent must also limit the use of directive verbalizations (HNC; an average of 0.4 or fewer commands plus questions per minute; PCIT; no more than 3 questions, commands, or critical statements in 5 minutes). Both programs also encourage the parent to ignore nonharmful inappropriate behavior, but this is less formalized (HNC; recommended value of 70% of misbehavior is ignored; PCIT; therapist's subjective evaluation). Regarding the mastery criteria for the second stage of therapy, both programs have requirements regarding use of effective commands (HNC; average of 2 or more clear instructions per minute with no more than 25% of total commands as unclear instructions; PCIT; 75% of commands must be effective) and also adherence to the consequences protocol (HNC; parental use of attends and rewards within 5 seconds following child compliance at least 60% of the time; PCIT; 75% correct uses of a labeled praises, warnings, or successful follow-through with Time Out). Lastly, both programs require an improvement in child behavior; however, this is operationalized differently across the two programs. In HNC, there should be a 75% ratio of child compliance to parental commands; PCIT requires an Eyberg Child Behavior Inventory (ECBI; Eyberg & Pincus, 1999) intensity score at or below 114 as a treatment termination standard.

Although not structured in the same manner as the original two-stage Hanf model, the remaining programs (i.e., COPE, DC, IY) utilize a similar sequencing of skills with use of positive and differential attention taught first followed by disciplinary procedures. However, there are no explicit criteria for advancing through these programs, which seems to be more consistent with the group-based approach typical of these programs in which the child may not be in attendance. Nevertheless, Webster-Stratton (2008) does offer a basic remediation plan for group participants who are not progressing as the clinician would expect: "participants who have difficulty with material in a program can review additional vignettes and do more practice sessions before moving to subsequent programs" (p.17).

While a clear rationale for the specific sequencing of skills could not be found in her writings, Hanf (1969b) noted "if she [mother] were not practiced in observing a broad range of [child's] behaviors she would not be able to discriminate his ongoing desirable behaviors, nor would she note the effect of her antecedent and consequent behaviors upon [child's] behavior" (p. 4). Building upon her assertion, practical and empirical data have evolved to support sequencing. First, putting the focus on increasing attention to the child's positive behavior decreases the likelihood that a child will seek attention through negative behavior, bolster the quality of the parent-child relationship, and in turn, increase the likelihood that the child will respond to the clear instructions and contingencies for noncompliance taught in the later part of the programs (e.g., Eyberg & Funderburk, 2011; McMahon & Forehand, 2003). There are some recommendations for when varying from this sequence may be more optimal, including circumstances such as extreme behavioral dysregulation or physically abusive parents. In the case of behavioral dysregulation, if the parent is unable to practice the positive attention skills, it may be necessary to directly target the disruptive behavior first (McMahon & Forehand, 2003). When working with physically abusive parents, the therapist may find it helpful to teach non-physical forms of discipline earlier than is typical in an

effort to prevent physical punishment, particularly because positive parenting approaches to manage misbehavior may take some time (McMahon & Forehand, 2003).

Empirically, the sequencing of the stages has been examined in a study of PCIT (Eisenstadt, Eyberg, McNeil, Newcomb, & Funderburk, 1993) in which half of families received the traditional sequence, while the other group was taught the second phase (i.e., clear instructions, consequences) before the first. There were few differences observed between the two treatment conditions; in fact, initial reports suggested that putting the second phase first may be more beneficial. Notably, parents reported greater improvements in child's behavior, more satisfaction with therapy, and did not return for follow-up assessment (which the investigators interpreted as indicating less of a need for follow-up consultation). However, in a subsequent book chapter, two of the authors (McNeil & Hembree-Kigin, 2010) reported that there were a multitude of disadvantages in reversing the phases during the study, including increased conflict during the early sessions, more difficulties with using Time Out, and shorter maintenance of treatment gains. They recommend switching the ordering only "as an absolute last resort approach to be used only when all other options have failed" (p. 325); in fact, they have only do so 4 times out of the over 1,000 PCIT cases they have treated.

In terms of the rationale for the use of mastery-criteria for a given skill and/or stage, consistent with Hanf's program, we are not aware of data to suggest when or if it is associated with differential outcomes. That said, the mastery criteria, which are inherent in both HNC and PCIT, are likely to be most practical and feasible in individual family-focused delivery of BPT when it is critical to confirm that clinically significant change is occurring within a family (e.g., parents of children who meet criteria for a disruptive behavior disorder vs. community-based sample of parents). Of note, there has been some work examining how home practice of skills outside of the clinic settings is associated with parental mastery of skills. For example, Stokes and colleagues (2016) reported that parent-reported homework completion was associated with skill acquisition and, in turn, treatment completion in fewer sessions, highlighting the critical importance of generalizing parental use of skills beyond the clinic-based setting and in the everyday lives of the child and family.

#### **Delivery Format of the Hanf and Hanf-Model Programs**

In Hanf's original program, her model was characterized by a clinic-based approach with the individual family, including a parent (typically the mother) and the child. Generally, therapy was completed within  $10 \pm 2$  sessions (Hanf & Kling, 1973) and follow-up sessions (termed "rechecks") were scheduled approximately 3 months after termination. According to Hanf (1969b), treatment continued for approximately 15 sessions or a maximum of 2 and half months, which included twice weekly sessions (approximately 15 to 30 minutes) until termination criteria were reached.

Two of the contemporary Hanf-Model programs, HNC (McMahon & Forehand, 2003) and PCIT (Eyberg & Funderburk, 2011) were modeled closely after this individual, family-focused format. For example, HNC (McMahon & Forehand, 2003) recommends twice weekly sessions (75-90 minutes each), given the benefits afforded by more consistent practice of skills and coaching and feedback from therapists; however, the authors

acknowledge that weekly sessions may be more feasible for families and practitioners and recommend supplementing the weekly session with a brief mid-week telephone check-in regarding skill practice and progress at home. In contrast to Hanf's original work, other contemporary Hanf-Model programs, primarily, COPE (Cunningham et al., 1993) and IY (Webster-Stratton, 1981), were originally conceived of as programs that would be delivered in a group format, with the primary goal of increasing consumer access to evidence-based parenting programs. In terms of recommended group size, prior descriptions suggest that the average number of group members for COPE is 27 (Cunningham et al., 2009), while a typical group size for IY is reportedly 10-14 parents (Webster-Stratton, 2011). In more of a hybrid extension of Hanf's work, Barkley's DC (2013) is designed to be used flexibly for either individual or small group administration; however, Barkley (2013) recommends using a group (i.e., recommended 6 to 10 families maximum) approach when possible.

In addition to individual family versus group clinic-based Hanf-Model BPT, research has also been conducted looking at alternative methods of service delivery with some of these programs. For example, both HNC (Conners, Edwards, & Grant, 2007; Long & Forehand, 2000) and PCIT (Niec, Hemme, Yopp, & Brestan, 2005; Nieter, Thornberry Jr, & Brestan-Knight, 2013) have been administered successfully in a group-format, in addition to the more traditional individual family focus. Similarly, to our knowledge self-administered versions of the curricula are available to the public for three of the programs: DC (Your Defiant Child: 8 Steps to Better Behavior; Barkley & Benton, 2013; Your Defiant Teen: 10 Steps to Resolve Conflict and Build Your Relationship; Barkley, Robin, & Benton, 2013), HNC (Parenting the Strong-Willed Child, Forehand & Long, 2010), and IY (The Incredible Years: A guide for parents of children 2–8 years old, Webster-Stratton, 2006), which also includes a video series self-help version administration (e.g., Webster-Stratton, 1990; 1992; Webster-Stratton, Kolpacoff, & Hollinsworth, 1988). Some data, in turn, suggests that such an approach can indeed be efficacious (e.g., see meta-analysis by Tarver, Daley, Lockwood, & Sayal, 2014; HNC, Forehand, Merchant, Long, & Garai, 2010; IY, Lavigne et al., 2008). While to our knowledge there is no formal "self-help" version of PCIT available to consumers, some work suggests that parents who received only educational handouts about the PCIT skills reported as much improvement in outcomes as those who participated in a group (Berkovits, O'Brien, Carter, & Eyberg, 2010).

Session length times vary across the programs with individual family-focused programs ranging from 60 (DC; Barkley, 2013; PCIT; McNeil & Hembree-Kigin, 2010) to 75-90 (HNC; McMahon & Forehand, 2003) minutes, while group-delivered programs seem to generally last approximately 2 hours (COPE; Cunningham et al., 2009; DC; Barkley, 2013; IY; Webster-Stratton, 2008; 2011). Most of the programs have the sessions occur weekly (COPE; Cunningham et al., 2009; DC; Barkley, 2013; PCIT; McNeil & Hembree-Kigin, 2010; IY; Webster-Stratton, 2008; 2011); however, there is variability within and across programs. For example, the average number of sessions over the course of the treatment varies based on whether it is individual or group delivered content. Individual-based programs, with an average course of treatment ranging from 8 to 12 (HNC; McMahon & Forehand, 2003; McMahon, Long, & Forehand, 2010; PCIT; McNeil & Hembree-Kigin, 2010) sessions, may be completed sooner than group-based approaches, which can be structured to range from as few as 6 sessions (DC; Canu & Bearman, 2011) up to 20 (IY;

Webster-Stratton, 2008; 2011); however, group-based approaches have the inherent benefit of treating multiple families simultaneously, which leads to a brief mention regarding cost.

#### Cost and Cost-Effectiveness of Hanf Model Training and Implementation

When considering overall time, as well as number and frequency of sessions, there has been growing attention to exploring the cost-effectiveness of mental health interventions, including Hanf-Model BPT programs. Although we are not aware of cost data related to Hanf's original work, variability in costs across contemporary Hanf Model programs seems to depend on how the evaluators defined and calculated "cost", as well as other factors such as inflation, which make direct comparisons across Hanf-Model programs, as well as comparing Hanf-Model programs with other evidence-based treatments, complicated. That said, published costs for four of the Hanf Model programs (i.e., COPE, HNC, PCIT, and IY) range from \$501 to \$1765 per client (Goldfine, Wagner, Branstetter, & McNeil, 2008; Honeycutt et al., 2015; Sampaio, & Feldman, 2014); however, another way of looking at cost is dollar amounts associated per one-point improvement on clinical measures of child behavior, such as the Eyberg Child Behavior Inventory ECBI; Eyberg & Pincus, 1999). For Hanf- model programs, this value tends to range from \$13 to \$30 (Edwards, Céilleachair, Bywater, Hughes, & Hutchings, 2007; Honeycutt et al., 2015).

Another cost to consider are those clinicians must encumber for materials, training, and supervision for each of the Hanf Model programs. To this point, there is variability in regard to the level of structure associated with training for each program. For example, PCIT.org has a tab on their website for "Professionals", which includes sub-tabs for "PCIT Trainings" and "PCIT Certification". For example, "Initial Therapist Training", includes a minimum of 40 hours of face-to-face training and/or mentored cotherapy, at least twice monthly phone, web, or in person group or individual consultation, video or live observation of four PCIT sessions with feedback, and additional case experience, all under the supervision/ consultation of a more senior PCIT therapist. The website lists the price for an upcoming initial training, as well as program materials, as \$4,500 per trainee. Then, those therapists who have completed "Initial Therapist Training", may seek "Certification", which includes an application process (\$225), an optional certification workshop (\$350 per trainee), which average 1.5 to 2.5 days, as well as an online examination. Once a therapist is PCIT Certified, they may seek training to become a "Level I PCIT Trainer", with other prerequisites including being an independently licensed mental health provider, a psychology predoctoral intern, or a psychology postdoctoral fellow who has completed at least 4 PCIT cases. This Level 1 Trainer training (\$1,700 per trainee) includes at least 8 hours of work in how to train and coach others, as well as how to ensure that trainees are maintaining fidelity and competence, as well as once monthly consultation for at least one year, video review and feedback of at least two PCIT sessions, and case experience supervising at least one trainee, all under the supervision of a more senior trainer. Following successful Level I Trainer Training, therapists may pursue "Level II" (i.e., approved to conduct the training and consultation of professional or graduate-level clinicians, as well as Level I Trainers, in regional mental health service delivery systems) or "Master" (i.e., approved to conduct the training and consultation of professional or graduate-level clinicians, as well as Level 1 and 2 Trainers, in national and international mental health service delivery systems) Trainer

status. Although the website is less explicit about the training and cost, the website does provide the names and contact information for their Level II and Master Trainers for those interested in further information, as well as other continuing education opportunities for PCIT Certified Therapists.

Similarly, incredibleyears.com has a tab for "Workshops" on their website, which includes details on the workshops to become an Incredible Years "Group Leader" [e.g., BASIC Parent Group Leader Training (2-8)], as well as training requirements to become a Certified Incredible Years "Trainer", "Mentor", or "Peer Coach". Although the website indicates that training is not required to do an IY group, it is recommended, with "Group Leaders" typically having a degree in a helping profession (e.g., social work, psychology, education) and must have attended a workshop, be familiar with materials for their respective group(s) (e.g., BASIC Parent Group), and have ongoing consultation and supervision. For example, an upcoming "BASIC Parent Group Leader Training" is a 3-day workshop, which includes a detailed syllabus, as well as copies of the core materials, including "The Incredible Years: A Guide for Parents of Children 2-8 Years Old "and "Collaborating with Parents to Reduce Children's Behavior Problems: A Book for Therapists Using the Incredible Years Programs". The website clarifies that the cost of trainings depends on which program and where it is held (i.e., Seattle is IY home base), with a Seattle 3-day (21 hours) parent, teacher or child training costing between \$400- \$550, 2-day trainings (Baby, Advance, Attentive Parenting) costing \$300, and a single day update or consultation day costing \$175. That said, the website clarifies that prior to attending the workshop, participants should also purchase the relevant program curriculum (e.g., \$1,670 for Preschool BASIC Parenting Program). Then to become a "Certified Group Leader", an individual must complete at least two of the respective IY group, participate in consultation/supervision, and receive consistently positive reviews from trainers, mentors, and group attendees (e.g., \$525 for BASIC Parent Certification). Although the pricing is not available on the website for the subsequent levels of training, a summary of the requirements and training is provided here. The next level of training, "Certified Coach", more typically includes individuals with a master's degree in a mental health related field (i.e., social work, psychology, psychiatry), who must have completed at least six of the respective group(s) (e.g., BASIC Parent Group, participated in a Peer Coaching Workshop, participated in supervision/consultation, as well as received favorable reviews from all mentors, peers, and attendees. To move from a "Certified Coach" to a "Certified Mentor", who is then able to provide trainings, as well as mentor and supervise group leaders, the individual who typically also has an advanced mental health degree must be nominated by a Mentor or Trainer, have completed at least eight of the respective group, receives training, observation, and supervision in the delivery of the workshop(s), as well as demonstrated the ability to mentor my observing and providing feedback to mentees, all with positive evaluations from mentors and mentees. Finally, a "Certified Trainer" typically has a M.A, Ph.D., or M.D. degree with extensive clinical and research experience, is established by executive appointment, as well as extensive experience as a group leader, coach, and mentor and, in turn, provides international training and consultation.

COPE also has a website with a training tab (rfts.ca); however, similar to the subsequent programs that will be discussed as well, DC and HNC, there is somewhat less structure

inherent in the training process than PCIT and IY. COPE has three levels of facilitators. The first level of facilitator training takes place in a 2-day workshop designed for helping professions (e.g., social work, psychologists), including discussions, demonstrations, role-playing, and review of program materials in order conduct COPE courses for parents of 3-12 year olds. The price currently listed on the website for the training is \$290, which includes the Leader Package (manual, videos, etc.). Level II Facilitator Training does not include a workshop, but rather supervised co-leading of a COPE group or the equivalent). Finally, Level III Facilitator training is a 1-day workshop (\$100) designed to teach advanced skills for use with large parenting groups, which leads to certification as an "Advance COPE Group Leader". Attendees have to have completed the Level I Facilitator Training and led at least one COPE group to participating in Level III and be certified.

For HNC, then initial training consists of a 2-day sequence, conducted by two trainers, with up to 20 attendees per initial training. The cost for the trainers is \$6,000 (i.e., \$1,500/day/ trainer). In addition, agencies interested in sponsoring a training would be responsible for travel expenses for each trainer (e.g., airfare, airport parking, taxis, hotel rooms, meals). After the initial training, booster sessions (1 day each) are conducted by a single trainer, with a fee of \$2,500 per trainer fee plus travel expenses. A minimum of four booster sessions are recommended, which typically occur 4, 10, 16-18, and 22-24 months after the initial training. In addition to the initial training and booster sessions, 90-minute telephone consultations approximately every 3 weeks for the first 4 months of implementation for the purpose of case review and troubleshooting are recommended. Participants include the trainer(s), the clinical supervisor at the host site, and therapists. The cost for the 90-minute conference calls with both trainers, every 3 weeks for the first 4 months (i.e., until the first booster training) are \$240 per call. Then, the agency may transition to 90-minute conference calls with one trainer, every 4-6 weeks thereafter at a cost of \$120 per call. Finally, the only cost for materials is for purchase of the training manual (McMahon & Forehand, 2003) for each participant (approximately \$35 each), which is not included in the training fee.

Finally, although Barkley previously conducted trainings in the DC program, he currently has no formal, face to face training required. That said, he clarifies in the introduction to the manual that the program "is not intended for use by individuals who have not had education and training in the knowledge and skills necessary to provide mental health services to defiant children and their families", which he defines as "clinical psychologists, psychiatrists, social workers, child and family therapists, and others trained at the graduate level in the provision of services to families" (Barkley, 2013, p. 1). The manual, in turn, is laid out with each session being described in detail along with outlines for the clinician, handouts for the parents, and a discussion of common problems associated with each session and how best to try to address them. As such, the cost associated with learning the program is the cost of the manual (approximately \$35).

While variability in cost across programs may make it difficult in terms of determining whether a program is "cost-effective" or one is more cost-effective than another at an organizational level, cost effectiveness in reality may depend primarily on the extent to which the training and implementation "works" for a particular agency (e.g., resources to afford on-site and follow-up training and supervision), therapist (e.g., amount of time and

funding allotted for continuing education), and family (i.e., if a family chooses not to engage in a service, it cannot be cost-effective). Yet, as noted elsewhere (see Tarver et al., 2014; Wymbs et al., 2015), families may optimally benefit if an organization is able to provide multiple format options. Tarver and associates (2014), for example, recommend that selfdirected interventions can be offered if there are barriers to treatment access (including being waitlisted for treatment) or if the child presents with less severe behavioral difficulties. Wymbs and colleagues (2015), in contrast, talk about the potential value of group-based parenting curriculum as a first-line intervention, before considering the need for individual family-focused options. Consistent with this approach, Barkley (2013), for example, recommends group administration of his manual; however, he qualifies that parents of severely disruptive children or families with multiple risk factors (including parents with educational or economic difficulties) may benefit more from an individualized treatment program, an approach that is supported by a stepped response to intervention approach with IY as well (Phaneuf & McIntyre, 2011). One qualifier with regard to group-based approaches as a front-line to treatment, however, is that some work suggests that some families may do better with an individual family-format, perhaps most likely families with more severe symptomatology and/or more challenges to engaging in and completing BPT. For example, in a meta-analysis of the moderators of BPT, economically disadvantaged families benefited significantly more from BPT when in individual family-focused versus group treatment (Lundahl et al., 2006). Likely, individual family-focused programs offer more individualized and tailored support and coaching that may allow a low income family to more effectively navigate the weekly and daily demands of treatment.

# Extensions of Hanf-Model Programs to other Problems and Delivery Vehicles

As demonstrated in the aforementioned sections, there is some variation, although more notably remarkable similarity in the contemporary Hanf-Model BPT programs (McMahon & Forehand, 2003; Reitman & McMahon, 2013). Collectively, BPT programs, including Hanf Model programs, are considered the standard-of-care for early onset behavior disorders in children (see Forehand, Jones, & Parent, 2013; Leijten et al., 2013; Lundahl et al., 2006, for reviews); however, they have been extended to target other presenting issues in youth as well.

#### Extending Hanf Model BPT Programs to a Broader Range of Presenting Issues

From their conception as a treatment for developmental disabilities, to their prominent use as evidence-based treatment for behavior disorders, BPT has been used to treat a variety of clinical disorders. Such work is consistent with the broader movement toward "developmentally lateral extensions" (Carpenter, Puliafico, Kurtz, Pincus, & Comer, 2014 p. 341) of established treatments to children with other presenting issues in the same age range (e.g., Cartwright-Hatton et al., 2011; Waters, Ford, Wharton, & Cobham, 2009). Of relevance to lateral extensions of Hanf-Model BPT programs in particular, ecological systems theory (see Cummings, Davies, & Campbell, 2000 for a review) highlights that the primary context in which normal and abnormal development occurs among young children is the family. As such, the family is a central psychosocial context in which to understand

the development of a broader range of presenting issues in young children, including issues that may co-occur and/or present independently from behavior disorders, such as internalizing symptoms/disorders, autism spectrum disorders, and maltreatment in the family.

**Internalizing Symptoms and Disorders**—Treatments for behavior disorders, relative to problems of mood and anxiety in children, have evolved relatively separately, including the age range targeted and, in turn, how parents are integrated into interventions (see Forehand et al., 2013, for a review). Whereas treatments for behavior disorders have focused on the critical importance of intervention in early childhood, interventions for childhood internalizing problems have generally targeted older children who have the cognitive and emotional capacity to participate in interventions that target how their thoughts, feelings, and behaviors are interrelated (e.g., Pulifico, Comer, Pincus, 2012). Yet, anxiety and depression do affect young children and the early onset of internalizing symptoms, in turn, tends to be associated with more protracted illnesses in adolescence and adulthood (e.g., Carpenter et al., 2014; Hammen, Brennan, & Kennan-Miller, 2008; Luby, Belden, Pautsch, Si, & Spitznagel, 2009). Moreover, internalizing problems tend to co-occur with behavior disorders in young children (Angold & Costello, 1993; Birmaher et. al., 1996; Fanti & Henrich, 2010), suggesting that the potential for treatment to target multiple symptom clusters would be more cost-effective for families. As such, Hanf-Model BPT researchers have considered the relevance of using the theory and practice elements that characterize BPT to reshape the parent-child context in which internalizing problems may develop among young children as well (see Carpenter et al., 2014, for a review). For example, there is preliminary data to suggest that Hanf-Model Programs have the capacity to alleviate comorbid symptoms of separation anxiety disorder in children with problem behavior (PCIT; Choate, Pincus, Eyberg, Barlow, 2005; Pincus, Santucci, Ehrenreich, 2008; Herman, Borden, Reinke, & Webster-Stratton, 2011). Essentially, the rationale behind using standard BPT follows the logic of using BPT for behavior disorders: Attending to behavior that the parent wants to see or see more (e.g. brave behavior) will increase the rate of occurrence of that behavior, while Ignoring problem behavior (e.g., clinging to caregivers) will increase the child's capacity to regulate both behavior and emotions over time.

In addition, Hanf-Model Programs have been adapted to more explicitly target internalizing symptoms (Pincus et al., 2010). For example, one adaptation of PCIT, introduced a single session in between the standard child-directed and parent-directed play sessions, which uses the standard PCIT session structure and skills to teach parents how best to manage symptoms of anxiety, resulted in 73% of the families in the modified PCIT program no longer meeting criteria for SAD compared to no change in the wait-list control. A second example of modified Hanf-Model program, PCIT-CALM, targets internalizing symptoms more broadly (i.e., social phobia, generalized anxiety disorder, and specific phobias), and more explicitly builds in exposure-based principals and skills into the standard PCIT framework (Comer, Pulifico, & Aschenbrand, 2012). Findings suggest the promise of this tailored approach, as all but one participant (85.7%) no longer met criteria for any anxiety disorders at post-treatment.

**Autism Spectrum Disorders**—In addition to adapting and utilizing BPT for internalizing disorders, some work has been done to test whether BPT is a good fit for treating behavioral problems in the context of autism (Hartley, Sikora, & McCoy, 2008), which follows nicely on Hanf's original work with children with developmental disabilities more broadly. Evidence to suggest the promise of Hanf-Model BPT programs stems largely from case study designs (Agazzi, Tan & Tan, 2013; Eyberg & Funderburk, 2011; Sheperis, Sheperis, Monceaux, Davis, & Lopez, 2015), which have shown decreases in disruptive behavior, as well as increases in effective communication; however, the efficacy of BPT may depend on the severity of the child's symptoms. Perhaps most notably, children with more severe autism may have significant problems adapting to the child directed play component of BPT, which may feel less comfortable for children who find interpersonal contexts less reinforcing (or not reinforcing at all), as well as Time Out, which may be a less effective consequence for those for whom isolation is preferred (Dababnah & Parish, 2014).

**Maltreatment**—As discussed previously, the coercive cycle can play a significant role in exacerbating both behavioral problems in youth and ineffective parenting styles in adults, including vulnerability for and behavioral issues that evolve in the context of child maltreatment. At its extreme, the coercive cycle has the capacity to increase a parent's vulnerability for maltreatment as they inadvertently grow more frustrated with their child's noncompliant and disruptive behavior, as well as their lack of efficacy in managing it (e.g., Chaffin et al., 2004; Cicchetti & Valentino, 2006; Patterson, DeBaryshe, & Ramsey, 1989). As a result, parents caught in the coercive cycle may be more likely to turn to harsher and abusive discipline strategies in anger and frustration, which may indeed "control" the child's behavior in the short-term but not necessarily teach the child or parent more adaptive strategies to facilitate more positive parent-child interactions in the long term.

Perhaps not surprisingly then, BPT shows promising results as a preventative approach for interrupting the coercive cycle in families at high-risk for maltreatment by improving the child's behavior. For example, Wolfe, Edwards, Manion, and Koverola (1988) used HNC (McMahon & Forehand, 2003) with half of the mother-child dyads in an early intervention program for young parents at increased risk of child maltreatment. There were significant improvements in both parenting risk and behavior problems at post assessment and 3 month follow up only for mothers in the BPT group, relative to those in the control given parenting information only. Similarly, Hanf-Model programs have yielded reductions in disruptive behavior after an experience of maltreatment (e.g., Chaffin et al., 2004; Hakman, Chaffin, Funderburk, Silvoski, 2009; Webster-Stratton, 2014). For example, Hakman et al. (2009) taught PCIT to abusive parents, and found that the decrease in negative parental practices and increase in parental warmth early in therapy (usually the first three sessions) reduced future child abuse reports.

In summary, BPT has been tested with clinical presentations beyond disruptive behavior disorders. In thinking about the findings of this work, as well as providing guidelines for clinicians moving forward, it seems that successful use of BPT with a broader range of presenting issues depends on clinician comfort with the rationale and use of the practice elements characterizing BPT, expertise with the particular disorder, and, in turn, clinical judgment regarding whether and how BPT can be applied. Of course, such an assertion is in

and of itself an empirical question that merits further investigation: that is, does a clinician need to be trained in each iteration of each Hanf Model program for each disorder or presenting issue or is general training in at least one program enough for broad application? A similar question could potentially be asked regarding the generalizability of Hanf Model BPT programs across cultures as well.

#### **Extending Hanf Model BPT Programs Across Cultures**

Beyond extending Hanf Model BPT programs to broader issues facing children and families, Hanf-Model BPT programs have been translated and/or extended to increase the reach and impact for racial and ethnic minority families (see Kotchick & Forehand, 2002; Ortiz & Del Vecchio, 2013, for reviews). For example, culturally tailored versions of PCIT are available for Mexican American families (McCabe, Yeh, Garland, Lau, & Chavez, 2005), Chinese-speaking families (Leung, Tsang, Heung, & Yiu, 1999), and African American families (Fernandez, Butler, & Eyberg, 2011). There have been efforts to implement Hanf-Model BPT programs more generally in other countries as well, including Canada (Taylor, Schmidt, Pepler, & Hodgins, 1998), China (Leung & Tsang, 2012), Norway (Larsson et al., 2009), Puerto Rico (Matos, Bauermeister, & Bernal, 2009), Sweden (Axberg & Broberg, 2012), Pakistan (Malik & Tariq, 2014), and the United Kingdom (Gardner, Burton, & Klimes, 2006; McGilloway et al., 2012; Scott et al., 2001).

Interestingly, while the focus on culture, defined broadly, is important and timely, findings to date on the effect of culturally-tailored programming may be somewhat surprising. While language translations of BPT, both in the U.S. and abroad, appear to yield results equally as impressive as studies with English speakers in the U.S., cultural adaptations in which the content or format, for example, of the programs were tailored more explicitly to address the characteristics of a particular cultural or racial or ethnic group, have not necessarily yet yielded substantive improvements in treatment efficacy over and above the standard program (see Gardner, Montgomery, & Knerr, 2015; Ortiz & Del Vecchio, 2013, for reviews). The aforementioned PCIT adaptation, GANA, for example, generated no greater improvements in disruptive behavior than standard PCIT (McCabe, Yeh, Garland, Lau, & Chavez, 2005).

Building upon such findings, Gardner, Montgomery, & Knerr (2015) posited that the central role of the parent-child relationship mediating children's problem behavior, as well as behavioral theory and techniques that are core to BPT programs, appear to be universal. Accordingly, rather than developing a tailored approach of Hanf-Model programs to meet the specific characteristics and needs of particular groups, which in and of themselves are likely quite heterogeneous, a more cost-effective and useful approach may be for researchers and clinicians to fully understand the theory and range of practice elements characterizing Hanf-Model programs, then tailor their respective treatment plans to optimally support the diversity of families who engage Hanf-Model BPT programs, including considering novel dissemination and delivery methods.

#### **Extending Hanf-Model Programs to Capitalize on Technology**

Building upon Hanf's early use of "bug in the ear" and videotape technology, Hanf-Model BPT programs are increasingly capitalizing on advances in technology to aid in the delivery

of program content (see Jones, Forehand, McKee, Cuellar, & Kincaid, 2010; Jones et al., 2013; Jones, 2014, for reviews). To some degree, all of the Hanf-inspired programs utilize technology in some way. At the most basic level, two of the models (COPE and IY) are built around the use of videotaped modeling of parenting skills, as noted above. HNC (Jones et al., 2014) and PCIT (Nixon, Sweeney, Erickson, & Touyz, 2003) also have research with iterations of their programs that include parenting skill videos, although videos were not a central component of the original program formats.

As technology evolves, skills videos can increasingly be used to support families in the context of their daily lives. For example, web- (DC: Xie et al., 2013; PCIT: Comer et al., 2014; IY: Taylor et al., 2008) and smartphone-platforms (see Jones et al., 2010; 2014) are increasingly being used to increase the transportability of Hanf-Model BPT programs, either as the primary delivery vehicle or a complement to the standard BPT treatment plan. For example, a technology-enhanced HNC program delivers a series of skills videos to families for use between sessions in order to remind caregivers what skills they are working on in treatment, the rationale for the skill as it relates to the parents' goal of improving the child's behavior, and modeling of parents using the skills in interactions with their children (Jones et al., 2014). Beyond providing families with skills videos as examples, technology also has the capacity to provide therapists a window on the parents' use of the skills with the child outside of session. For example, HNC (Jones et al., 2014) and IY (Phaneuf & McIntyre, 2007) have both explored the utility of having parents video record their skill practice at home. In turn, therapists have an opportunity to review parent's use of skills in context in order provide more tailored feedback, coaching, and support and to adjust session content and focus accordingly. With the similar aim of providing therapists a virtual window into the parent's use of the skills at home and in the context of the family's daily life, Comer and colleagues (2014) are testing the extent to which internet-delivered PCIT, with live-coaching in the family's home, may help to reduce the barriers that many families experience with regard to engaging in clinic-based BPT treatment.

Lastly, as noted earlier, far fewer children and families have access to evidence-based BPT programs than those creating such programs would like to see (see Forehand, Dorsey, Jones, Long, & McMahon, 2010; Mazzucchelli & Sanders, 2010, for reviews). Of course, this is ironic given that the roots of the contemporary evidence-based BPT programs reviewed here are rooted in the work of a clinician, Constance Hanf, which perhaps makes our relative ineffectiveness with dissemination and implementation even less acceptable. Although not likely the entire or only solution, dissemination of Hanf-Model BPT programs from research and training clinics to front-line service settings can certainly be facilitated via the use of technology. For example, Hanf-Model authors have written about a range of dissemination possibilities, such as web-based courses (PCIT; PCIT Training Center, 2011), video trainings (HNC; Forehand, Armistead, Neighbors, & Klein, 1994; PCIT; Borrego & Burrell, 2010), and, most recently, remote real-time supervision, which allows therapists and their supervisors to collaborate in real-time to ensure therapist competence and fidelity (PCIT; Funderburk, Ware, Altshuler, & Chaffin, 2008).

While current iterations of BPT continue the tradition of technology in Hanf-Model programs, it is a reality that technology will advance rapidly to quickly outpace our research

questions, hypotheses, and manuscripts (see Jones, 2014; Jones et al., 2013, for reviews). In turn, if we focus on the goal of remaining historically grounded in the theory, treatment, and evidence-base that has evolved from the work of Hanf, it may not be the case that each Hanf-Model program needs to be tested with each iteration of each platform in order to make the case that technology holds promise for both therapists and their clients. Rather, findings from one Hanf-Model program tested with a particular technology should, by definition of their common history, practice elements, and evidence base, generalize to other Hanf Model programs as well. Moreover, the demonstration that one platform (e.g., videos) enhances treatment outcomes in some particular way (e.g., increasing skill practice at home) should suggest similar effects for modeling skills via videos regardless of the platform (e.g., videos viewed by a family on the web vs. videos viewed by a family on a smartphone).

# **Using Common History and Practice Elements to Enhance Dissemination**

As highlighted throughout this article, Hanf has had a remarkable influence on the field we now collectively refer to as BPT, as well as the treatment of numerous other presenting issues across a diversity of children, adolescents, and their families. She may not have anticipated such a broad impact on the modern era of children's mental health, but her commitment to the treatment of young children with developmental disabilities clearly motivated and inspired the subsequent generation of clinical researchers and what is now considered a standard-of-care in evidence-based practice.

As we think ahead to the evolving and continued relevance of Hanf's legacy, we believe an awareness and acknowledgement of her influence on the foundation of the theory and techniques that now characterize BPT is necessary as we aim to better ensure that BPT is available to children and families in need (e.g., Addis et al., 1999; Chorpita & Daleiden, 2009; Weisz, Donenberg, Han, & Weiss, 1995). As noted earlier, skepticism among frontline clinicians regarding evidence-based treatments may be further exacerbated in the treatment of DBDs in particular by the range of available BPT treatment programs, which makes it even more difficult for clinicians to be informed about those with an evidence-base versus those without, as well as the similarities and differences of the evidence-based programs in particular (Shaffer et al., 2001). Moreover, the question becomes whether it is enough for a clinician to select and train in a single BPT program, in this case one of the Hanf Model programs, or does the ability to adequately treat a given child and family really depend on understanding the similarities and differences within and between programs, in order to selectively sequence and tailor key aspects of the treatment plan to more flexibly deliver BPT? Consistent with the movement toward "distillation" (Chorpita et al., 2005, 2009) of common "elements" (Garland et al., 2008), "components" (Barth & Liggett-Creel, 2014), or "essentials" (CDC, 2014), we urge the field to consider moving from a focus on one manual or evidence-based BPT program, in this case each of the Hanf Model programs. In turn, we advocate further consideration of a dissemination approach that allows clinicians to understand the purpose of and rationale for treatment techniques and components and, in turn, have the understanding and flexibility to more optimally tailor treatment to the presenting issues of specific children and families within the constraints and confines of real world practice beyond research and training settings.

Building upon such an approach, it is our contention that it may be less relevant whether an interventionist in a clinical trial or a therapist on the front-lines of clinical practice is trained in one specific Hanf-Model BPT program versus another. Rather, it is likely most important to understand the concept of the coercion theory and its role in the development and maintenance of DBDs, how each of the core elements and techniques characteristic of BPT (as well as the similarities and differences across programs) were designed and tested to shape specific aspects of the parent-child relationship and, in turn, child behavior, and then use that knowledge to develop a course of treatment that most adequately addresses the therapist's conceptualization of the child's presenting issues and the context in which those issues have evolved, are maintained, and must be treated. In turn, understanding of the relative similarities and differences in how the Hanf-Model programs evolved and why, will allow clinicians to be more flexible in their development of a treatment plan that is most likely to engage a particular family in treatment (e.g., group vs. individual), be consistent with the family's resources and challenges (e.g., insurance coverage and number of sessions allotted), and to most cost-effectively address the specific nature of the family's presenting issues (e.g., combination of anxiety and mood vs. behavior problems alone) and the context in which these issues occur (e.g., history of maltreatment, cultural relevance).

Of course, given the way training in mental health generally occurs, it will likely remain the case that the majority of clinicians are formally trained in a single BPT approach, which may include one of the Hanf-Model Programs or other iterations of evidence-based BPT that have evolved over the history of the field and include a range of the common practice elements discussed here as well, including the aforementioned programs developed in the U.S., such as Parent Management Training (PMT; see Patterson, 2005, for a review), as well as those such as the Triple P - Positive Parenting Program (Triple P; see Prinz & Sanders, 2007; Sanders, 1999; 2012, for a review) developed abroad, which perhaps more explicitly than any other program to date seeks to extend the dissemination and, in turn, public health impact of BPT by focusing on prevention, as well as treatment. For new generations of clinicians, which Hanf-Model program in particular or BPT program in general they are trained in may depend on the academic and training history of the instructor for the graduate course or practicum in which they learn BPT and that instructors' own BPT training history. For clinicians already in the field, training in BPT programs may depend on the availability of financial resources within their practice for continuing education and/or the availability and accessibility of BPT supervision and other training resources. Regardless, we believe that awareness of common elements and techniques affords the opportunity for a common language within and between programs, as well as between researchers and clinicians, and, in turn, enhances opportunities for the uptake, availability, and flexible use of Hanf Model BPT programs for and with families of children with DBDs. Of course, what we propose is not likely to "fix" the issue of availability entirely; however, it may be one important piece of the puzzle. Given that un- or inadequately treated early onset DBDs predict delinquency in adolescence and antisocial behavior in adulthood, as well as alcohol and substance abuse and dependence, chronic relationship and employment instability, and poor physical health, yielding in excess of \$70,000 in education, health, and criminal justice costs in 7 years alone or as much as a ten-fold increase in costs before the age of 30 (e.g., Pelham, Foster, & Robb,

2007; Scott et al., 2001; also see O'Connell, Boat, & Warner, 2009; Piquero et al., 2009 for reviews), every piece of the puzzle is important.

### Acknowledgments

Support for this project was provided by a grant from the National Institute of Mental Health (R01MH100377). We are grateful to the memory of Dr. Constance Hanf, who continues to live on in the work she has inspired in her trainees and the generations of researchers and clinicians who have followed in their footsteps. We also extend our gratitude to Drs. David Reitman and Robert McMahon, who so effectively reminded us of the importance of honoring Dr. Hanf and all of our mentors, as well as Dr. Mark Roberts, who although entering retirement graciously took the time to share records of Dr. Hanf's original work. Of course, this paper could not be possible without the authors of the contemporary Hanf-Model BPT programs, including Drs. Russell Barkley (DC), Charles Cunningham (COPE), Sheila Eyberg (PCIT), Carolyn Webster Stratton (IYS), and Rex Forehand and Robert McMahon (HNC). They are stellar examples of scientist-practitioners who took what they learned in the context of clinical practice in order to profoundly impact the evolution of evidence-based practice in the treatment of children, adolescents, and their families.

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  2015; :1–18. DOI: 10.1080/15374416.2015.10046