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# DELIBERATE PRACTICE TO IMPROVE BEHAVIORAL PARENT TRAINING SKILLS AMONG CLINICAL TRAINEES

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# DELIBERATE PRACTICE TO IMPROVE BEHAVIORAL PARENT TRAINING SKILLS AMONG CLINICAL TRAINEES

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**ABSTRACT**

DELIBERATE PRACTICE TO IMPROVE BEHAVIORAL PARENT TRAINING SKILLS AMONG CLINICAL TRAINEES

Olivia Anne Walsh

Deliberate practice (DP) is a method in which structured activities are done to specifically improve performance in a given domain. Training programs, like DP, can incorporate different learning experiences to assist trainees in developing not only competency but improving client outcomes in specific therapies, like behavioral parent training (BPT). The current study examined the impact of an online-simulated DP training component on the competency among trainees, and parent-reported child outcomes after brief, virtual BPT. Eight trainees/parents were randomly assigned to the intervention group or comparison group. All trainees received didactics in BPT, with the intervention group receiving additional DP training in which they received feedback to 17 recorded vignettes depicting parents presenting their child's behavioral difficulties. Outcome measures included six scales measured at four timepoints (baseline, week-4, -8, -12). Results indicated a significant decrease across groups from baseline to week-8 in parent-reported number of problem behaviors; from baseline to week-12 follow-up there was a significant decrease in parent-reported number of problem behaviors, intensity of problem behaviors, and negative parenting strategies, including hostility and lax strategies. No differences were observed between the intervention and comparison groups on all outcomes measures (i.e. trainee competency, parent-reported child outcomes,

parenting) at all timepoints. Strengths, limitations and suggestions for future research are discussed below.

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# CHAPTER I: INTRODUCTION

Approximately 4.5 million children ages 3 to 17 (7.4%) have a diagnosed behavior problem (Ghandour, 2019). Behavior problems include inattentive, oppositional, impulsive, and aggressive behaviors (Kaminski et al., 2008). These children are at risk of a variety of negative outcomes, as these problems impact them socially and/or academically (Ryan & Ladd, 2012) and frequently interfere with their family functioning (Graziano et al., 2011). If untreated, behavior problems demonstrated during childhood might develop into more chronic patterns of problem behavior throughout adolescence (Hinshaw & Lee, 2003). Therefore, it is critical to provide effective treatment to school-aged children and their parents.

## Behavioral Parent Training

Behavioral parent training (BPT) is an evidence-based practice (Evans et al., 2014) used to treat children with disruptive behavior (Kazdin & Wassell, 2000). BPT integrates practice, research, and theory on a child's behavior and family interaction (Chacko et al., 2015). This intervention is based on social learning theory and operant conditioning (Patterson et al., 1982), which purport that challenging and prosocial behaviors are shaped by reinforcement contingencies and the child's social environment (Patterson, 2005). Children of parents who model aversive behaviors, such as arguing and aggression, are more likely to develop aggressive, punitive, and harsh behavioral patterns compared to children in more well-functioning families, whose parents model the skills needed to adaptively solve conflicts (Patterson, 2005). BPT was therefore created to target specific parenting practices that maintain problematic behaviors (Scavenius et al., 2020).

Even though BPT is a well-established intervention for children with externalizing disorders (Evans et al., 2014), parental engagement in BPT remains a challenge. Lengthy behavioral parenting training programs typically have intensive time requirements which can be a barrier to treatment for many due to having to find the time and organize childcare to attend sessions (Tully & Hunt, 2016). In fact, Chacko and colleagues (2016) found that at least 51% of parents drop out of BPT programs. Therefore, brief BPT programs are used to alleviate some of these barriers. Tully and colleagues (2016) conducted a systematic review in which nine studies utilizing a brief parent training program (two – eight hours of intervention) were identified. Results showed that parents in the brief BPT groups showed statistically significant reductions in parent-reported externalizing behaviors at post-assessment and follow-up timepoints (Tully & Hunt, 2016).

Additionally, due to the COVID-19 pandemic, there has been an accelerated transition of psychological treatments to be delivered virtually, including BPT (Sullivan et al., 2021). BPT programs, such as Defiant Child, Triple P, and iPCIT, have growing evidence to support their effectiveness in reducing externalizing child behaviors when delivered virtually (Sullivan et al., 2021). DuPaul and colleagues (2018) conducted a study in which they delivered 10 sessions of BPT face to face and online to parents of children diagnosed with Attention Deficit / Hyperactivity Disorder. Data showed that that the online BPT was similarly efficacious with the face-to-face BPT group (DuPaul et al., 2018).

The approaches for BPT are manualized and fairly straight-forward in which parents are taught how to use positive reinforcement, such as praise, privileges, or tokens

to be exchanged for a reward, more effectively to promote behavioral change (Eyberg et al., 2008). In addition, parents are taught how to use consistent consequences, such as loss of privileges, formal time-out, or loss of positive attention, when their child engages in problematic behaviors (Eyberg et al., 2008). When thinking about how to train clinicians in delivering BPT, programs need to think about not only providing trainees with the knowledge of these BPT skills but also consider the way in which the clinicians will implement these skills so that clients improve in their outcomes.

**Training of Clinicians**

The way in which training is delivered, the type of experience the trainee is offered during training, and how often training occurs all impact the knowledge that is acquired by the trainee (Dolan & Collins, 2015; Dunn et al., 2013; Valenstein-Mah et al., 2020). Traditional psychotherapy training models for graduate students include didactic instruction combined with coursework to understand how psychotherapy is conducted (Overholser, 2019). Clinical trainees are expected to develop competency through a combination of supervised experience and classroom education (Overholser, 2019). While memorizing facts from articles or books does not help trainees fully grasp concepts (Martin et al., 2013), lectures are considered passive, finite, and nonsocial, which results in less-than-optimal learning; in addition, lectures are disconnected from real practice (Martin et al., 2013). Instead, evidence suggests that posing open-ended questions and allowing trainees to speak and collaborate with each other to solve problems that require higher-level thinking provides a superior learning experience (Dolan & Collins, 2015; Martin et al., 2013).

Structured treatment manuals are another mode used to provide novice clinicians basic information regarding the procedural steps involved in psychotherapy (Overholser, 2019). Whereas learning the basic procedural steps and technical information is important and can be provided by treatment manuals, treatment manuals lack the ability to address certain clinical skills that are foundational to effective psychotherapy (Friedberg et al., 2008). Therefore, evidence suggests clinical skills are better developed through role-plays and modeling (Bearman et al., 2013).

While understanding the general knowledge of theories is important and can be taught via classroom experiences, it is only one aspect of clinical training. Psychotherapy also requires generic clinical skills such as empathy, sensitivity, insight, and patience (Overholser, 2009). The American Psychological Association Standards of Accreditation for Programs in Health Service Psychology (2015) states that clinical trainees should have not only knowledge of evidence-based theories and methods but also should have the skills needed to implement these techniques. Reading manuals and attending workshops are unlikely to sufficiently allow clinicians to develop these clinical skills (Beidas et al., 2009), so supplemental education is required to ensure clinical trainees develop these skills.

***Competency***

Supervision of clinical work is another essential part of every psychology training program and has been shown to have beneficial effects for the clinical trainees. Supervision according to Bernard and Goodyear (2008) is "an intervention provided by a more senior member of a profession to a more junior member or members of that same profession" (p. 8). According to the American Psychological Association Guidelines for

Clinical Supervision in Health Service Psychology (2014), supervisors are responsible for helping supervisees develop not only knowledge but also the skills that compromise clinical competency.

Competence is defined as "performing work in an expected way" (Rousmaniere et al., 2017, p. 16). Goodyear and Rousmaniere (2017) suggest the following areas of competency in psychotherapy are developed through classroom experience, supervision, and consultation: progression and personal characteristics (i.e., self-efficacy, professionalism and ethics, values and attitudes, and self-knowledge); conceptual skills (i.e., recognizing client dynamics, understanding client-therapist, interactions and sequences); trainee relationships and technical skills (i.e., alliance development/maintenance, managing countertransference, therapy-specific skills). These competency skills are the foundational blocks that can be further developed throughout training (Rousmaniere et al., 2017). Evidence suggests that supervision is associated with enhanced treatment knowledge, self-awareness, self-efficacy, skill acquisition, skill utilization, and enhanced client-therapist relationship (Watkins, 2011). However, a comprehensive review by Watkins (2011) stated that there is still not enough evidence to suggest supervision positively affects client outcomes. While supervision may provide a space for clinical trainees to participate in active learning and enhance their knowledge and skills, there is still question as to whether supervision is sufficient (Watkins, 2020). In a 2020 comprehensive review, Watkins suggests that there is not conclusive evidence regarding the impact of supervisors' effectiveness. A major limitation in this area is that "supervision lacks evidence-based practice research and an evidence-based practice model" (Watkins, 2020, p.13). While supervision is important for improving clinical

development, there are other strategies that may be beneficial to be incorporated into training programs and supervision.

Understanding the limitations of didactics and supervision is critical when examining how to best train clinicians to deliver an evidence-based approach, like BPT. Ideally, once knowledge is acquired, whether through formal graduate training or continued education, that knowledge is then incorporated into and impacts the decisions clinicians make in clinical practice; however, oftentimes turning knowledge into action is not straightforward. Across various fields, there is often a gap between what someone learns and how that knowledge is incorporated into practice (Khan et al., 2013; Tonelli, 2011; Wilkins et al., 2013). This gap is called *the knowledge-action* gap (Khan et al., 2013; Tonelli, 2011; Wilkins et al., 2013). Evidence suggests that how knowledge is acquired is important; for example, the method of training clinicians influences the amount of knowledge and skill acquisition the mental health professional has in that specific evidence-based psychotherapy (Valenstein-Mah et al., 2020). Ineffective training may result in poorer client outcomes (Valenstein-Mah et al., 2020). It is therefore important to consider how to enhance training programs and supervision to ensure trainees are competent in delivering these evidence-based practices and interventions (Weisz & Kazdin, 2010).

While it is necessary for foundational skills, competency itself (as measured by oneself or an expert) in a specific form of therapy does not always lead to improved client outcomes (Branson et al., 2015). To improve client outcomes, it is argued that clinicians need to move beyond competency toward expertise (Goodyear & Rousmaniere, 2017). In fact, evidence suggests that clinicians who not only practice more but are guided in their

practice ultimately move toward expertise development (Chow et al., 2015). Deliberate practice is therefore intended to be an additional component designed to enhance the traditional training model by helping clinical trainees access needed skills in a more automatic fashion (Goldman et al., 2021). While traditional supervision is one essential way to help clinical trainees develop competence (Goodyear & Rousmaniere, 2017), deliberate practice is another component for supporting training beyond enhancing competency (Tracey et al., 2014) to yield a positive effect on client outcomes.

**Deliberate Practice**

Deliberate practice is considered the "individualized training activities specially designed by a coach or teacher to improve specific aspects of an individual's performance through repetition and successive refinement" (Ericsson & Lehmann, 1996, pp. 278–279). Deliberate practice involves participating repeatedly in skill-building activities. A key element of deliberate practice is that it must be focused on achieving clear goals that are slightly beyond the performer's current abilities (Chow et al., 2015). In addition, there needs to be conscious monitoring of the performer's outcomes, and the practice needs to occur over an extended time (Chow et al., 2015). Once the goal is achieved, a new skill is introduced and developed (Ericsson, 2006).

Research suggests that engagement in deliberate practice results in superior performance across a variety of fields including music (Ericsson et al., 1993), sports (Ericsson & Lehmann, 1996) and medicine (Norman et al., 2006). For example, a study by Ericsson and colleagues (1993) examined the relationship between practice and performance of violin players. Expert violinists from a music academy in Berlin kept track of the time they spent per week on different musical activities. Results indicated

that all expert violinists spent about 50 hours per week on music-related activities (Ericsson et al., 1993). Specifically, the violinists who were the "best" spent more time per week on activities that were designed specifically to improve their performance (Ericsson et al., 1993). These specific activities are what is known as deliberate practice (Ericsson 2006). The music, sports, and medical industries rely on deliberate practice to not only move beyond competency toward expertise, but to maintain this high level of performance (Ericsson & Pool, 2016).

At the same time, researchers in the field have argued the extent to which deliberate practice plays a role in improved performance. Macnamara and colleagues (2014) published a meta-analysis of 88 studies to examine the strength of the association between performance and deliberate practice. Results showed a .35 correlation coefficient between deliberate practice and performance. Researchers concluded that "… deliberate practice is important, but not as important as has been argued" (p.1). However, Miller and colleagues (2020) conducted a re-analysis in which they included a narrower definition of deliberate practice. Raters from the re-analysis found that 18 studies included in the Macnamara meta-analysis did not meet criteria as being deliberate practice studies. Of the new analysis of the 70 studies, results revealed that the correlation coefficient for deliberate practice effects on performance (.40) was significantly larger than the non-deliberate practice studies that examined time spent practicing in a non-deliberate way (i.e., without individualized learning objectives, repetition, feedback, and/or use coach) (.21). This correlation between deliberate practice and performance is comparable to other associations in research deemed critical, such as the correlation between obesity and mortality (.08), adherence to effective medication and mortality (.23), and batting

average and major league baseball salary (.43) (Miller et al., 2020). These results provide additional evidence for the use of deliberate practice in improving performance in a specific area.

### *Deliberate Practice in Psychotherapy*

More recently, deliberate practice has been studied in the field of psychotherapy. In this realm, deliberate practice focuses on a clinical trainee's individual skills, emphasizes behavioral rehearsal for skill acquisition, and aims for higher levels of sustained effort (Goodyear & Rousmaniere, 2017; Rousmaniere, 2016).

Chow and colleagues (2015) conducted a study to determine whether deliberate practice accounted for the development of higher performance among therapists. Participants included 69 therapists who practiced independently in the United Kingdom and had a caseload of at least 10 clients who were over the age of 18 (Chow et al., 2015). Client outcome data was collected via the Clinical Outcomes in Routine Evaluation questionnaire and deliberate practice data was collected through a retrospective analysis tool designed to assess the amount of time a therapist spent participating in deliberate practice activities. Deliberate practice activities were identified by a 25-item questionnaire that specifically targeted the time a clinician spent engaging in various activities with the goal of improving therapeutic performance (i.e., writing down reflections from previous sessions, reviewing difficult or challenging cases alone, reviewing therapy recordings with peers, etc.) (Chow et al., 2015). Results suggested that the top quartile of therapist who were identified based on improved client outcomes participated in 2.81 times more (about 7.39 hours) deliberate practice in a week than the other therapists. Specifically, a decrease in client distress was predicted by therapists who

spent more time outside of work participating in deliberate practice activities (Chow et al., 2015). There are, however, limitations to the study, including its use of retrospective methods to gather information about the therapists' participation in deliberate practice (Chow et al., 2015). It is also important to point out these therapists were licensed and already completed their clinical training programs. Nevertheless, this study provides foundational evidence for the use of deliberate practice in psychotherapy.

A few years later, Hill and colleagues (2020) examined the effects of deliberate practice on developing immediacy for doctoral clinical trainees. Immediacy, which is a specific clinical skill of psychodynamic therapies, is defined as "inquiring about or disclosing immediate feelings about the client, herself or himself in relation to the client, or the therapeutic relationship" (Hill et al., 2020, p.2). The deliberate practice model used was adapted from Rousmaniere's model and included an 8-hour workshop, four 50-minute individual training sessions, and four 30-minute homework assignments. The deliberate practice trainer observed the trainees' performance of the skill while they role-played or watched a client video (Hill et al., 2020). The goal of these activities was to apply rehearsal of interpersonal skills related to immediacy and interpersonal skills that precede immediacy (i.e., countertransference, emotional self-regulation) (Hill et al., 2020). Participants included seven clinical doctoral trainees and one deliberate practice trainer. Quantitative and qualitive results found that deliberate practice training was helpful in enhancing clinical trainees' self-efficacy of immediacy (Hill et al., 2020). Furthermore, single subject analyses found deliberate practice to have a positive effect on client-rated working alliance for one of the therapists. A major limitation to this study is the small sample size of clinical trainees who were from a single university, which has a

single, psychodynamic, clinical orientation (Hill et al., 2020). In addition, there was only one deliberate practice instructor. Despite these limitations, the deliberate practice model enhanced self-efficacy or the confidence they had in delivering immediacy, which was the specific skill set learned (Hill et al., 2020).

Traditional training models provide clinical trainees knowledge to acquire skills necessary to achieve competency; however, improvement in outcomes is not consistent (Owens et al., 2016). This might be due to clinical trainees only acquiring competency and not moving beyond competency development. As evidence shows, competency alone is not related to improved client outcomes (Rousmaniere et al., 2017). Therefore, it is critical to consider how training programs can incorporate different learning experiences, such as deliberate practice, to assist clinical trainees in moving beyond competency development alone. By incorporating deliberate practice, clinical trainees would not only gain knowledge about specific clinical skills, but they would also develop skills by means of practicing and receiving receive corrective feedback. This additional component may enhance the traditional training model to help clinicians access needed skills in a more automatic fashion (Goldman et al., 2021). At the same time, more research in assessing whether engagement in deliberate practice leads to better client outcomes is needed (Clements-Hickman & Reese, 2020).

**Simulation-Based Learning**

Simulation-based learning is a technique used across disciplines for training purposes, in which the goal is to replicate substantial aspects of a real-world situation (Gaba, 2004). Simulation-based education is used to facilitate clinical training of health-care professionals (Sheen et al., 2021) while also providing a space where trainees can

practice and receive coaching (Lee et al., 2021). While psychology training has historically relied on clinical placements, there is movement toward incorporating simulated-based learning into training programs as it reduces the potential risks to both the trainee and client (Sheen et al., 2015) and may increase exposure to a wider range of mental health disorders (Scott et al., 2011).

One-way that graduate programs can incorporate simulated-based active learning and deliberate practice into their training for BPT is through vignettes. Vignettes are written descriptions of events that are broadly related to a specific topic that when presented to participants they are asked to respond to the situation presented (Sampson & Johannessen, 2019). Video vignettes have been incorporated into BPT programs to assist in teaching parents BPT skills (Phaneuf &McIntyre, 2011). Additionally, there is evidence supporting the use of standardized vignettes to improve clinicians' interactions with clients (Ravitz et al., 2013). Therefore, using vignettes specifically designed to target the skills necessary for clinicians to learn, is one way supervisors can provide feedback to trainees and allow them to practice the specific clinical skills, which are necessary steps of deliberate practice.

**Present Study**

This study sought to test a deliberate practice-oriented approach to enhance the competency of clinical trainees in BPT and improve parent-reported client outcomes. Clinicians were randomized to one of two groups: Intervention Group - deliberate practice-oriented approach and then delivering the BPT intervention; Comparison - providing the BPT intervention with **no** deliberate practice approach. Didactic sessions, years of experience and supervision all give clinical trainees the knowledge underlying

BPT, but these training experiences do not automatically lead to an improvement in clinicians' effectiveness (Hill et al., 2013). While supervision is important for improving clinical development, engaging in deliberate practice that is focused and systematic may lead to enhanced clinical skills. Psychotherapy research specifically shows feedback from supervisors is associated with enhanced clinical skills (Hill et al., 2013). Therefore, by incorporating feedback within a deliberate practice framework specifically for BPT, this additional training piece may lead to enhanced clinical competency and improved client outcomes. This research was innovative both conceptually and methodologically. From a conceptual perspective, the approach was novel in using a deliberate practice model to improve clinicians' skills in behavioral parenting work to address the behavior problems often experienced by so many children. From a methodological standpoint, the results of this study expanded the training and clinical literature for BPT and for the efficacy and feasibility of using an online-simulated deliberate practice-oriented approach. While there is research that shows repeated practice among athletes, musicians, and chess players improve with time and experience (Ericsson & Pool, 2016), there is very limited research to support this within psychotherapy (Tracey, et al., 2014). This study aims to add to the existing literature of deliberate practice and psychotherapy.

## CHAPTER II: RESEARCH HYPOTHESES

The present study hypothesized that:

1. Parents working with clinicians who participated in the deliberate practice program would report more positive child behavioral changes in outcomes than the comparison condition (i.e., clinicians who implement the BPT intervention only)
2. Parents whose clinicians participated in the deliberate practice program would also report higher levels of consumer satisfaction
3. Participating in the deliberate practice program would produce greater changes in clinical competency of the clinicians as rated by themselves and an expert than the comparison condition
4. Parents working with clinicians who participated in the deliberate practice program would report more of an increase in positive parenting strategies and more of a decrease in negative parenting strategies than the comparison condition

# CHAPTER III: METHODS

## Participants and Procedures

### *Parent Clients*

Eight parents were recruited from the community via the following: paid social media advertisement, hanging flyers in local libraries and grocery stores, hanging flyers in pediatrician offices, email blast to all state school districts, individual emails to all state special education directors, individual emails and calls to all the Boy and Girls Clubs in state, individual emails to the Children and Adults with Attention-Deficit/Hyperactivity Disorder (CHADD) chapters, individual emails and calls to state YMCAS, individual emails to school psychologists, and emails to training clinics in the local area for any parents who may be waitlisted for parent training programs *(Appendix A)*. Two-hundred and ninety-eight parents were identified from this recruitment method were screened using a phone screen *(Appendix B)*. Parent clients received a consent form *(Appendix C)* and once consented, the Eyberg Child Behavior Inventory (ECBI) *(Appendix D)* was administered to determine eligibility.

Parents were enrolled in the program if they met the following eligibility criteria the: (1) had a child between the ages of 4 to 12 years, (2) the child demonstrated clinically significant externalizing behavior problems (i.e., aggression, tantrums, non-compliance) based on a score on the Eyberg Child Behavior Inventory (ECBI) Intensity and/or Problem scale greater than one standard deviation from the mean (T score > 60), (3) the parents were willing to attend BPT sessions virtually (in New York state) and weekly for 8 weeks, and (4) parents had reliable Internet and videoconferencing access. Parents received a $25.00 gift card at baseline, and again after session 4 and 8, as well as

after the completion of questionnaires at around a one-month follow-up. Parents who completed the study received a total of $100.00 in gift cards.

From these recruitment efforts over a twelve-month period, an initial sample of 298 parents reached out expressing interest in the study. Of those, 74 parents were interested in a phone screen and were contacted on three separate occasions. Of the 74 parents, 32 completed the phone screen, and 24 parents were deemed eligible based on the basic screening information (i.e., lived in New York stated, had a child between the ages of 4 and 12 with reported behavioral problems)to receive the consent form. Fifteen parents completed the consent form whereas nine parents did not consent. These nine parents were contacted on three separate occasions (both via phone and email) and still did not complete consent. Afterward consent was received, the ECBI was administered to determine eligibility, in which 13 parents completed the ECBI – two parents did not complete the questionnaires and were contacted on three separate occasions via phone and email. After eligibility was determined, parental clients completed the additional measures (Home Situations Questionnaire and Multidimensional Assessment of Parenting Scale) and were randomly assigned to a clinical trainee (Figure 1). The same parent was required to attend all the sessions and complete all questionnaires, with a second caregiver allowed to attend session if requested.

***Clinical Trainees***

This study population consisted of eight clinical trainees enrolled in an APA approved school psychology doctoral program in a large Metropolitan area. All had completed a doctoral level course in Behavior Therapy, which focused on teaching the theory of behavior therapy, as well as the implementation of behavior therapy techniques.

Clinical trainees were identified and recruited via university email over a three-month period *(Appendix E)*. The clinicians completed a consent form *(Appendix F)*, brief demographic questionnaire *(Appendix G)*. A total of nine clinicians consented to participate in the study; however, one dropped out prior to completing any questionnaires due to time constraints.

**Didactic Workshop.** Clinicians in both the intervention and comparison group attended a three-part didactic workshop on BPT by an expert in the field as defined by their previous clinical work and research experience. The first two sessions consisted of a 90-minute, asynchronous virtual session that provided didactic information on 12 BPT principles identified by Terjesen and colleagues (in-press) in the upcoming book "Deliberate Practice in Behavioral Parent Training". These BPT principles incorporate common components of different BPT programs that are effective in improving child problem behaviors. These components include psychoeducation, behavior management, relationship enhancement, parental self-management and parent as a coach (Tehrani et al., 2023). The third session was a 90-minute synchronous virtual session which included the following: a review of BPT principles, role-playing of the 12 skills, questions from the clinical trainees, and study logistics. The didactic clinician received a $300.00 gift card. After participation in the didactic workshop and prior to randomization, clinical trainees then completed the perceived clinical competency *(Appendix H).* The eight clinical trainees were then randomly assigned to the intervention group, Deliberate Practice Training Program, or to the comparison group.

### *Behavioral Parent Training*

Each clinical trainee, in both the intervention and comparison groups, met with one client weekly for 8 sessions and were paid $100 for their participation. Each session was held virtually for 45-60 minutes and included the parents only. Clinicians were randomly assigned to one of two supervisors with whom they met with individually on a weekly basis. Supervisors were not blind to the study, nor to their trainees' randomization. Supervisors each received a $500 gift card. Randomization was conducted so that each supervisor had two clinical trainees in the intervention group and two in the comparison group. Supervision was conducted as typical at the University in which trainees presented their case, discussed strategies used, and targets for the next session.

The BPT sessions were guided by the following breakdown that was reviewed during the didactic sessions: (Session 1) Introductions / Current Parenting Practices; (Session 2) Psychoeducation on Behaviors; (Session 3) Positive Attention and Praise; (Session 4) Planned Ignoring; (Session 5) Communication; (Session 6) Consequences; (Session 7) Managing Misbehavior in Public Settings; and (Session 8) Validation / Parent Affect Recognition and Management. These sessions were selected to combine the 12 BPT principles reviewed during the didactics. These are common components of BPT programs and have been shown to significantly reduce child externalizing behaviors (Tehrani et al., 2023).

### *Comparison Group*

After didactic training, completion of the perceived clinical competency scale, and randomization to a supervisor, clinical trainees in the comparison group began seeing their parent clients and receiving weekly supervision.

### *Deliberate Practice Training Program*

After didactic training, training clinicians in the intervention group viewed and responded to a collection of 17 video vignettes of common behavioral parenting skills *(Appendix I).* In a previous research project (Walsh et al., 2020), vignettes based on common themes in BPT were created from a review of existing training manuals in BPT and through consultation with clinicians who conduct BPT. These written vignettes were sent out via email correspondence to experts in field of BPT to receive feedback as to the quality of the vignette and to what degree each vignette related the targeted BPT skill. Experts were identified based on the number of research articles in BPT published and/or clinical experience with BPT. After reviewing feedback from the experts, revisions to the vignettes were made. The revised vignettes were then recorded by six actors identified through email recruitment.

Trainees viewed the vignettes through the Skillsetter website, a web-based deliberate practice system for psychotherapy courses. They were informed what clinical skill they were being asked to demonstrate in response to the vignette and then recorded their response to the vignette. Each vignette listed the specific skill the clinical trainees were working on developing. Trainees were able to review their response and consider their response as it related to training objectives on a rubric with the choice to re-record their response (up to three times). Vignettes were approximately 10 to 30 seconds long

and responses were anticipated to be around 30 to 60 seconds. These recordings were sent to two reviewers who work in the behavior parenting field and who reviewed, graded, and provided feedback about their performance *(Appendix J).* Each reviewer received $250.00 gift card. Clinical trainees continued to record their responses to each vignette until the reviewer determined competency of the skill was met. After completion of the vignettes, clinical trainees began seeing their parent clients and received supervision weekly.

## Outcome Measures

### *Overview*

During the study, all participants (clinicians, clients, and supervisors) completed assessments to collect behavioral data to further monitor changes in symptomology during treatment and during follow up periods. Data was collected using standardized measures at baseline, 4 weeks, and 8 weeks, as well as at follow-up for follow-up. Both clinical trainees and parental clients completed brief demographic questionnaires *(Appendix G* and *K*, respectively).

### *Primary Outcome Measures*

The parental clients, clinical trainees and supervisors completed the following primary measures at different time-points as specified below throughout the study:

a. Eyberg Child Behavior Inventory (EBCI; Eyberg & Ross, 1978) was completed by parental clients at baseline and weeks 4, 8, and 12. The ECBI is a 36-item parent-report scale of disruptive behavior and includes two scales: Intensity and Problem *(Appendix D)*. The Intensity Scale measures the frequency with which disruptive behavior occurs using a 7-point Likert-type scale (1= Never to 7= Always). The Problem Scale includes

"Yes" or "No" responses and measures how problematic the child's behavior is for the parent. The Intensity and Problem scales have demonstrated high internal consistency (0.91, 0.87, respectively) (Morawska & Sanders, 2006). Both the Intensity and Problem scales were be utilized for the present study in which scores are presented as *T* scores which have a mean 50 and standard deviation of 10.

b. Home Situations Questionnaire (HSQ; Barkley & Edelbrock, 1987) was also completed by parental clients at baseline and weeks 4, 8, and 12. The HSQ is a caregiver-rated, 16-item scale designed to assess noncompliance in everyday settings *(Appendix L*). Parents are asked to indicate whether the child has problems with compliance in these situations and, if so, to rate the severity on a 1–9 Likert Scale, with higher scores indicating greater non-compliance. HSQ has demonstrated at or above acceptable levels of internal consistency (Altepeter & Breen, 1989). The number of problem behaviors and mean severity of problem identified were utilized for the present study.

c. Therapy Attitude Inventory (TAI; Brestan et al., 1999) was completed by parental clients at weeks 4 and 8. The TAI is a 10-item parent satisfaction measure addressing the impact of parent training skills on such areas as confidence in discipline skills, quality of parent-child interaction, the child's behavior, and overall family adjustment *(Appendix M).* The TAI has acceptable internal consistency (alpha = 0.91) and moderate external validity with correlations between 0.36 and 0.49 between TAI scores and pre- to post-treatment difference scores on the ECBI (Brestan et al., 1999). Parents were asked to rate each item on a 5-point scale from 1 (dissatisfaction with the treatment or worsening of problems) to 5 (maximum satisfaction with treatment or improvement of problems); item

scores were summed to yield a total score between 10 and 50 with higher scores representing higher levels of caregiver satisfaction (Brestan et al., 1999). The TAI was compared throughout treatment between the intervention and comparison groups.

d. Perceived Clinical Competency was completed by the clinical trainees at baseline (after the didactic workshop) and weeks 4, 8, and 12. This is a two-item measure created specifically for this research where the clinicians answered questions related to their knowledge of BPT, as well as their perception as to how effective they believed that they were in delivering BPT *(Appendix H).* Participants were asked to rate their knowledge of parent training on a scale of 1 (Not at all Knowledgeable) to 5 (Extremely Knowledgeable). Additionally, participants were asked to rate their perceived effectiveness in delivering BPT on a scale of 1 (Not Effective at All) to 5 (Extremely Effective).

e. Supervisory Rating of Clinical Skills was completed by the clinical trainees' supervisors at weeks 4 and 8. This is an overall evaluation of clinical skills of the trainee clinician by the training supervisor in which trainees are measured on a 1 (Extremely Inadequate) to 5 (Extremely Skillful) Likert scale *(Appendix N)*. It was based on the measure used for all trainee clinicians at the University clinical training facility located in a large Metropolitan area. Four items from this scale were analyzed for the purpose of the present study: Interviewing skills; Behavioral assessment skills; Interventions logically follow from a theory and case conceptualization; Overall rating of intervention skills. These were averaged to create a total mean score.

***Secondary Outcomes Measure***

The parental clients completed the following primary measures at weeks 4, 8, and 12:

a. The Multidimensional Assessment of Parenting Scale (MAPS) was completed by parental clients at baseline and. The MAPS is a 34-item self-report measure of both positive and negative dimensions of parenting practices (Parent & Forehand, 2017) *(Appendix O).* Items are rated on a 5-point Likert Scale (Never, Almost Never, Sometimes, Often, and Always). The MAPS includes two broad domains of parenting: The Broadband Positive Parenting factor and the Broadband Negative Parenting factor. The Broadband Positive Parenting factor includes four narrow subscales: Proactive Parenting (i.e., child-centered appropriate responding to difficulties), Positive Reinforcement (i.e., praise, rewards), Warmth (i.e., displays of affection), and Supportiveness (i.e., positive communication and openness to child's opinions) (Parent & Forehand, 2017). The Broadband Negative Parenting factor includes three narrow subscales: Hostility (i.e., overcontrolling parenting, yelling, arguing), Physical Control (i.e., general physical discipline and specifically out of frustration), and Lax Control (i.e., inconsistency with applying consequences) (Parent & Forehand, 2017). The MAPS has demonstrated strong internal reliability (alpha ranging from 0.77 to 0.91) (Parent & Forehand, 2017). MAPS scores are presented as *T* scores which have a mean of 50 and standard deviation of 10. Positive parenting scales are considered to be borderline problematic when $T < 40$ and problematic when $T \leq 30$. Negative parenting scales are considered to be borderline problematic when $T > 60$ and problematic when $T \geq 70$ (Parent & Forehand, 2017).

# CHAPTER IV: RESULTS

Preliminary analyses examined whether there were baseline differences between the randomized groups on baseline data of the clinical trainees and parent. An independent samples t-test was utilized to compare baseline means for continuous variables and Pearson's Chi-Square test were utilized for categorical variables. There was no missing data. Skewness and kurtosis were examined for all continuous outcome measures. All timepoints from all ratings were within appropriate limits. The EBCI, HSQ, TAI, Supervisory Rating Scale, Perceived Clinical Competency, and MAPS were compared using a two-way mixed analysis of variance. Effect size is reported as a partial eta squared ($\eta 2$) value in which $\eta 2 = 0.01$ indicates a small effect, $\eta 2 = 0.06$ indicates a medium effect, and $\eta 2 = 0.14$ indicates a large effect (Richardson, 2011).

## Demographics

**Clinicians.** All eight clinicians completed the entirety of the study. Clinicians were all female and Caucasian with a mean (*SD* = standard deviation) age of 24.50 (*SD* = 1.69). The average number of years of graduate training was 1.50 (*SD* = 0.54). Half the clinicians ($N = 4$) had previous experience with conducting BPT. Three clinicians in the comparison group had previous experience in delivering BPT, while only one clinician in the intervention group had previous experience in delivering BPT. This difference was not statistically significant ($p = .160$). Demographic characteristics for clinicians including age, ethnicity, sex, years of graduate training and past experience delivering BPT did not differ significantly at baseline between the intervention and comparison groups (Table 1).

Clinician groups also did not differ significantly at baseline in terms of the extent to which parent training was addressed in their graduate program, the number of articles they read during their career, the number of workshops they attended, and number of families they engaged in parent training with during their career (Table 1).

**Parents.** All eight parents, the same parent each time, completed the four data assessments; however, one parent in the intervention group did not complete sessions 7 and 8 of the BPT program due to a sudden relocation out of New York State. The mean age of the children of these parents was 7.38 (*SD* = 2.13), with four females and four males. Of the caregivers, who participated in the BPT sessions, seven were female and one was male with a mean age of 37.00 (*SD* = 5.04). Parents in the comparison group were significantly younger than parents in the deliberate practice BPT group. Seven identified as Caucasian and one identified as Other. There was a mean of two (*SD* = 0.54) caregivers in the home in which of the secondary caregivers one was female, six were male, and one had no secondary caregiver. There was a mean of 4.00 (*SD* = 1.07) family members in the home, with a mean of 2.13 children (*SD* = 0.99). Groups for parents differed significantly at baseline with age only; all other baseline characteristics were nonsignificant between groups (Table 2).

**Eyberg Child Behavior Inventory (ECBI)**

ECBI scores were reported as *T*-scores with an average of 50 and standard deviation of 10. *T*-scores greater than 60 were considered clinically significant on both the Intensity and Problem Scales. All eight parental scores on both the Intensity and Problem Scales were greater than 60 at baseline with a mean of 70.75 (*SD* = 6.54) and 71.75 (*SD* = 6.45), respectively. ECBI scores for both the Intensity Scale and Problem

Scale did not differ significantly at baseline between the intervention and comparison group, $p = .315$ and $p = .257$, respectively (Table 3).

**ECBI Intensity Scale.** The mean ECBI Intensity Scale scores for the comparison group were the following: Baseline = 73.24 (*SD* = 6.60), Session 4 = 70.00 (*SD* = 7.02), Session 8 = 65.25 (*SD* = 10.53), and Follow-Up = 61.50 (*SD* = 8.74) (Tables 3 – 6). The mean ECBI Intensity Scale scores for the intervention group were the following: Baseline = 68.25 (*SD* = 6.29 ), Session 4 = 66.50 (*SD* = 14.62), Session 8 = 60.50 (*SD* = 11.90), and Follow-Up = 58.00 (*SD* =15.58) (Tables 3 – 6). Mauchly's test of sphericity indicated that the assumption of sphericity was met for the two-way interaction, $\chi 2 = 0.26$, $p = .284$. There was no statistically significant interaction between the intervention and time on ECBI Intensity Scale, $F(3, 18) = 0.03$, $p = .994$, partial $\eta 2 = .004$. The main effect of time showed a statistically significant difference in the ECBI Intensity Scale scores at the different time points, $F(3, 18) = 3.98$, $p = .025$, partial $\eta 2 = .399$. Post hoc tests using the Bonferroni correction revealed that the 8-session BPT program significantly decreased the ECBI Intensity Scale Score from baseline to follow-up. The marginal means for ECBI Intensity Scale were 70.75 at baseline and 59.75 at follow-up, a statistically significant mean difference of 11.00, $p = .036$ (Table 7). There were no significant differences in ECBI Intensity Scale scores at the following other timepoints: baseline to session 4 ($p = .495$), baseline to session 8 ($p = .068$), session 4 to session 8 ($p = .239$), session 4 to follow-up ($p = .068$), and session 8 to follow-up ($p = .112$) (Table 7). The main effect of group showed that there was no statistically significant difference in ECBI Intensity Scale between intervention group and comparison group, $F(1, 6) = 0.46$, $p = .525$, partial $\eta 2 = .071$. These results do not support hypothesis one that there would be a significant

difference in parent-reported child outcome scores between the comparison group and intervention group.

**ECBI Problem Scale.** The mean ECBI Problem Scale scores for the comparison group were the following: Baseline = 74.50 (*SD* = 6.60), Session 4 = 71.50 (*SD* = 5.26), Session 8 = 66.50 (*SD* = 7.33), and Follow-Up = 67.00 (*SD* = 5.03) (Tables 3 – 6). The mean ECBI Problem Scale scores for the intervention group were the following: Baseline = 68.25 (*SD* = 6.29), Session 4 = 66.25 (*SD* = 11.32), Session 8 = 62.00 (*SD* = 11.75), and Follow-Up = 59.50 (*SD* = 14.20) (Tables 3 – 6). On the ECBI Problem Scale, Mauchly's test of sphericity indicated that the assumption of sphericity was met for the two-way interaction, $\chi 2 = 0.26$, $p = .282$. There was no statistically significant interaction between the intervention and time on the ECBI Problem Scale, $F(3, 18) = 0.16$, $p = .923$, partial $\eta 2 = .026$. The main effect of time showed a statistically significant difference in the ECBI Problem Scale at the different time points, $F(3, 18) = 6.12$, $p = .005$, partial $\eta 2 = .505$. Post hoc tests using the Bonferroni correction revealed that the 8-session BPT program significantly decreased the ECBI Problem Score at three timepoints: baseline to session 8, baseline to follow-up, and session 4 to follow-up. The marginal means for ECBI Problem Scale were 71.75 at baseline and 64.25 at session 8, a statistically significant mean difference of 7.50, $p = .038$ (Table 7). The marginal means for ECBI Problem Scale were 71.75 at baseline and 63.25 at follow-up, a statistically significant mean difference of 8.50, $p = .018$ (Table 7). The marginal means for ECBI Problem Scale were 68.88 at session 4 and 63.25 at follow-up, a statistically significant mean difference of 5.63, $p = .019$ (Table 7). There was no significant difference in ECBI Problem Scale scores from baseline to session 4 ($p = 0.074$), session 4 to session 8 ($p = .120$), and

session 8 to follow-up ($p$ = .663) (Table 7). The main effect of group showed that there was no statistically significant difference in ECBI Problem Scale scores between intervention groups, $F(1, 6) = 0.98$, $p$ = .360, partial $\eta 2$ = .141. These results do not support hypothesis one that there would be a significant difference in parent-reported child outcome scores between the comparison group and intervention group.

**Home Situations Questionnaire (HSQ)**

HSQ scores were reported as the number of problem behaviors identified, as well as the mean severity of all problem behaviors on a Likert scale of 1 (Mild) to 9 (Severe). The mean number of problem behaviors identified at baseline was 11.75 ($SD$ = 2.19) and the mean severity score was 4.86 ($SD$ = 1.37). Both the HSQ number of problem behaviors and mean severity scores did not differ significantly at baseline between the intervention and comparison group, $p$ = 1.00 and $p$ = .175, respectively (Table 3).

**HSQ Number of Problem Behaviors.** The mean HSQ Number of Problem Behavior scores for the comparison group were the following: Baseline = 11.75 ($SD$ = 1.89), Session 4 = 12.00 ($SD$ = 2.16), Session 8 = 11.25 ($SD$ = 3.59), and Follow-Up = 10.75 ($SD$ = 2.22) (Tables 3 – 6). The mean HSQ Number of Problem Behavior scores for the intervention group were the following: Baseline = 11.75 ($SD$ = 2.75), Session 4 = 13.50 ($SD$ = 1.29), Session 8 = 11.25 ($SD$ = 3.59), and Follow-Up = 11.25 ($SD$ = 4.35) (Tables 3 – 6). On the HSQ Number of Problem Behaviors Scale, Mauchly's test of sphericity indicated that the assumption of sphericity was met for the two-way interaction, $\chi 2$= 0.731, $p$ = .917. There was no statistically significant interaction between the intervention and time on the HSQ Number of Problem Behaviors score, $F(3, 18)$ = 0.40, $p$ = .758, partial $\eta 2$ = .062. The main effect of time also showed no statistically

significant difference in number of problem behaviors at the different time points, $F(3, 18) = 1.89$, $p = .167$, partial $\eta 2 = .240$. The main effect of group showed that there was no statistically significant difference in number of problem behaviors between intervention groups, $F(1, 6) = 0.09$, $p = .776$, partial $\eta 2 = .015$. These results do not support hypothesis one that there would be a significant difference in parent-reported child outcome scores between the comparison group and intervention group.

**HSQ Mean Severity Score.** The HSQ Mean Severity scores for the comparison group were the following: Baseline = 5.54 (*SD* = 1.23), Session 4 = 5.40 (*SD* = 0.46), Session 8 = 5.03 (*SD* = 2.09), and Follow-Up = 4.36 (*SD* = 1.40) (Tables 3 – 6). The HSQ Mean Severity scores for the intervention group were the following: Baseline = 4.18 (*SD* = 1.28), Session 4 = 5.29 (*SD* = 0.94), Session 8 = 4.45 (*SD* = 1.18), and Follow-Up = 3.31 (*SD* = 1.81) (Tables 3 – 6). On the HSQ Mean Severity Score, Mauchly's test of sphericity indicated that the assumption of sphericity was met for the two-way interaction, $\chi 2 = 0.75$, $p = .932$. There was no statistically significant interaction between the intervention and time on the HSQ Mean Severity score, $F(3, 18) = 0.46$, $p = .711$ partial $\eta 2 = .072$. The main effect of time showed no statistically significant difference in mean severity problems at the different time points, $F(3, 18) = 2.43$, $p = .099$, partial $\eta 2 = .288$. The main effect of group showed that there was no statistically significant difference in mean HSQ severity scores between intervention groups, $F(1, 6) = 1.30$, $p = .298$, partial $\eta 2 = .178$. These results do not support hypothesis one that there would be a significant difference in parent-reported child outcome scores between the comparison group and intervention group.

**Therapy Attitude Inventory (TAI)**

The TAI was scored as a total score in which higher scores (closer to 50) indicated higher levels of caregiver satisfaction. The total TAI scores for the comparison group were the following: Session 4 = 40.25 (*SD* = 3.86) and Session 8 = 43.75 (*SD* = 6.13) (Tables 4 – 5). The total TAI scores for the intervention group were the following: Session 4 = 37.25 (*SD* = 7.01) and Session 8 = 39.00 (*SD* = 8.64) (Tables 4 – 5). There was no statistically significant interaction between the intervention and time on the TAI, $F(1, 6) = 1.03$, $p = .350$, partial $\eta 2 = .146$. The main effect of time showed a statistically significant difference in the TAI at the different time points, $F(1, 6) = 9.25$, $p = .023$, partial $\eta 2 = .607$. Post hoc tests using the Bonferroni correction revealed that the 8-session BPT program significantly increased TAI score from Session 4 to Session 8. The marginal means for the TAI were 38.75 at Session 4 and 41.38 at Session 8, a statistically significant mean difference of 2.63, $p = .023$ (Table 7). The main effect of group showed that there was no statistically significant difference in TAI between intervention groups, $F(1, 6) = 0.70$, $p = .435$, partial $\eta 2 = .105$. These results do not support hypothesis two, which predicted a significant difference in parent-reported consumer-satisfaction scores between the comparison group and intervention group.

**Perceived Clinical Competency**

The Perceived Clinical Competency assessed clinicians' perception of their knowledge of BPT, as well as their perception as to how effective they believed that they were in delivering BPT on a 5-Point Likert Scale. Clinician scores on the Knowledge and Effectiveness questions had a mean of 3.25 (*SD* = 0.46) and 3.00 (*SD* = 0.76), respectively. Both the clinicians' perceived knowledge and perceived effectiveness of

BPT did not differ significantly at baseline between the intervention and comparison group, $p$ = 1.00 and $p$ = 1.00, respectively (Table 3).

**Clinicians' Perceived Knowledge of BPT.** Clinicians' Perceived Knowledge of BPT for the comparison group were the following: Baseline = 3.25 (*SD* = 0.50), Session 4 = 3.00 (*SD* = 0.00), Session 8 = 3.25 (*SD* = 0.50), and Follow-Up = 3.50 (*SD* = 0.58) (Tables 3 – 6). Clinicians' Perceived Knowledge of BPT for the intervention group were the following: Baseline = 3.25 (*SD* = 0.50), Session 4 = 3.00 (*SD* = 0.82), Session 8 = 3.50 (*SD* = 0.58), and Follow-Up = 3.00 (*SD* = 0.82) (Tables 3 – 6). In regard to Clinicians' Perceived Knowledge of BPT, Mauchly's test of sphericity indicated that the assumption of sphericity was met for the two-way interaction, $\chi 2$= 0.67, $p$ = .870. There was no statistically significant interaction between the intervention and knowledge of BPT, $F(3, 18) = 1.73$, $p$ = .197, partial $\eta 2$ = .224. The main effect of time showed no statistically significant difference in clinicians' BPT knowledge at the different time points, $F(3, 18) = 11.73$, $p$ = .197, partial $\eta 2$ = .224. The main effect of group showed that there was no statistically significant difference in clinicians' BPT knowledge between intervention groups, $F(1, 6) = 0.03$, $p$ = .868, partial $\eta 2$ = .005. These results do not support hypothesis three which stated that there would be a significant difference in perceived clinical competency scores between the comparison group and intervention group.

**Clinicians' Perceived Effectiveness in BPT.** Clinicians' Perceived Effectiveness in BPT for the comparison group were the following: Baseline = 3.00 (*SD* = 0.82), Session 4 = 3.00 (*SD* = 0.00), Session 8 = 3.00 (*SD* = 0.00), and Follow-Up = 3.00 (*SD* = 0.00) (Tables 3 – 6). Clinicians' Perceived Effectiveness in BPT for the intervention

group were the following: Baseline = 3.00 (*SD* = 0.82), Session 4 = 3.25 (*SD* = 0.50), Session 8 = 3.25 (*SD* = 0.580), and Follow-Up = 3.00 (*SD* = 0.82) (Tables 3 – 6). In regard to Clinicians' Perceived Effectiveness in BPT, Mauchly's test of sphericity indicated that the assumption of sphericity was met for the two-way interaction, $\chi 2$= 0.35, $p$ = .433. There was no statistically significant interaction between the intervention and clinicians' perceived effectiveness in BPT, $F(3, 18) = 0.18$, $p$ = .911, partial $\eta 2$ = .029. The main effect of time showed no statistically significant difference in clinicians' perceived effectiveness in BPT at the different time points, $F(3, 18) = 0.18$, $p$ = .911, partial $\eta 2$ = .029. The main effect of group showed that there was no statistically significant difference in clinicians' perceived effectiveness in BPT between intervention groups, $F(1, 6) = 0.23$, $p$ = .648, partial $\eta 2$ = .037. These results do not support hypothesis three that there would be a significant difference in perceived clinical competency scores between the comparison group and intervention group.

**Supervisory Rating of Clinical Skills**

Supervisors rated clinicians on four-items: (Interviewing skills; Behavioral assessment skills; Interventions logically follow from a theory and case conceptualization; Overall rating of intervention skills) at weeks 4 and 8 on a 5-point Likert Scale: 1 (Extremely Inadequate) to 5 (Extremely Skillful). These scores were averaged to create a total mean score. The mean Supervisory Rating of Clinical Skills scores for the comparison group were the following: Session 4 = 3.75 (*SD* = 0.79) and Session 8 = 3.75 (*SD* = 0.79) (Tables 4 – 5). The mean Supervisory Rating of Clinical Skills scores for the intervention group were the following: Session 4 = 4.25 (*SD* = 0.65) and Session 8 = 3.94 (*SD* = 0.75) (Tables 4 – 5). There was no statistically significant

interaction between the intervention and Supervisory Rating of Clinical Skills, $F(1, 6) = 2.14$, $p = .194$, partial $\eta 2 = .263$. The main effect of time showed no statistically significant difference in mean Supervisory Rating of Clinical Skills at the different time points, $F(1, 6) = 2.14$, $p = .194$, partial $\eta 2 = .263$. The main effect of group showed that there was no statistically significant difference in mean Supervisory Rating of Clinical Skills between intervention groups, $F(1, 6) = 0.43$, $p = .530$, partial $\eta 2 = .069$. These results do not support hypothesis three that there would be a significant difference in supervisor-reported clinical competency scores between the comparison group and intervention group.

### *Secondary Outcome Measures*

#### The Multidimensional Assessment of Parenting Scale (MAPS)

The MAPS was utilized as a secondary outcome measure to further explore both positive and negative dimensions of parenting practices. The MAPS consists of two broad domains: (The Broadband Positive Parenting factor and the Broadband Negative Parenting factor) as well as seven narrow subscales: (Proactive Parenting, Positive Reinforcement, Warmth, and Supportiveness, Hostility, Physical Control, and Lax Control). The 34-items were rated on a 5-point Likert Scale (Never, Almost Never, Sometimes, Often, and Always) and presented as *T* scores. Positive parenting scales are considered to be borderline problematic when $T < 40$ and problematic when $T \leq 30$. Negative parenting scales are considered to be borderline problematic when $T > 60$ and problematic when $T \geq 70$ (Parent & Forehand, 2017). On all MAPS scales, the intervention group and comparison group did not differ significantly at baseline (*p* ranging from .276 to 1.00) (Table 3).

**Broadband Positive Parenting Scale.** The mean Broadband Positive Parenting Scale scores for the comparison group were the following: Baseline = 52.50 (*SD* = 12.01), Session 4 = 54.50 (*SD* = 11.56), Session 8 = 53.75 (*SD* = 10.24), and Follow-Up = 53.75 (*SD* = 11.15) (Tables 3 – 6). The mean Broadband Positive Parenting Scale scores for the intervention group were the following: Baseline = 56.50 (*SD* = 4.43), Session 4 = 54.75 (*SD* = 2.22), Session 8 = 56.00 (*SD* = 6.22), and Follow-Up = 56.75 (*SD* = 6.50) (Tables 3 – 6). Mauchly's test of sphericity indicated that the assumption of sphericity was met for the two-way interaction, $\chi 2$= 0.30, $p$ = .233. There was no statistically significant interaction between the intervention and time on the Broadband Positive Parenting Scale, $F(3, 18) = 0.87$, $p$ = .475, partial $\eta 2$ = .127. The main effect of time showed no statistically significant difference in the Broadband Positive Parenting Scale at the different time points, $F(3, 18) = 0.15$, $p$ = .928, partial $\eta 2$ = .025. The main effect of group showed that there was no statistically significant difference in the Broadband Positive Parenting Scale between intervention groups, $F(1, 6) = 0.16$, $p$ = .706, partial $\eta 2$ = .025. These results do not support hypothesis four that there would be a more of an increase in positive parenting strategies in the intervention group than the comparison group.

**Proactive Parenting Subscale.** The mean Proactive Parenting Subscale scores for the comparison group were the following: Baseline = 54.50 (*SD* = 9.95), Session 4 = 54.50 (SD = 8.10), Session 8 = 51.75 (SD = 10.34), and Follow-Up = 55.00 (SD = 8.37) (Tables 3 – 6). The mean Proactive Parenting Subscale scores for the intervention group were the following: Baseline = 52.50 (SD = 9.15), Session 4 = 53.00 (SD = 5.23), Session 8 = 52.25 (SD = 8.26), and Follow-Up = 56.00 (SD = 9.20) (Tables 3 – 6).

Mauchly's test of sphericity indicated that the assumption of sphericity was met for the two-way interaction, $\chi 2$= 0.45, $p$ = .588. There was no statistically significant interaction between the intervention and time on the Proactive Parenting Subscale, $F(3, 18) = 0.33$, $p$ = .806, partial $\eta 2$ = .052. The main effect of time showed no statistically significant difference in the Proactive Parenting Subscale at the different time points, $F(3, 18)$ = 1.24, $p$ = .325, partial $\eta 2$ = .171. The main effect of group showed that there was no statistically significant difference in the Proactive Parenting Subscale between intervention groups, $F(1, 6) = 0.01$, $p$ = .933, partial $\eta 2$ = .001. These results do not support hypothesis four that there would be a more of an increase in positive parenting strategies in the intervention group than the comparison group.

**Positive Reinforcement Subscale.** The mean Positive Reinforcement Subscale scores for the comparison group were the following: Baseline = 54.25 (*SD* = 9.71), Session 4 = 57.00 (*SD* = 5.23), Session 8 = 58.00 (*SD* = 4.55), and Follow-Up = 56.25 (*SD* = 7.80) (Tables 3 – 6). The mean Positive Reinforcement Subscale scores for the intervention group were the following: Baseline = 59.00 (*SD* = 4.08), Session 4 = 55.50 (*SD* = 6.14), Session 8 = 55.00 (*SD* = 5.48), and Follow-Up = 57.75 (*SD* = 4.03) (Tables 3 – 6). Mauchly's test of sphericity indicated that the assumption of sphericity was met for the two-way interaction, $\chi 2$= 0.16, $p$ = .135. There was no statistically significant interaction between the intervention and time on the Positive Reinforcement Subscale, $F(3, 18) = 1.19$, $p$ = .340, partial $\eta 2$ = .166. The main effect of time showed no statistically significant difference in the Positive Reinforcement Subscale at the different time points, $F(3, 18) = 0.04$, $p$ = .989, partial $\eta 2$ = .007. The main effect of group showed that there was no statistically significant difference in the Positive Reinforcement

Subscale between intervention groups, $F(1, 6) = 0.02$, $p = .902$, partial $\eta 2 = 0.003$. These results do not support hypothesis four that there would be a more of an increase in positive parenting strategies in the intervention group than the comparison group.

**Warmth Parenting Subscale.** The mean Warmth Parenting Subscale scores for the comparison group were the following: Baseline = 48.00 (*SD* = 14.07), Session 4 = 51.50 (*SD* = 15.70), Session 8 = 51.00 (*SD* = 10.42), and Follow-Up = 50.25 (*SD* = 15.20) (Tables 3 – 6). The mean Warmth Parenting Subscale scores for the intervention group were the following: Baseline = 56.75 (*SD* = 3.86), Session 4 = 55.50 (*SD* = 3.70), Session 8 = 55.50 (*SD* = 3.70), and Follow-Up = 53.25 (*SD* = 8.02) (Tables 3 – 6). Mauchly's test of sphericity indicated that the assumption of sphericity was met for the two-way interaction, $\chi 2 = 0.42$, $p = .550$. There was no statistically significant interaction between the intervention and time on the Warmth Parenting Subscale, $F(3, 18) = 1.41$, $p = .272$, partial $\eta 2 = .190$. The main effect of time showed no statistically significant difference in the Warmth Parenting Subscale at the different time points, $F(3, 18) = 0.57$, $p = .642$, partial $\eta 2 = .087$. The main effect of group showed that there was no statistically significant difference in the Warmth Parenting Subscale between intervention groups, $F(1, 6) = 0.49$, $p = .510$, partial $\eta 2 = .076$. These results do not support hypothesis four that there would be a more of an increase in positive parenting strategies in the intervention group than the comparison group.

**Supportiveness Parenting Subscale.** The mean Supportiveness Parenting Subscale scores for the comparison group were the following: Baseline = 51.50 (*SD* = 8.58), Session 4 = 51.50 (*SD* = 11.12), Session 8 = 51.50 (*SD* = 13.91), and Follow-Up = 51.50 (*SD* = 12.40) (Tables 3 – 6). The mean Supportiveness Parenting Subscale scores

for the intervention group were the following: Baseline = 54.00 (*SD* = 5.94), Session 4 = 52.75 (*SD* = 5.91), Session 8 = 57.50 (*SD* = 7.00), and Follow-Up = 56.25 (*SD* = 6.60) (Tables 3 – 6). Mauchly's test of sphericity indicated that the assumption of sphericity was met for the two-way interaction, $\chi 2$= 0.64, $p$ = .839. There was no statistically significant interaction between the intervention and time on the Supportiveness Parenting Subscale, $F(3, 18) = 0.76$, $p$ = .531, partial $\eta 2$ = .112. The main effect of time showed no statistically significant difference in the Supportiveness Parenting Subscale at the different time points, $F(3, 18) = 0.76$, $p$ = .531, partial $\eta 2$ = .112. The main effect of group showed that there was no statistically significant difference in the Supportiveness Parenting Subscale between intervention groups, $F(1, 6) = 0.33$, $p$ = .586, partial $\eta 2$ = .052. These results do not support hypothesis four that there would be a more of an increase in positive parenting strategies in the intervention group than the comparison group.

**Broadband Negative Parenting Scale.** The mean Broadband Negative Parenting Scale scores for the comparison group were the following: Baseline = 60.25 (*SD* = 8.10), Session 4 = 52.25 (*SD* = 10.53), Session 8 = 54.25 (*SD* = 12.12), and Follow-Up = 52.25 (*SD* = 13.89) (Tables 3 – 6). The mean Broadband Negative Parenting Scale scores for the intervention group were the following: Baseline = 60.25 (*SD* = 3.30), Session 4 = 57.25 (*SD* = 4.27), Session 8 = 57.75 (*SD* = 4.79), and Follow-Up = 54.50 (*SD* = 3.87) (Tables 3 – 6). Mauchly's test of sphericity indicated that the assumption of sphericity was met for the two-way interaction, $\chi 2$= 0.43, $p$ = .560. There was no statistically significant interaction between the intervention and time on the Broadband Negative Parenting Scale, $F(3, 18) = 0.83$, $p$ = .497, partial $\eta 2$ = .121. The main effect of time

showed a statistically significant difference in the Broadband Negative Parenting Scale at the different time points, $F(3, 18) = 6.52$, $p = .004$, partial $\eta 2 = 0.521$. Post hoc tests using the Bonferroni correction revealed that the 8-session BPT program significantly decreased the MAPS Broadband Negative Parenting Scale at three timepoints: baseline to session 4, baseline to follow-up, and session 8 to follow-up. The marginal means for MAPS Broadband Negative Parenting Scale were 60.25 at baseline and 54.75 at session 4, a statistically significant mean difference of 5.50, $p = .028$ (Table 7). The marginal means for the MAPS Broadband Negative Parenting Scale were 60.25 at baseline and 53.38 at follow-up, a statistically significant mean difference of 6.88, $p = .017$ (Table 7). The marginal means for MAPS Broadband Negative Parenting Scale were 56.00 at session 8 and 53.38 at follow-up, a statistically significant mean difference of 2.63, $p = .038$ (Table 7). There was no significant difference in MAPS Broadband Negative Parenting Scale scores from baseline to session 8 ($p = .064$), session 4 to session 8 ($p = .324$), and session 4 to follow-up ($p = .404$) (Table 7). The main effect of group showed that there was no statistically significant difference in the Broadband Negative Parenting Scale between intervention groups, $F(1, 6) = 0.22$, $p = .654$, partial $\eta 2 = .036$. These results do not support hypothesis four that there would be a more of a decrease in negative parenting strategies in the intervention group than the comparison group.

**Hostility Parenting Subscale.** The mean Hostility Parenting Subscale scores for the comparison group were the following: Baseline = 61.50 ($SD = 7.72$), Session 4 = 54.00 ($SD = 12.14$), Session 8 = 54.00 ($SD = 12.14$), and Follow-Up = 53.50 ($SD = 13.77$) (Tables 3 – 6). The mean Hostility Parenting Subscale scores for the intervention group were the following: Baseline = 65.00 ($SD = 3.56$), Session 4 = 64.50 ($SD = 6.76$),

Session 8 = 65.25 (*SD* = 5.74), and Follow-Up = 61.25 (*SD* = 4.50) (Tables 3 – 6). Mauchly's test of sphericity indicated that the assumption of sphericity was met for the two-way interaction, $\chi 2$= 0.84, $p$ = .975. There was no statistically significant interaction between the intervention and time on the Hostility Parenting Subscale, $F(3, 18) = 2.20$, $p$ = .124, partial $\eta 2$ = .268. The main effect of time showed a statistically significant difference in the Hostility Parenting Subscale at the different time points, $F(3, 18) = 4.31$, $p$ = .019, partial $\eta 2$ = .418. Post hoc tests using the Bonferroni correction revealed that the 8-session BPT program significantly decreased the Hostility Parenting Subscale from baseline to follow-up. The marginal means for Hostility Parenting Subscale were 59.88 at baseline and 52.75 at follow-up, a statistically significant mean difference of 5.88, $p$ = .017 (Table 7). There was no significant difference in Hostility Parenting Subscale scores from baseline to session 4 ($p$ = .080), baseline to session 8 ($p$ = .079), session 4 to session 8 ($p$ = .813), session 4 to follow-up ($p$ = .317), and session 8 to follow-up ($p$ = .138) (Table 7). The main effect of group showed that there was no statistically significant difference in the Hostility Parenting Subscale between intervention groups, $F(1, 6)$ = 1.85, $p$ = .223, partial $\eta 2$ = .236. These results do not support hypothesis four that there would be a more of a decrease in negative parenting strategies in the intervention group than the comparison group.

**Lax Parenting Subscale.** The mean Lax Parenting Subscale scores for the comparison group were the following: Baseline = 59.25 (*SD* = 6.90), Session 4 = 50.75 (*SD* = 12.50), Session 8 = 52.00 (*SD* = 12.30), and Follow-Up = 48.00 (*SD* = 12.83) (Tables 3 – 6). The mean Lax Parenting Subscale scores for the intervention group were the following: Baseline = 60.50 (*SD* = 5.45), Session 4 = 59.50 (*SD* = 4.04), Session 8 =

55.25 (*SD* = 5.38), and Follow-Up = 57.50 (*SD* = 5.80) (Tables 3 – 6). Mauchly's test of sphericity indicated that the assumption of sphericity was met for the two-way interaction, $\chi 2$= 0.64, $p$ = .834. There was no statistically significant interaction between the intervention and time on the Lax Parenting Subscale, $F(3, 18) = 1.62$, $p$ = .219, partial $\eta 2$ = .213. The main effect of time showed a statistically significant difference in the Lax Parenting Subscale at the different time points, $F(3, 18) = 3.96$, $p$ = .025, partial $\eta 2$ = .398. Post hoc tests using the Bonferroni correction revealed that the 8-session BPT program significantly decreased the Lax Parenting Subscale at two timepoints: baseline to session 4 and baseline to follow-up. The marginal means for the Lax Parenting Subscale were 59.88 at baseline and 55.13 at session 4, a statistically significant mean decrease of 4.75, $p$ = .045 (Table 7). The marginal means for the Lax Parenting Subscale were 59.88 at baseline and 52.75 at follow-up, a statistically significant mean decrease of 7.13, $p$ = .035 (Table 7). There was no significant difference from baseline to session 8 ($p$ = .055), session 4 to session 8 ($p$ = .479), session 4 to follow-up ($p$ = .361), and session 8 to follow-up ($p$ = .655) (Table 7). The main effect of group showed that there was no statistically significant difference in the Lax Parenting Subscale between intervention groups, $F(1, 6) = 0.35$, $p$ = .351, partial $\eta 2$ = .146. These results do not support hypothesis four that there would be a more of a decrease in negative parenting strategies in the intervention group than the comparison group.

**Physical Control Subscale.** The mean Physical Control Subscale scores for the comparison group were the following: Baseline = 53.75 (*SD* = 7.63), Session 4 = 49.75 (*SD* = 6.13), Session 8 = 52.75 (*SD* = 10.37), and Follow-Up = 52.75 (*SD* = 10.37) (Tables 3 – 6). The mean Physical Control Subscale scores for the intervention group

were the following: Baseline = 49.50 (*SD* = 7.94), Session 4 = 45.50 (*SD* = 5.20), Session 8 = 46.50 (*SD* = 6.56), and Follow-Up = 44.00 (*SD* = 4.24) (Tables 3 – 6). Mauchly's test of sphericity indicated that the assumption of sphericity was met for the two-way interaction, $\chi 2$= 0.37, $p$ = .455. There was no statistically significant interaction between the intervention and time on the Physical Control Subscale, $F(3, 18) = 0.83$, $p$ = .496, partial $\eta 2$ = .121. The main effect of time showed no statistically significant difference in the Physical Control Subscale at the different time points, $F(3, 18) = 2.22$, $p$ = .121, partial $\eta 2$ = .270. The main effect of group showed that there was no statistically significant difference in the Physical Control Subscale between intervention groups, $F(1, 6) = 1.40$, $p$ = .282, partial $\eta 2$ = .189. These results do not support hypothesis four that there would be a more of a decrease in negative parenting strategies in the intervention group than the comparison group. Table 8 provides a summary of the results.

**Comparison of Effect Sizes**

***Two-Way Mixed Analysis of Variance Effect Sizes***

While the interaction over time between the intervention and comparison groups was not statistically significant, there were six measures that demonstrated a large effect size ($\eta 2$ ranging from .166 - .268) and six measures that demonstrated a medium effect size ($\eta 2$ ranging from .062 - .127) (Table 9). Additionally, when examining the main effect of group there were no significant differences; however, there were four measures that demonstrated a large effect size ($\eta 2$ ranging from .141 - .236) and four measures that demonstrated a medium effect size ($\eta 2$ ranging from .071 - .105) (Table 9).

### *Comparison of Effect Sizes among Each Group*

Given the small sample size, we wanted to look at the magnitude of the impact of the intervention, for the comparison and intervention groups, on outcome measures under the investigation of effect sizes, as effect sizes are independent of sample size (Sullvian & Feinn, 2012).

Exploratory analyses were conducted to examine the effect sizes for the intervention group alone and the comparison group alone. This was conducted to determine the magnitude of the effects for the intervention group and/or comparison group that provides further support for the 8-session, virtual BPT program. A paired samples *t*-test at post-assessment and follow-up assessment for each outcome measure within each condition was conducted to compare scores from baseline. Due to the small sample size, Cohen's d effect sizes are reported as another statistic to determine the effect the intervention had on the primary and secondary outcome measures. Cohen's *d* is interpreted as the following: 0.20 = small effect size; 0.50 = medium effect size; 0.80 = large effect size (Cohen, 1988).

**Comparison Group.** Results of the paired samples *t*-test indicated that all outcomes measures, except for the MAPS Proactive Parenting Subscale at post-assessment, remained the same or improved for the comparison group at post-assessment and follow-up assessment (Table 10). While none of these improvements were statistically significant, the effect sizes ranged from small to large effects for the comparison group.

Within the comparison group, at post-test there were five measures with a large effect size ($d$ = 0.92 – 1.52) and at follow-up there were seven measures with a large

effect size ($d$ = 0.86 – 1.55) (Table 10). Three measures demonstrated a medium effect size at post-assessment ($d$ = 0.62 – 0.72) and two measures at follow-up assessment demonstrated a medium effect size ($d$ = 0.50 – 0.62) (Table 10). Six studies demonstrated a small effect size, two at post-assessment ($d$ = 0.20 – 0.37) and three at follow-up assessment ($d$ = 0.05 – 0.38) (Table 10).

**Intervention Group.** When looking at the magnitude of change within the intervention group, there were some interesting patterns among some of the outcomes. For example, the HSQ Mean Severity score had a very small effect size ($d$ = -0.09) at post-assessment; however, at follow-up assessment, this measure improved over time, yielding a moderate effect size ($d$ = 0.53). Interestingly, while clinicians Perceived Knowledge of BPT improved at post-assessment with a medium effect size ($d$ = 0.50), at follow-up assessment this measure worsened also with a medium effect size ($d$ = -0.50). While both of the MAPS Proactive Parenting Subscale and the MAPS Hostility Subscale worsened from baseline to post-assessment with a small effect size ($d$ = -0.26, -0.05, respectively), from baseline to follow-up assessment there was a large effect ($d$ = 2.02, 2.20, respectively). The MAPS Positive Reinforcement Subscale worsened at both post-assessment and follow-up assessment, with large ($d$ = -0.71) and small ($d$ = -0.27) effect sizes, respectively. The MAPS Warmth Subscale worsened at both post-assessment and follow-up assessment, with medium ($d$ = -0.50) and large ($d$ = -0.80) effect sizes, respectively (Table 10).

Within the intervention group, at post-assessment there were three measures with a large effect size ($d$ = 0.80 – 1.35) and at follow-up assessment there were seven measures with a large effect size ($d$ = 0.86 – 2.20) (Table 10). Four measures

demonstrated a medium effect size at post-assessment ($d$ = 0.50 – 0.58) and one measure at follow-up assessment demonstrated a medium effect size ($d$ = 0.53) (Table 10). Fives measures demonstrated a small effect size, two at post-assessment ($d$ = 0.21 – 0.44) and three at follow-up assessment ($d$ = 0.09 – 0.39) (Table 10).

***Comparison of Effect Sizes to Previous Research***

In order to determine if this brief, virtual BPT was as effective in reducing child externalizing behaviors as previous BPT programs, a series of one-sample *t*-tests were conducted to determine whether the effect size of the current BPT program's data on child externalizing behavior differed significantly from the known effect size of previous BPT studies. Mingebach and colleagues (2018) conducted a meta-meta-analysis on the effectiveness of parent-based interventions for children under the age of 13 with externalizing behavioral problems. The following standardized mean difference (SMD) effect sizes from this meta-meta-analysis of 26 previous meta-analyses were utilized to compare SMD effect sizes from the current study: externalizing child behavior post-assessment effect size: SMD = 0.45; externalizing child behavior post-assessment effect size: SMD = 0.49 (Mingebach, et al., 2018). Table 11 displays the results. Overall, no one-sample *t*-test results were significant for the comparison group and the intervention group in comparison with the results of Mingebach et al (2019). This suggests that the brief, virtual BPT program was as effective in reducing children's externalizing behaviors as standard, BPT programs.

As parenting were many of the outcomes examined in this research, we also sought to understand how effective this research is on parenting variables in comparison with other BPT research. Weber and colleagues (2019) conducted a meta-meta-analysis

examining the effects of BPT, for children with externalizing behavioral problems under the age of 13, on parenting. The meta-meta-analysis of nine previous meta-analyses found the effect size of parent-reported parenting at post-assessment to be a SMD = 0.56 (Weber, et al., 2019). Due to a lack of sufficient data, no effect size was conducted for follow-up measurement (Weber, et al., 2019); therefore, only post-assessment data was utilized in these analyses. Table 11 displays the results. On the MAPS Negative Broadband Scale and all subscales (Hostility, Lax Parenting, and Physical Control), there were no significant one-sample *t* tests. This suggests that the brief, virtual BPT program was as effective in reducing parent-reported negative parenting behaviors as standard, BPT programs. The one-sample *t*-test for the MAPS Positive Behavior Broadband Scale and all subscale was non-significant for the comparison group. The one-sample *t*-test for the MAPS Supportiveness Subscale was non-significant for both the comparison and intervention group. However, on the MAPS Positive Broadband Scale, MAPS Proactive Parenting Subscale, MAPS Positive Reinforcement Subscale and MAPS Warmth Subscale the one sample *t*-tests were significant for the intervention group (*p* ranging from .008 to .043). This indicates that the effect size from previous analyses (Weber et al., 2019) was statistically better than the effect sizes from this current study; therefore, the intervention group compared to previous research studies was not as effective in improving these specific parent-reported parenting outcomes in the current research. It is important to note that these scores were not clinically elevated at baseline, post-assessment or follow-up assessment.

# CHAPTER V: DISCUSSION

The primary research questions of this investigation sought to determine whether participating in an online deliberate practice model prior to engaging in BPT lead to significantly greater parent-reported child behavioral outcomes (Hypothesis 1), parent-reported consumer satisfaction (Hypothesis 2), competency among clinical trainees (Hypothesis 3), and an increase in positive parenting strategies and decrease in negative parenting strategies than those who did not participate in the deliberate practice program (Hypothesis 4). While the results showed that throughout the 8-session BPT program both groups improved across some outcomes, there were no significant differences between the intervention group and comparison group across all measures during the 8-session BPT program and one-month follow-up: ECBI, HSQ, TAI, MAPS, Perceived Competency, and Supervisory Rating of Clinical Skills ($p > .05$ for all comparisons). However, there were 12 measures that demonstrated a large and medium effect size between groups over time and eight measures that demonstrated large effect sizes medium effect sizes between groups. Due to the small sample size, the effect sizes observed suggest that future research is warranted in examining the impact deliberate practice has on BPT intervention. When examining effect sizes within groups, the intervention group's effect sizes ranged from small to large, indicating future research may want to examine the intervention with a larger sample size to further examine the effect sizes of the deliberate practice component; however, it is important to note that for some measures the comparison group had more non-significant improved mean changes than the intervention group. Regardless, it would be important findings if it shows the

deliberate practice component produced negative results in terms of clinical competency and parent-reported child outcomes and parenting. When comparing effect sizes of the current study to previous BPT research, results showed that the both the comparison group and intervention group were just as effective as the previous standard BPT programs in reducing children's externalizing behaviors and decreasing negative parenting strategies. This suggests that the intervention was as effective in improving parent-reported outcomes as expected. Interestingly, the intervention group was not as effective in increasing positive parenting strategies. However, these measures were not clinically elevated at baseline. Therefore, additional research is needed to further explore the effect of a deliberate practice component and the brief, virtual BPT on parents who at baseline have clinically elevated parenting strategies as reported on the MAPS.

The addition of the deliberate practice component prior to BPT treatment did not further improve parent-reported outcomes and increase competency of the clinicians beyond the traditional BPT approach. While this study measured competency in regard to BPT, previous studies have found deliberate practice to improve clinicians' perceived competency of the psychotherapy skill of focus (i.e., immediacy) (Hill et al., 2020). However, this deliberate practice model research of Hill and colleagues was more intensive than the current study as clinicians attended an 8-hour workshop, four 50-minute individual training sessions, and four 30-minute homework assignments. Additionally, there was only one skill that was targeted. For the present study, clinical trainees responded to 17 online-vignettes and received feedback on a rubric prior to engaging in BPT.

The amount of time spent in deliberate practice for clinical training and when the time is spent is important to consider. Chow and colleagues (2015) retrospectively found that the top quartile of therapists, as defined by those whose clients had improved client outcomes compared to others, participated in about 7.39 hours of deliberate practice in a week. Participating in the online vignettes alone, around 20 hours total, may not have been enough of a dose of deliberate practice in order to see improved outcomes for both the parent-reported outcomes and trainee competency.

In terms of the Deliberate Practice Program, future studies may wish to examine how they are implementing this online deliberate practice program. It may be more beneficial for the clinicians to practice each skill the week that they implement the skill in session with the parent. For example, for Session 1 which targeted Introductions / Current Parenting Practices, the clinician that week would engage in only the deliberate practice models that are relevant to that week (i.e., Vignette 1: Gathered relevant background information about client behavior; Vignette 2: Reviewed current parenting practices; Vignette 12: Relevant homework was assigned). The reviewer would give targeted feedback on those specific skills and practice them within a 48-hour period and then the client would see the parent that week. In the current study, clinicians completed all 17-vignettes within a couple of weeks and then did not put that skill into practice for weeks. Therefore, the feedback that they gained may not have been effective as it wasn't immediate enough to the implementation of the skill.

Related, clinical trainees on average did not meet competency initially on five out of the 17 skills on average. For the skills in which competency was not met, clinicians had to practice the skill again and resubmit the video. As such, most of the skills were not

practiced on multiple occasions as trainees only had the opportunity to respond to feedback and practice only on the items that they did not demonstrate competency. In hindsight, it may have been helpful to have vignettes of varying difficulty for which trainees to practice on. For example, have a beginner, intermediate and advanced vignette for each skill so that the trainee can be challenged clinically across difficulty and also be given the opportunity to receive clinical feedback on all the skills. Part of deliberate practice is working on a skillset that is slightly beyond your area of mastery (Chow et al., 2015). Since BPT focuses on specific skillsets for clinicians to teach parents (i.e., positive reinforcement, effective communication, consistent consequences), BPT lends itself to being able to have vignettes of varying difficulty. By having different levels of difficulty, as well as different skill difficulty, it allows for more targeted deliberate practice work. Future studies may require clinicians to receive feedback a certain number of times to be sure they are "practicing" the skill. Further, it is possible, that the rubric for each skill was not specific enough to provide the direct, feedback needed for deliberate practice to be effective. It may be beneficial to have added in deliberate practice sessions with an expert throughout the 8-session BPT program for clinicians to receive more targeted feedback based on recordings of the actual counseling sessions. Reviewing one's own session and receiving feedback was a retrospective area of deliberate practice examined by Chow and colleagues (2015). This additional dosage of deliberate practice may prove to be necessary to see client outcomes improve compared to those who do not participate in deliberate practice. Future research may examine whether there are differences in the effectiveness of online, simulated deliberate practice versus deliberate practice from actual clinical sessions. Additionally, a combination of the two in which trainees

participate in pre-session deliberate practice for each skill may help them prepare and improve their skills for a client, while participating in post-session feedback may be an effective way to train clinicians for future clients.

When examining the effectiveness of the 8-session virtual BPT program, there were some significant improvements across groups (both the intervention and comparison groups). There was a significant decrease in the number of behavior problems as reported on the ECBI at the end of the 8-session program and these results remained significant at one-month follow-up. At the one-month follow-up, there was a significant decrease in the intensity of these behavior problems as reported on the ECBI, and parent-reported negative parenting strategies, including hostility and lax parenting strategies. There were non-significant improvements ranging from small to large effect sizes throughout the 8-session program and one-month follow-up on the other parent-reported outcome measures examining positive parenting strategies and problem behaviors. Previous studies found that parents enrolled in brief BPT groups (two to eight hours of intervention) showed significantly greater reductions in parent-reported externalizing behaviors at post-assessment and follow-up timepoints (Tully & Hunt, 2016). Of note, the studies included in the meta-analysis by Tully and Hunt (2019) delivered the brief BPT in-person. This study found only a few statistically significant improvements across both the intervention and comparison groups at post-assessment and follow-up.

Future research is needed to further explore the effectiveness of brief, virtual BPT as parent engagement in this evidence-based intervention remains to be a challenge (Chacko et al., 2016). Lengthy parent training programs do not only require parents to find the time in their busy schedules and organize childcare, while virtual therapy

alleviates travel time to sessions and allows individuals in more remote areas to receive training by an expert. Therefore, additional research is needed to confirm whether a virtual, brief BPT program is effective in reducing parent-reported problematic behaviors. Overall, parents who participated in the virtual brief BPT program (both the intervention and comparison groups) were highly satisfied with the program at the end of treatment (M = 41.38 out of a possible 50 on the TAI) and there was a significant increase in parents' reported confidence of discipline skills, the quality of parent-child interaction, the child's behavior, and overall family adjustment. This further supports that a brief, virtual BPT may be an area to further research.

At the end of the brief behavioral parenting training program, clinical trainees knowledge and effectiveness fell in the Average range as rated by themselves and their supervisory rating (i.e., Interviewing Skills, Behavioral Assessment Skills, Case Conceptualization, and Overall Intervention Skills). There was no significant increase for the deliberate practice group, nor was there a significant increase across time when looking at both the comparison and intervention groups. Previous research suggests that participating in didactics and gaining knowledge does not automatically lead to action, the knowledge-action gap (Khan et al., 2013; Tonelli, 2011; Wilkins et al., 2013). This may suggest that in order for clinical trainees to move beyond average competency as rated by themselves and an expert, additional training beyond a didactic and online-simulated deliberate practice component is necessary. Future research may want to continue to explore ways in which graduate programs can add additional training components so that by the time that clinicians enter the field, they are able to move beyond average competency and closer to expertise. Looking at increasing the dose of

deliberate practice may be one way. Overall, there were no differences in parent-reported child outcomes, consumer-satisfaction, and clinician competency between the intervention and comparison group. However, the data did yield a few significant positive changes supporting a brief, virtual BPT intervention. Additionally, analyses examining post-assessment and follow-up assessment outcome data for the intervention group and the comparison group found there were a number of large and medium effect sizes for parent-reported child externalizing behaviors, clinicians perceived competency, and parent-reported parenting strategies. While these findings were not statistically significant, due to the small sample size, these large effect sizes may possibly suggest meaningful improvements for a variety of outcome measures. This suggests that future research in examining whether a brief, 8-session, virtual BPT program is effective may be warranted.

**Limitations and Future Directions**

**Sample.** A major limitation to this study was the small sample size. While this study originally set out to recruit 16 parent participants for each clinician to treat two parents, only eight participants enrolled in the study due to recruitment challenges, giving each clinician one parent to treat. By moving forward with a smaller sample size, it impacted both the validity and generalizability of the above findings. Specifically, the smaller sample size reduced the statistical power of the study. Due to the study being underpowered, the data may not have been able to detect whether there was a statistically significant difference between groups.

Participation, engagement, and adherence of parents in BPT continue to be a challenge in the field. Chacko and colleagues (2016) found that 55% of families who

would benefit and are eligible for BPT do not enroll or attend BPT and about 25% of parents who meet inclusion criteria do not end up enrolling BPT, and this does not include those parents who declined participating in the screening phase of BPT studies (Chacko et al., 2016). Additionally, this review found that another 26% of parents drop out during treatment, in which about half drop out prior to the first session (Chacko et al., 2016). While many parents were interested in the current study, only 11% of parents completed a phone screen. Of those who completed the phone screen, 41% enrolled in the study in which only 28% participated in sessions.

Improved recruitment strategies are needed for future studies. Research suggests there is a need to for recruitment efforts to be collaborative in nature in which there is connection with educators and community leaders that interface with the target population (Axford et al., 2012). The current study's recruitment strategies (i.e., personal emails, flyers, pediatricians, and social media advertisements) may have been too impersonal in which there was not enough community and/or educator engagement. Therefore, future studies may wish to connect with a specific school or program (i.e., Boys and Girls Club or YMCA) prior to the recruitment process to work together in creating awareness in what BPT is and how it can be beneficial for parents. Then during the recruitment process, work directly with these educators and leaders to target specific parents who may benefit from BPT.

In addition to difficulty with recruitment within BPT field, attrition to treatment is also a challenge. Chacko and colleagues (2016) found that an additional 26% of parents drop out during treatment. The current study had one participant drop out after three sessions in which no data was collected for weeks 4, 8, and 12. Another participant in the

intervention group did not complete the final two BPT sessions due to moving out of state; however, completed all data collection and was included in all analyses. Due to the small sample size, not attending 25% of the sessions may have greatly impacted their results on the outcome measures.

Additionally, a more diverse parent and clinician population would be beneficial to allow the findings to be more generalizable. The clinical trainees enrolled in the study were 100% female, Caucasian students enrolled in an APA accredited school psychology program in a large metropolitan area. Seven of the eight parents recruited were Caucasian. Furthermore, three clinicians in the comparison group had previous experience in delivering BPT, while only one clinician in the intervention group had previous experience in delivering BPT. While this difference was not statistically significant ($p = 0.157$), future studies may wish to examine previous experience more carefully and using quasi-randomization.

While this study provides preliminary insights into the role deliberate practice may or may not play in the psychotherapy field, more adequately powered studies are needed to confirm the results of this study.

**Methodological Issues.** The timing of the didactics and starting the BPT programs was longer than anticipated. The asynchronous and synchronous didactics were held in early November; however, the first parent was not seen until January due to the recruitment challenges. This long period in time may have been detrimental to the clinicians' knowledge and skill retention. Additionally, there was no confirmation as to how effective the didactics were in clinicians learning the BPT concepts which are necessary for effective implementation of BPT. Future studies may wish to provide a

brief assessment at the end of the didactics to assure that the basic knowledge and concepts of BPT were clearly communicated to all clinical trainees. Another limitation to this study was how competency was measured. Competency in this study was evaluated based on researcher-based questions regarding clinicians' perceived knowledge and perceived effectiveness, as well as based on a four-question supervisory rating scale utilized by the local institution. While there are limited competency scales in the field, it may be beneficial to utilize additional ways to measure competency in the area of BPT. For example, futures studies may wish to have one session recorded for the supervisor to review in order to better accurately identify the clinicians' competency of the skill. It also may be interesting to assess competency of each skill throughout the BPT program. For example, each week have clinicians rate their perceived competency (i.e., knowledge and effectiveness) prior to participating in the deliberate practice program and then after they participate and see the parent for that session. This may allow to see if the deliberate practice program led to an increase in competency for the clinicians.

Future research may want to examine the role of common clinician factors often seen within psychotherapy in a more focused manner. Common factors are essential to psychotherapy (Wampold, 2015). While this study had a few vignettes targeting some of the common factors that have shown to be essential in psychotherapy (i.e., response to personal question, empathy, alliance rupture, and cultural awareness), these skills were not measured. Future research should code for common factors utilized in a session with the parent to determine if a possible lack of demonstrated competency in common factors is related to lack of improve client outcomes, as opposed to lack of expertise in a BPT skill. Many of the common factor skills of psychotherapy (Wampold, 2015) are

integrated throughout these BPT skills; however, it was assumed that clinicians already had developed competency in these basic common factors of psychotherapy. If they lack these common factors, it is likely this would impact improving client outcomes.

Additionally, it is important to consider how to identify "experts" who are administering the deliberate practice feedback. For this study, no formal assessment of experts' research experience and/or clinical experience of BPT was collected. Future studies may wish to utilize multiple experts and examine inter-rater reliability on the feedback provided to clinicians on Skillsetter.

Within BPT, homework and implementation of skills outside of sessions play a critical role in BPT's effectiveness (Chacko et al., 2013). However, this study did not track the fidelity of the intervention nor whether parents engaged in homework assignments or practiced the skill outside of session. Future studies may keep a checklist that clinicians need to complete for fidelity of the intervention, as well as parents' engagement in homework / practicing the skills outside of session, as this can play a role in treatment outcomes.

Despite the limitations of this study, this study provides preliminary data when examining the effect sizes that can inform subsequent research and intervention development. Future studies may explore if changing the timing of when participation in the deliberate practice program takes place, as well as the amount of practice of the skills and feedback given leads to positive outcomes. It is critical for researchers to understand and prepare for the recruitment challenges and increasing parental engagement in BPT for future studies as well.

# CHAPTER VI: APPLICATION TO SCHOOL PSYCHOLOGY

Training in evidenced-based interventions is an important part to school psychology graduate programs. It is critical that when a clinician completes a graduate program that they are competent in delivering evidence-based interventions like BPT. With the behavioral and/or conduct problems being one of the most common disorders in children and adolescents (Ghandour et al., 2019), school psychologists are likely to encounter this population on a regular basis. Given that school psychologist often provide parent training as an intervention for working with children with these externalizing problem behaviors, it is vital for school psychologist to not only understand the knowledge and concept of BPT but be able to competently deliver BPT.

By engaging in repeated practice of a skill and receiving feedback on performance, clinical trainees have the potential to move beyond just knowledge of BPT and into competency, while improving client outcomes. In fact, recently the American Psychological Association developed a book series of Deliberate Practice in different areas like Rational Emotive Behavior Therapy, Dialectical Behavior Therapy and Emotion-Focused Therapy. Additional research is still needed to determine the most efficient and feasible way in which deliberate practice can be incorporated into school psychology graduate programs. Deliberate practice is a growing field within psychotherapy and there are other ways in which the online simulation may be used in conjunction with already developed courses and practicums.

While the results of this study showed non-significant findings for the effectiveness of the online deliberate practice program, there is promising evidence to suggest the importance of continuing to explore efficient and feasible ways to ensure that

clinical trainees have the skills to deliver specific interventions, like BPT, in a way that improves client outcomes.

**APPENDIX A.**
**RECRUITMENT MATERIAL**


**APPENDIX B.**
**PHONE SCREEN**

Hello, my name is XXX and I am contacting you regarding the Behavioral Parenting Training Study by St. John's University.

We will be running a study in which you will receive 8 weeks of free, virtual behavioral parent training. You will also be eligible to receive up to $100 throughout the study.

To begin determining whether your child is eligible for this study, there are a couple of questions I need answered. Is that okay?

Parent Name:
Child Name:
Phone #:
Email:
ID #:

1. Do you believe your child is experiencing behavior problems (i.e., i.e., aggression, tantrums, non-compliance)? *(For eligibility must have significant externalizing problems.)*

2. How old is your child? (*Participant must be 4-12 years of age.*)

3. Are you or your child currently receive any counseling or therapy services specific for their behavior? (*Participant must not be already receiving services for disruptive behavior.*)

4. Would you be available to attend 8 weekly, virtual tele-health sessions? *(Must be available.)*

5. Do you have access to a computer with reliable WiFi and videoconferencing, as well as a confidential place for the 8-session 45 to 60-minute parenting sessions? *(Must have these resources.)***Must be in NY***

If participant meets eligibility, say, "Thank you so much for answering these questions, I am going to send you an email now that includes a link to a consent letter for you to complete regarding participation in the research. Once you have submitted this form, we will review it and with your consent we will deliver a questionnaire regarding your child's behavior for you to complete to further determine his/her eligibility. The questionnaire takes about 15-20 minutes to complete, and we ask that you return it within 48 hours. Once you have submitted this questionnaire, we will review it and let you know if you meet eligibility to participate by next Friday.

If participant does not meet eligibility, say, "Thank you so much for answering these questions. I'm sorry to inform you that you do not meet eligibility for our study, however I would be happy to offer you an additional treatment option.

Treatment options: treatment at the St. John's Center for Psychological Services (718) 990-1900.


**APPENDIX C.**
**PARENT CONSENT FORM**

**Introduction:**
You are being asked to participate in a research study conducted by Olivia Walsh and Dr. Mark Terjesen, of St. John's University. The decision to participate in this study is entirely up to you. You can decide to stop participating in this study at any time. If you have any questions, you may contact one of the principal investigators.

**Procedures:**
The purpose of this study is to evaluate the effectiveness of behavioral parent training (BPT) for which you have been recommended. By participating, you will be working with a clinical trainee throughout eight sessions to positively impact the behavior of your child. If you agree to participate, you will be given a brief demographic form, and asked to complete the following measures at baseline and weeks 4, 8, 12: Eyberg Child Behavior Inventory, Home Situations Questionnaire, Therapy Attitude Inventory, and Multidimensional Assessment of Parenting Scale. It is estimated to take around 20 minutes to complete. All information collected will be de-identified.

**Benefits:**
At each time-point in which questionnaires are completed, you will receive a $25 gift card. All data will be collected and stored electronically. Applicable data files will be password protected and only the primary investigator and faculty mentor will have access to the password. All data will be destroyed following publication of the results.

**Risks, Inconvenience, Discomfort**:
There are no physical risks involved with participation in this study.

**Alternatives:**
The alternative to this study is not participating. Your decision to not participate in this study will not have any negative implications for you; you may decide to withdraw from the study at any time or choose not to answer specific questions.

**Confidentiality:**
All information from this study will be kept strictly confidential and only seen by the researchers. If any publications result from this study, you will not be identified. Any data from this study will be reported in aggregate form only; individual data responses will not be reported. Data will be transferred in a HIPAA-compliant manner and will be kept in de-identified, password-protected files.

**Questions:**
If you have any questions regarding this research study, please contact Olivia Walsh at (516) 317-6096. For questions regarding your rights as a research participant, please contact Dr. Marie Nitopi from the Institutional Review Board at (718) 990-1440.

Thank you very much for your consideration. If you agree to participate, please consent by pressing the button below. Please print a copy of this form for your records.

- I voluntarily give my consent to participate in this study. I understand that my signing below indicates that I have read and understood the information provided here. I understand that my participation is completely voluntary, and that my name will not be tied to the information I am providing. If at any time I do not wish to further participate, I have the right to withdraw my participation.

Name: _____

Signature: _____

Date: _____

## CONSENT TO RECEIVE TELEPSYCHOLOGY SERVICES

Please review carefully the following informed consent for telepsychology services for the Behavioral Parent Training (BPT) Research Study.

- There are potential benefits and risks of video-conferencing (e.g. limits to patient confidentiality) that differ from in-person sessions.
- Confidentiality (and the limits of) still applies for telepsychology services.
- Signing this consent will allow the BPT Research Study team, its students and supervisors, to observe some of your sessions via recordings made in the Webex system. We remind you that the recordings are made for training purposes only and are destroyed following supervisory review or upon completion of research study need, unless circumstances require their preservation. These recordings are not part of your record.
- We agree to use the Webex platform for telepsychology services.
- The Webex session invitation will be delivered by email to the address you provided to your student therapist. Do not reply to this email or use this as a means of general communication regarding treatment.
- You need to use a webcam or smartphone during the session.
- You must be physically present in New York State during the session.
- Be in a quiet, private space that is free of distractions (including cell phone or other devices) during the session.

- Use a secure internet connection rather than public/free Wi-Fi.
- Be on time and ready to begin at your scheduled session time. If you need to cancel or change your tele-appointment, please notify the research staff in advance.
- Have a back-up plan (e.g., phone number where you can be reached) to restart the session or to reschedule it, in the event of technical problems.
- If you are not an adult, we need the permission of your parent or legal guardian (and their contact information and location at time of session) for you to participate in telepsychology sessions.
- There may be circumstances in which we determine that due to certain circumstances, telepsychology services is no longer appropriate.

I understand the risks and procedures involved with using the videoconferencing technology. I agree to the terms listed above and I hereby voluntarily consent to the use of this platform for therapy sessions with my provider. This consent will last for the duration of the relationship for this research study.

I have read, understand, and agree to the policies and services referenced in this document. I give my consent to the St. John's BPT Research Study to provide treatment/psychological services to me via telepsychology. By providing my information below I am attesting to be the person authorized by law to make health decisions for the identified client.

Student Therapist Name:_____

Supervisor Name:_____

Client Name:_____

Emergency Contact Name/Contact Information:_____

Signature of Client / Client's Legal Representative:

_____

Date


**APPENDIX D.**
**EYBERG CHILD BEHAVIOR INVENTORY**

Bought online on PARiConnect.


**APPENDIX E.**
**TRAINEE RECRUITMENT EMAIL**

To Whom It May Concern:

You are being asked to participate in a research study conducted by Olivia Walsh and Dr. Mark Terjesen, of St. John's University. The purpose of this research seeks to examine the impact of deliberate practice on behavioral parent training among clinicians with the objective being to improve clinical competency and have a positive impact on client (child and parent) change. This feedback and training will all be done through an online program (https://www.skillsetter.com/).

If you are interested in participating, please click the link below for more information about the study.

You will be directed to additional information and a consent form.

If you have any questions regarding this research study, please contact either Ms. Walsh at (516) 317-6096.

Thank you for your consideration.


**APPENDIX F.**
**TRAINEE CONSENT FORM**

**Introduction** You are being asked to participate in a research study conducted by Olivia Walsh and Dr. Mark Terjesen, of St. John's University. The purpose of this research seeks to examine the impact of deliberate practice (DP) on behavioral parent training (BPT) among clinicians with the objective being to improve clinical competency and have a positive impact on client (child and parent) change.

**Procedures:**
This is a pilot study with both an intervention and comparison group. Both the intervention and comparison groups will receive a didactic training session about BPT from a BPT expert. As a trainee in the intervention group, you will engage with video scenarios through Skillsetter and in doing so, you will complete each scenario by recording a video response to all 17 scenarios. Initially, you will be instructed to self-evaluate your performance (up to 3 times). Afterwards, you will receive deliberate feedback from a reviewer regarding your performance. You will then complete the scenario/skill until competency is demonstrated. This is all done through the Skillsetter webpage. Both groups will be asked to complete the same questionnaires throughout the study.

**Benefits:**
Regardless of randomization, by participating in this study, you will gain information regarding BPT. Participants in the intervention group will also experience direct feedback from a BPT expert to become competent in each BPT skill.

**Risks, Inconvenience, Discomfort**:
There are no physical risks involved with participation in this study.

**Confidentiality:**
All information from this study will be kept strictly confidential and only seen by the researchers. If any publications result from this study, you will not be identified. Any data from this study will be reported in aggregate form only; individual data responses will not be reported. Data will be transferred in a HIPAA-compliant manner and will be kept in de-identified, password-protected files.

**Questions:**
If you have any questions regarding this research study, please contact Olivia Walsh at (516) 317-6096. For questions regarding your rights as a research participant, please

contact Dr. Marie Nitopi from the Institutional Review Board at (718) 990-1440. Thank you very much for your consideration. If you agree to participate, please consent by pressing the button below. Please print a copy of this form for your records.

- I voluntarily give my consent to participate as a clinical trainee in this study. I understand that my signing below indicates that I have read and understood the information provided here. I understand that my participation is completely voluntary, and that my name will not be tied to the information I am providing. If at any time I do not wish to further participate, I have the right to withdraw my participation.

Name:_____

Signature: _____

Date:_____


**APPENDIX G.**
**TRAINEE DEMOGRAPHIC QUESTIONNAIRE**

1. What is your age? _____

2. What gender do you identify as?
   - Male
   - Female
   - Other (please specify) _____

3. Please specify your ethnicity:
   - Caucasian
   - African-American
   - Latino or Hispanic
   - Asian
   - Native American
   - Native Hawaiian or Pacific Islander
   - Two or More
   - Other/Unknown
   - Prefer not to say

4. Years of graduate training: _____

5. Do you have any previous experience with parent training?
   - No
   - Yes

     If yes, please specify: _____

6. Diagnosis of the client: _____

7. To what extent was Parent Training addressed in your graduate training program?

| 1 | 2 | 3 | 4 | 5 |
|---|---|---|---|---|
| Not at all | | Somewhat | | To a Great Extent |

8. Estimate the number of articles/papers dealing with Parent Training that you have read in your career.

| | | | | |
|---|---|---|---|---|
| 0 | 1-3 | 4-6 | 7-9 | 10 or more |

9. Estimate the number of workshops or in-services pertaining to Parent Training that you have attended in your career.

| | | | | |
|---|---|---|---|---|
| 0 | 1-2 | 3-4 | 5-6 | 7 or more |

10. Estimate the number of families where you have engaged in Parent Training in the past 12 months.

| | | | | |
|---|---|---|---|---|
| 0 | 1 | 2 | 3 | 4 or more |


## APPENDIX H.
## TRAINEE PERCEIVED COMPETENCY MEASURE

The following form asks you to answer questions regarding your previous clinical training. Please read the questions carefully and select/provide your answers below.

1. How would you rate your knowledge of Parent Training?

| 1 | 2 | 3 | 4 | 5 |
|---|---|---|---|---|
| Not at all Knowledgeable | | Somewhat Knowledgeable | | Extremely Knowledgeable |

2. How effective do you think you are in conducting Parent Training?

| 1 | 2 | 3 | 4 | 5 |
|---|---|---|---|---|
| Not at all Effective | | Somewhat Effective | | Extremely Effective |


## APPENDIX I.
## VIGNETTES

1. **Targeted Skill**: Gathered relevant background information about client behavior
   **Operation Definition**: Clinician gathers information from the parent about the child's presenting behavioral problem.
   **Introduction**: This is Lilly. It is her first-time starting therapy and her first session with you. You just introduced yourself.
   **Script**: I am having difficulty dealing with my children while also dealing with balancing work and life. I don't think I realized how difficult it would be.

2. **Targeted Skill**: Reviewed current parenting practices
   **Operation Definition**: Clinician reviews history of attempted efforts by parent to change child's behavior.
   **Introduction**: This is Matilda. Recently she has been having more difficulties with trying to get her son to comply with what she wants him to do. She came to you for the first time asking for help about this. You have just asked her to explain what has been happening.
   **Script**: I have tried again and again to get my son to follow directions, and he refuses. Nothing I say or do will make him follow my directions. Whether it be get in the car we're going to school, wash up for dinner, or help set the table. He just won't listen.

3. **Targeted Skill**: Psychoeducation with parents about child behavior
   **Operation Definition**: Clinician provides normative aspect of behavior and discussion of different etiological variables that could lead to development of it.
   **Introduction**: This is Amy. She came to you looking for input about her 8-year-old son Billy. She told you he has been acting out a lot both at home and at school. Teachers have already begun to complain to her about his getting up out of his seat and talking to his friends instead of listening.
   **Script**: I don't understand why Billy is behaving this way. I was never like this as a child and his brothers aren't like this, so I can't imagine where he gets it from. I thought at this age kids were supposed to enjoy school. He is impossible. I think he's the only child who acts like this.

4. **Targeted Skill**: Presented/reviewed ABC of child behavior
   **Operation Definition**: Clinician facilitates discussion of antecedent, behavior, and consequence of child's action.

**Introduction**: This is Brian. Brian came to you about his 13-year-old son. He told you he needs help with figuring out why his son won't eat dinner every night. You just asked him to elaborate.
**Script**: Every time I tell my son to stop playing video games because it's time for dinner, he says he has a stomachache and refuses to eat. I don't know how to get him to come eat dinner with the family.

5. **Targeted Skill**: Presented/reviewed a point system (token economy)
   **Operation Definition**: Clinician works towards creating a token economy with parent.
   **Introduction**: Mark comes to you because of his inability to discipline his daughter effectively. He has a 16-year-old daughter Lucy. Previously he's told you that in other situations he's tried using methods such as punishment and planned ignoring.
   **Script**: Lucy never finishes her homework. I try to get her to sit down and complete it, but she doesn't listen to me and there's nothing I say or do that has worked to get her to finish. Clearly, she doesn't care about bringing it to class incomplete.

6. **Targeted Skill:** Presented/reviewed consequential interventions (response cost, time-out)
   **Operation Definition:** Clinician reviewing different disciplinary interventions that are primarily consequential responses.
   **Introduction:** This is Max and Hannah. They have twins, a son and a daughter. Previously in therapy sessions, they have discussed how their children don't get along and how they often argue. You just asked them if there have been any improvements with their children's relationship. This is their response.
   **Script:** I don't know what to do. My daughter keeps hitting my son whenever he doesn't do what she wants. She hasn't hurt him too badly, but it seems to be escalating. I'm afraid to leave them alone together.

7. **Targeted Skill:** Presented/reviewed anticipation of misbehavior in different settings
   **Operation Definition:** Clinician works to prepare parents for anticipation of the child's misbehavior in an upcoming setting.
   **Introduction:** Steve has three teenage children who are very different from each other and all rarely spend time together. In one of your first sessions, Steve discussed that the last time the family traveled together, his youngest son refused to leave the hotel room, even to eat, because he didn't want to lose WIFI and be disconnected from his friends. In this clip, Steve is telling you how excited he is for their upcoming family trip.
   **Script:** This weekend we're going on a family camping trip. We'll be very secluded and just like last time, we won't have cell service, so we can all detach and bond as a family.

8. **Targeted Skill:** Presented/reviewed communication with school re: behaviors (Daily Report Card)
   **Operation Definition:** Clinician discusses daily report card from school as to child behaviors during the day which is signed by teacher and sent home so that parent can see it.
   **Introduction:** Mike has come to you with concerns about his son Benny's behavior in school. His school just had parent teacher night and he told you he attended and met Benny's teacher. You just asked how him how it went.
   **Script:** Well, all along I thought Benny was doing fine in his classes. It wasn't until this parent teacher night that I found out he's been having problems. They waited three months to tell me. I don't understand why there was no way of me finding out sooner.

9. **Targeted Skill:** Presented/reviewed strategies for parent to manage their affect
   **Operation Definition:** Clinician offers strategies for managing parenting emotions
   **Introduction:** This is Becky. She's in therapy for a few reasons, one of them being her inability to manage her anger, especially when it comes to disciplining her children. You've just asked her to describe the last situation in which she got angry with her children.
   **Script:** The last time things were bad was when we went grocery shopping, and I wouldn't get them the snack they wanted. They wouldn't stop yelling in the aisle and I just exploded. I couldn't contain myself. I was so angry I dropped all the groceries and started yelling at them to stop.

10. **Targeted Skill:** Presented/reviewed strategies to improve family communication
    **Operation Definition:** Clinician works with parent to review strategies to implement that will increase communication within family.
    **Introduction:** This is Susan, she has a 9-year-old daughter Jo. Her mother moved in with her last year and they don't always agree on how to raise Jo. Jo has been acting out lately, but Susan cannot get her to listen to her, as she just wants to listen to her mother. In this clip, Susan is expressing her frustrations with her situation at home.
    **Script:** When my mom moved in with us, I thought it would be this great thing. I wouldn't have to leave work early to pick up Jo from the bus stop. But it's been really difficult. My mom spoils her and lets her eat and do whatever she wants when I'm not there. I don't want to hurt her feelings, but I wish she would just be on my side.

11. **Targeted Skill:** Presented/reviewed coping strategies with child
    **Operation Definition:** Clinician reviews approaches for the parent to continue to work with child without having therapy sessions and to reinforces what they learned.
    **Introduction:** This is Alex. You are planning to transition off of regular meetings. Previously you have informed him of this, and he expressed that he was concerned. You just asked him about why he is concerned.

**Script:** I'm so worried that I won't know how to handle my son's behaviors without our sessions. I'm not sure I'll be able to do it.

12. **Targeted Skill:** Relevant homework was assigned
    **Operation Definition:** Clinician works with parents to develop and assign homework assignments that build on skills learned in each session.
    **Introduction:** You've been seeing Kevin for a couple sessions now. You have presented several parenting strategies as well as taught him about how to handle his own parenting emotions.
    **Script:** I'm not so sure that what I am learning in here transfers over to home. I am pretty sure I understand things but am not seeing any kind of change and I continue to get stressed.

13. **Targeted Skill:** Affect recognition and validation
    **Operation Definition:** Clinician identifies that the parent is demonstrating an elevated affective level that may interfere with parenting.
    **Introduction:** This is Jerry. You have asked him to describe a recent situation with managing his children's behavior.
    **Script:** "The other night I was trying to get the children to finish dinner and get ready for bed and it was impossible. I was so upset with them, and they wouldn't listen, and I lost it. I broke their game system on purpose. Parenting is difficult but this is too much for anyone to handle. I don't think I calmed down for a few more hours. I can't handle this."

14. **Targeted Skill:** Response to personal question
    **Operation Definition:** Clinician responds to client questioning their skills to assist them.
    **Introduction:** This is James. This is your first session with him, and you have asked him about his concerns about his children. You just introduced yourself.
    **Script:** "Well, I have tried to deal with my daughter's behavior for a while now but have not been successful. Nothing seems to work, and I am not sure anyone understands how difficult this is. As I think about this, before we start, I am wondering if you have any children of your own. Parenting is tough and unless you have walked in the shoes of a parent, I am not sure how you can help me."

15. **Targeted Skill:** Empathy
    **Operation Definition:** Clinician validates some of the challenges that the parent is experiencing.
    **Introduction:** This is Jessie. It is his first time in a session with you and his first time speaking to anyone professionally about getting help for how to be a better parent. You have asked him to describe some of the challenges he has faced.
    **Script:** "I want to start by saying I love my kids, but I am really having difficulty trying to handle them. I see how other parents handle their kids and it seems so easy. It definitely isn't this way for me. I cannot get them to stop playing video games, do their schoolwork, clean their room, be respectful to each other and to me and other family members. I heard other parents talking about them at open

school night and at the soccer games. They clearly are the "problem kids" and I blame myself."

16. **Targeted Skill:** Alliance Rupture
**Operation Definition:** Clinician acknowledges client concern and that there has been a rupture in the client-therapist relationship.
**Introduction:** This is Patrick. You have been in several sessions with him, and his child is still struggling behaviorally. You have just asked if he notices any improvement in his child's behavior.
**Script:** "I feel like you think I am a bad parent. I am doing all that I can, but you always are telling me I need to do something differently like don't react that way or don't say that. Apparently, you just think I am horrible at parenting my child."

17. **Targeted Skill:** Cultural awareness
**Operational Definition:** Clinician recognizes the existence of cultural differences and responds to client concern.
**Introduction:** This is Maya. She came to you looking for help in disciplining her teen for consistently lying to her. You just asked her what things her teen has been lying about.
**Script:** "It doesn't matter what she's lying about. It's the fact that she is lying to me. In my culture, children know to respect their parents, which means following directions and telling the truth. Maybe that's not a big deal to some people, but it's very important to our cultural values."


**APPENDIX J.**
**VIGNETTE SKILLSETTER RUBRIC**

| Vignette | Content Area | Question 1 | Question 2 | Question 3 |
|---|---|---|---|---|
| 1 | Gathered relevant background information about client behavior | Does the response offer a rationale as to why it is important to gather additional information about client's behavior? | Does the response ask parent to describe concerns in behavioral terms? | Is the response non-judgmental? |
| 2 | Reviewed current parenting practices | Does the response ask parents to describe their response to change (improve) child's behavior? | Does the response ask parents to describe past interventions tried to change child's behavior? | Is the response non-judgmental? |
| 3 | Psychoeducation with parents about child behavior | Does the response validate parent's concerns? | Does the response attempt to summarize child behavior within a developmental context? | Does the response avoid criticizing the teacher's behavior? Does the response describe a plan or process for therapy and relate it to behaviors seen at school? |

| | | | | |
|---|---|---|---|---|
| 4 | Presented/reviewed ABC of child behavior | Does the response provide a rationale for why it is important to understand the behavior contextually (i.e., ABCs)? | Does the response attempt to solicit specific examples of antecedents that may set the stage for the behavior? | Does the response attempt to solicit specific examples of consequences that may maintain the behavior? |
| 5 | Presented/reviewed a point system (token economy) | Does the response provide a rationale for why a system of reinforcement may be helpful to change the behavior? | Does the response discuss overall strategies (i.e., choosing 2-3 behaviors, having a reward menu, choosing a symbolic reward, establishing a reward schedule) to implement a token-economy system? | Does the response ascertain/establish their experience with token-economies and their acceptability of this as an intervention? |
| 6 | Presented/reviewed consequential interventions (response cost, time-out) | Does the response provide education about consequential interventions? | Does the response present examples of two consequential interventions? | Does the response ask about their acceptability of this as an approach? |
| 7 | Presented/reviewed anticipation of misbehavior in different settings | Does the response ask parent to consider potential challenges that may arise in this experience? | Does the response assess/review parental responses should maladaptive behaviors present? | Does the response avoid tempering the parent's excitement about the upcoming trip? |
| 8 | Presented/reviewed communication with school re: behaviors (Daily Report Card) | Does the response validate parent's concerns about not being aware of this behavior in school? | Does the response provide parent with education about a Daily Behavior report card? | Does the response ask about their acceptability of this as an approach? |
| 9 | Presented/reviewed strategies to manage parent affect | Does the response validate what the parent was experiencing? | Does the response examine any negative consequences to the parent's response? | Does the response ask parent to consider working towards a different emotional and behavioral response? |

| | | | | |
|---|---|---|---|---|
| 10 | Presented/reviewed strategies to improve family communication | Does the response validate what the client was experiencing? | Does the response attempt to have client see that present communication style may not be effective? | Does the response offer suggestions to improve communication and increase the likelihood of consistency in parenting in the home? |
| 11 | Presented/reviewed coping strategies with child | Does the response validate what the client was experiencing? | Does the response point out the successes that the client has made as the reason for the transition? | Does the response ask client to review what have been the most effective strategies and consider what barriers/challenges they may experience as a result? |
| 12 | Relevant homework was assigned | Does the response validate the client's concerns? | Does the response discuss the importance of in-between session work to promote gains made in session? | Does the response offer a specific HW to reinforce parenting strategies? |
| 13 | Affect recognition and validation | Does the response identify that the parent has an elevated affect level? | Does the response validate the parent's elevated affect level? | Does the response identify how the parent's elevated affect is interfering with parenting? |
| 14 | Response to personal question | Does the response validate the client's concern? | Was the response delivered smoothly and without discomfort? | Is the response non-defensive and accepting? |
| 15 | Empathy | Does the response explicitly identify the emotion or affect of the client? | Does the response further identify why the parent blames themself? | Is the response non-judgmental? |

| | | | | |
|---|---|---|---|---|
| 16 | Alliance Rupture | Does the response acknowledge that there has been a rupture in the client-therapist relationship? | Does the response reflect the client's thoughts and emotions? | Is the response non-defensive and accepting of the current discomfort in the relationship? |
| 17 | Cultural awareness | Does the response acknowledge the existence of cultural differences? | Does the response ask about reinforcers used (i.e., punishments) in response to the concerning behavior? | Is the response non-judgmental? |


**APPENDIX K.**
**PARENT DEMOGRAPHIC QUESTIONNAIRE**

1. Number of caregivers in the home:
   - 1 caregiver
   - 2 caregivers
   - More than 2 caregivers:
     Please specify: _____

2. Primary parent's age: _____

3. What gender do you identify as?
   - Male
   - Female
   - Other (please specify) _____

4. Please specify your ethnicity:
   - Caucasian
   - African-American
   - Latino or Hispanic
   - Asian
   - Native American
   - Native Hawaiian or Pacific Islander
   - Two or More
   - Other/Unknown
   - Prefer not to say

5. What is your zip code? _____

6. Please specify your relationship status:
   - Single, never married
   - In a domestic partnership
   - Married
   - Divorced
   - Widowed
   - Prefer not to say

7. Please specify your highest level of education:
    - Less than High School
    - High School
    - Trade School
    - Bachelor's Degree
    - Master's Degree
    - Doctorate Degree
    - Other (please specify): _____
    - Prefer not to say

8. Please specify your employment status:
    - Employed, working 1-39 hours per week
    - Employed, working 40 or more hours per week
    - Not employed, looking for work
    - Not employed, not looking for work
    - Retired
    - Disabled, not able to work
    - Prefer not to say

9. How many children do you have? _____

10. Number of family members in the home: _____

11. Residence of child: _____

12. Child's order among his/her siblings: _____

13. Please assign percentages to the role each person plays in the behavioral management of your child:

Caregiver #1: _____
Gender: •Male • Female • Other
Caregiver #2: _____
Gender: •Male • Female • Other
Other:
Please specify: _____
Gender: •Male • Female • Other

14. The behavioral difficulties of the child I am seeking treatment for is overwhelming to me.
    - Strongly agree
    - Agree
    - Not sure
    - Disagree
    - Strongly disagree

15. In considering my child's behavioral difficulties, I doubt my ability to parent efficiently.
    - Strongly agree
    - Agree
    - Not sure
    - Disagree
    - Strongly disagree


# APPENDIX L.
# HOME SITUATIONS QUESTIONNAIRE

FORM 4

## Home Situations Questionnaire

**Child's name** _____ **Date** _____

Name of person completing this form _____

**Instructions:** Does your child present any problems with compliance to instructions, commands, or rules from you in any of the following situations? If so, please circle *Yes* next to the situation and then rate how severe the problem is for you using the adjacent 1–9 scale, ranging from mild to severe. If your child does not present a problem in a given situation, circle *No* and go on to the next item on the form.

| | | | *If yes, how severe?* | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| *Situations* | *Yes/No* | | *Mild* | | | | | | | | *Severe* |
| While playing alone | Yes | No | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 |
| While playing with other children | Yes | No | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 |
| At mealtimes | Yes | No | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 |
| Getting dressed | Yes | No | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 |
| Washing and bathing | Yes | No | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 |
| While you are on the telephone | Yes | No | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 |
| While watching television | Yes | No | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 |
| When visitors are in your home | Yes | No | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 |
| When you are visiting someone's home | Yes | No | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 |
| In public places (e.g., restaurants, stores, church) | Yes | No | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 |
| When father is home | Yes | No | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 |
| When asked to do chores | Yes | No | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 |
| When asked to do homework | Yes | No | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 |
| At bedtime | Yes | No | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 |
| While in the car | Yes | No | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 |
| When with a babysitter | Yes | No | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 |

For Office Use Only

Total number of problem settings _____ Mean severity score _____


# APPENDIX M.
# THERAPY ATTITUDE INVENTORY

## THERAPY ATTITUDE INVENTORY*

*(Please circle the response for each question which best expresses how you honestly feel.)*

I. Regarding techniques of disciplining, I feel I have learned

1. nothing | 2. very little | 3. a few new techniques | 4. several useful techniques | 5. very many useful techniques

II. Regarding techniques for teaching my child new skills, I feel I have learned

1. nothing | 2. very little | 3. a few new techniques | 4. several useful techniques | 5. very many useful techniques

III. Regarding the relationship between myself and my child, I feel we get along

1. much worse than before | 2. somewhat worse than before | 3. the same as before | 4. somewhat better than before | 5. very much better than before

IV. Regarding my confidence in my ability to discipline my child, I feel

1. much less confident | 2. somewhat less confident | 3. the same | 4. somewhat more confident | 5. much more confident

V. The major behavior problems that my child presented at home before the program started are at this time

1. considerably worse | 2. somewhat worse | 3. the same | 4. somewhat improved | 5. greatly improved

VI. I feel that my child's compliance to my commands or requests is at this time

1. considerably worse | 2. somewhat worse | 3. the same | 4. somewhat improved | 5. greatly improved

VII. Regarding the progress my child has made in his/her general behavior, I am

1. very dissatisfied | 2. somewhat dissatisfied | 3. neutral | 4. somewhat satisfied | 5. very satisfied

VIII. To what degree has the treatment program helped with other general personal or family problems not directly related to your child in the program?

1. hindered much more than helped | 2. hindered slightly | 3. neither hindered nor helped | 4. helped somewhat | 5. helped very much

IX. I feel the type of program that was used to help me improve the behaviors of my child was

1. very poor | 2. poor | 3. adequate | 4. good | 5. very good

X. My general feeling about the program I participated in, is

1. I disliked it very much | 2. I disliked it somewhat | 3. I feel neutral | 4. I liked it somewhat | 5. I liked it very much

---


**APPENDIX N.**
**SUPERVISORY RATING OF CLINICAL SKILLS**

1. Interviewing skills:

| 1 | 2 | 3 | 4 | 5 | N/A |
|---|---|---|---|---|---|
| Extremely Inadequate | Somewhat Below Average | Average | Above Average | Extremely Skillful | Not Applicable |

2. Behavioral assessment skills:

| 1 | 2 | 3 | 4 | 5 | N/A |
|---|---|---|---|---|---|
| Extremely Inadequate | Somewhat Below Average | Average | Above Average | Extremely Skillful | Not Applicable |

3. Interventions logically follow from a theory and case conceptualization:

| 1 | 2 | 3 | 4 | 5 | N/A |
|---|---|---|---|---|---|
| Extremely Inadequate | Somewhat Below Average | Average | Above Average | Extremely Skillful | Not Applicable |

4. Overall rating of intervention skills:

| 1 | 2 | 3 | 4 | 5 | N/A |
|---|---|---|---|---|---|
| Extremely Inadequate | Somewhat Below Average | Average | Above Average | Extremely Skillful | Not Applicable |


# APPENDIX O.
# THE MULTIDIMENSIONAL ASSESSMENT OF PARENTING SCALE

## Multidimensional Assessment of Parenting Scale (MAPS)

**Parent Version**

| | | | |
|---|---|---|---|
| **Child's Name/ID** | _____ | **Child Sex:** (Circle One) | Female / Male |
| **Parent's Name/ID** | _____ | **Child Date of Birth** (mm/dd/yyyy) | ___ / ___ / _____ |
| **Relationship to Child** | _____ | **Today's Date** (mm/dd/yyyy) | ___ / ___ / _____ |
| **Child's Age:** | _____ | **Child's Grade** | _____ |

**Instructions:**

| Parents have different ways of trying to raise their children. Please read each statement and rate how much each one best describes your parenting during the **past two months** with the child indicated above. | **Never** | **Almost Never** | **Sometimes** | **Often** | **Always** |
|---|---|---|---|---|---|
| 1. I express affection by hugging, kissing, and holding my child. | 1 | 2 | 3 | 4 | 5 |
| 2. If my child whines or complains when I take away a privilege, I will give it back | 1 | 2 | 3 | 4 | 5 |
| 3. I am afraid that disciplining my child for misbehavior will cause her/him to not like me. | 1 | 2 | 3 | 4 | 5 |
| 4. I argue with my child. | 1 | 2 | 3 | 4 | 5 |
| 5. I use threats as punishment with little or no justification. | 1 | 2 | 3 | 4 | 5 |
| 6. The punishment I give my child depends on my mood. | 1 | 2 | 3 | 4 | 5 |
| 7. I have warm and intimate times together with my child. | 1 | 2 | 3 | 4 | 5 |
| 8. I yell or shout when my child misbehaves | 1 | 2 | 3 | 4 | 5 |
| 9. My child talks me out of punishing him/her after he/she has done something wrong | 1 | 2 | 3 | 4 | 5 |
| 10. I show respect for my child's opinions by encouraging him/her to express them. | 1 | 2 | 3 | 4 | 5 |
| 11. If my child does his/her chores, I will recognize his/her behavior in some manner. | 1 | 2 | 3 | 4 | 5 |
| 12. I let my child out of a punishment early (like lift restrictions earlier than I originally said). | 1 | 2 | 3 | 4 | 5 |
| 13. I explode in anger toward my child. | 1 | 2 | 3 | 4 | 5 |
| 14. I spank my child with my hand when he/she has done something wrong. | 1 | 2 | 3 | 4 | 5 |
| 15. I give reasons for my requests (such as "We must leave in five minutes, so it's time to clean up.") | 1 | 2 | 3 | 4 | 5 |

| | Never | Almost Never | Sometimes | Often | Always |
|---|---|---|---|---|---|
| 16. I lose my temper when my child doesn't do something I ask him/her to do. | 1 | 2 | 3 | 4 | 5 |
| 17. I encourage my child to talk about her/his troubles. | 1 | 2 | 3 | 4 | 5 |
| 18. If I give my child a request and she/he carries out the request, I praise her/him for listening and complying. | 1 | 2 | 3 | 4 | 5 |
| 19. I warn my child before a change of activity is required (such as a five-minute warning before leaving the house in the morning). | 1 | 2 | 3 | 4 | 5 |
| 20. If my child gets upset when I say "No," I back down and give in to her/him. | 1 | 2 | 3 | 4 | 5 |
| 21. My child and I hug and/or kiss each other. | 1 | 2 | 3 | 4 | 5 |
| 22. I listen to my child's ideas and opinions. | 1 | 2 | 3 | 4 | 5 |
| 23. I feel that getting my child to obey is more trouble than it's worth. | 1 | 2 | 3 | 4 | 5 |
| 24. I spank my child when I am extremely angry. | 1 | 2 | 3 | 4 | 5 |
| 25. I use physical punishment as a way of disciplining my child. | 1 | 2 | 3 | 4 | 5 |
| 26. If my child cleans his room, I will tell him/her how proud I am. | 1 | 2 | 3 | 4 | 5 |
| 27. I give in to my child when she/he causes a commotion about something. | 1 | 2 | 3 | 4 | 5 |
| 28. I tell my child my expectations regarding behavior before my child engages in an activity. | 1 | 2 | 3 | 4 | 5 |
| 29. When I am upset or under stress, I am picky and on my child's back. | 1 | 2 | 3 | 4 | 5 |
| 30. I tell my child that I like it when he/she helps out around the house. | 1 | 2 | 3 | 4 | 5 |
| 31. I use physical punishment (for example, spanking) to discipline my child because other things I have tried have not worked. | 1 | 2 | 3 | 4 | 5 |
| 32. I provide my child with a brief explanation when I discipline his/her misbehavior. | 1 | 2 | 3 | 4 | 5 |
| 33. I avoid struggles with my child by giving clear choices. | 1 | 2 | 3 | 4 | 5 |
| 34. When my child misbehaves, I let him know what will happen if she/he doesn't behave. | 1 | 2 | 3 | 4 | 5 |

**Table 1:**

*Clinicians' Characteristics at Baseline*

| Variable | Comparison | Intervention | Overall | *p* |
|---|---|---|---|---|
| Age | 23.75 ± 1.50 | 25.25 ± 1.71 | 24.50 ± 1.69 | .235 |
| Ethnicity | | | | 1.00 |
| Caucasian | 4 | 4 | 8 | |
| Sex | | | | 1.00 |
| Female | 4 | 4 | 8 | |
| Years of Graduate Training | 1.50 ± 0.58 | 1.50 ± 0.58 | 1.50 ± 0.54 | 1.00 |
| Past Experience with BPT | | | | .157 |
| Yes | 3 | 1 | 4 | |
| No | 1 | 3 | 4 | |
| To what extent was Parent Training addressed in your graduate training program? | | | | .766 |
| A little bit | 1 | 1 | 2 | |
| Somewhat | 1 | 1 | 2 | |
| To an extent | 2 | 1 | 3 | |
| To a great extent | 0 | 1 | 1 | |
| Estimate the number of articles/papers dealing with Parent Training that you have read in your career. | | | | .801 |
| 1-3 | 1 | 2 | 3 | |
| 4-6 | 2 | 1 | 3 | |
| 7-9 | 0 | 0 | 0 | |
| 10 or more | 1 | 1 | 2 | |
| Estimate the number of workshops or in-services | | | | .620 |

| | | | | |
|---|---|---|---|---|
| pertaining to Parent Training that you have attended in your career. | | | | |
| 0 | 1 | 0 | 1 | |
| 1-2 | 2 | 3 | 5 | |
| 3-4 | 1 | 1 | 2 | |
| Estimate the number of families where you have engaged in Parent Training in the past 12 months. | | | | .537 |
| 0 | 2 | 2 | 4 | |
| 1 | 2 | 1 | 3 | |
| 3 | 0 | 1 | 1 | |

*Note.* Mean ± standard deviation.

**Table 2:**

*Parents' Characteristics at Baseline*

| Variable | Comparison | Intervention | Overall | *p* |
|---|---|---|---|---|
| Child's Age | 8.50 ± 1.92 | 6.25 ± 1.89 | 7.38 ± 2.13 | .146 |
| Child's Sex | | | | .157 |
| Female | 3 | 1 | 4 | |
| Male | 1 | 3 | 4 | |
| Child's Order | | | | .368 |
| Oldest | 3 | 3 | 6 | |
| Middle | 0 | 1 | 1 | |
| Youngest | 1 | 0 | 1 | |
| Caregiver Age | 33.25 ± 2.63 | 40.75 ± 3.86 | 37.00 ± 5.04 | .018* |
| Caregiver Gender | | | | .285 |
| Female | 3 | 4 | 7 | |
| Male | 1 | 0 | 1 | |
| Ethnicity | | | | .285 |
| Caucasian | 4 | 3 | 7 | |
| Other | 0 | 1 | 1 | |
| Relationship Status | | | | .202 |
| Married | 2 | 3 | 5 | |
| Single, never married | 2 | 0 | 2 | |
| Prefer not to say | 0 | 1 | 1 | |
| Highest Level of Education | | | | .343 |
| High School | 1 | 0 | 1 | |
| Trade School | 2 | 1 | 3 | |
| Bachelor's Degree | 0 | 2 | 2 | |
| Master's Degree | 1 | 1 | 2 | |
| Employment Status | | | | .572 |
| Employed, working 1-39 hours per week | 2 | 2 | 4 | |

| | | | | |
|---|---|---|---|---|
| Employed, working 40 hours or more per week | 1 | 1 | 2 | |
| Disabled, not able to work | 0 | 1 | 1 | |
| Prefer Not to Say | 1 | 0 | 1 | |
| Number of Caregivers | 1.75 ± 0.50 | 2.25 ± 0.50 | 2.00 ± 0.54 | .207 |
| Secondary Caregiver Gender | | | | .212 |
| Female | 1 | 0 | 1 | |
| Male | 2 | 4 | 6 | |
| Number of children | 2.50 ± 1.00 | 1.75 ± 0.96 | 2.13 ± 0.99 | .320 |
| Number of family members in the home | 4.25 ± 1.26 | 3.75 ± 0.96 | 4.00 ± 1.07 | .550 |
| The behavioral difficulties of the child I am seeking treatment for is overwhelming to me | | | | .320 |
| Strongly Agree | 1 | 2 | 3 | |
| Agree | 2 | 2 | 4 | |
| Disagree | 1 | 0 | 1 | |
| Strongly Disagree | 0 | 0 | 0 | |
| I doubt my ability to parent efficiently | | | | .137 |
| Strongly Agree | 0 | 1 | 1 | |
| Agree | 2 | 3 | 5 | |
| Disagree | 1 | 0 | 1 | |
| Strongly Disagree | 1 | 0 | 1 | |

*Note.* Mean ± standard deviation. *Significant at the $p < 0.05$ level.

**Table 3:**

*Baseline Means and Standard Deviations for Outcome Measures*

| | Baseline | | | | | | |
|---|---|---|---|---|---|---|---|
| | *Comparison* | | *Intervention* | | *Overall* | | |
| Variable | *M* | *SD* | *M* | *SD* | *M* | *SD* | *p* |
| ECBI Intensity Scale | 73.25 | 6.60 | 68.25 | 6.29 | 70.75 | 6.54 | .315 |
| ECBI Problem Scale | 74.50 | 5.80 | 69.00 | 6.58 | 71.75 | 6.45 | .257 |
| HSQ Number of Problem Behaviors | 11.75 | 1.89 | 11.75 | 2.75 | 11.75 | 2.19 | 1.00 |
| HSQ Mean Severity Score | 5.54 | 1.23 | 4.18 | 1.28 | 4.86 | 1.37 | .175 |
| PCC Knowledge | 3.25 | 0.50 | 3.25 | 0.50 | 3.25 | 0.46 | 1.00 |
| PCC Effectiveness | 3.00 | 0.82 | 3.00 | 0.82 | 3.00 | 0.76 | 1.00 |
| MAPS | | | | | | | |
| Broadband Positive Parenting | 52.50 | 12.01 | 56.50 | 4.43 | 54.50 | 12.01 | .555 |
| Proactive Parenting | 54.50 | 9.95 | 52.50 | 9.15 | 53.50 | 8.91 | .777 |
| Positive Reinforcement | 54.25 | 9.71 | 59.00 | 4.08 | 56.25 | 7.35 | .402 |
| Warmth | 48.00 | 14.07 | 56.75 | 3.86 | 52.38 | 10.64 | .276 |
| Supportiveness | 51.50 | 8.58 | 54.00 | 5.94 | 52.75 | 6.96 | .649 |

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| Broadband Negative Parenting | 60.25 | 8.10 | 60.25 | 3.30 | 60.25 | 5.72 | 1.00 |
| Hostility | 61.50 | 7.72 | 65.00 | 3.56 | 63.25 | 5.87 | .442 |
| Lax Control | 59.25 | 6.90 | 60.50 | 5.45 | 59.88 | 5.79 | .786 |
| Physical Control | 53.75 | 7.63 | 49.50 | 7.94 | 51.63 | 7.76 | .469 |

*Note*. ECBI = Eyberg Child Behavior Inventory; HSQ = Home Situations Questionnaire; PCC = Perceived Clinical Competency; MAPS = Multidimensional Assessment of Parenting Scale.

**Table 4:**

*Session 4 Means and Standard Deviations for Outcome Measures*

| | Session 4 | | | | | |
|---|---|---|---|---|---|---|
| | *Comparison* | | *Intervention* | | *Overall* | |
| Variable | *M* | *SD* | *M* | *SD* | *M* | *SD* |
| ECBI Intensity Scale | 70.00 | 7.02 | 66.50 | 14.62 | 68.25 | 10.78 |
| ECBI Problem Scale | 71.50 | 5.26 | 66.25 | 11.32 | 68.88 | 7.33 |
| HSQ Number of Problem Behaviors | 12.00 | 2.16 | 13.50 | 1.29 | 12.75 | 1.83 |
| HSQ Mean Severity Score | 5.40 | 0.46 | 5.29 | 0.94 | 5.34 | 0.69 |
| TAI | 40.25 | 3.86 | 37.25 | 7.01 | 38.75 | 5.52 |
| PCC Knowledge | 3.00 | 0.00 | 3.00 | 0.82 | 3.00 | 0.54 |
| PCC Effectiveness | 3.00 | 0.00 | 3.25 | 0.50 | 3.13 | 0.35 |
| SRS | 3.75 | 0.79 | 4.25 | 0.65 | 4.00 | 0.72 |
| MAPS | | | | | | |
| Broadband Positive Parenting | 54.50 | 11.56 | 54.75 | 2.22 | 54.63 | 7.71 |
| Proactive Parenting | 54.50 | 8.10 | 53.00 | 5.23 | 53.75 | 6.36 |
| Positive Reinforcement | 57.00 | 5.23 | 55.50 | 6.14 | 56.25 | 5.34 |
| Warmth | 51.50 | 15.70 | 55.50 | 3.70 | 53.50 | 10.77 |

| | | | | | | |
|---|---|---|---|---|---|---|
| Supportiveness | 51.50 | 11.12 | 52.75 | 5.91 | 52.13 | 8.27 |
| Broadband Negative Parenting | 52.25 | 10.53 | 57.25 | 4.27 | 54.75 | 7.91 |
| Hostility | 54.00 | 12.14 | 64.50 | 6.76 | 59.25 | 10.69 |
| Lax Control | 50.75 | 12.50 | 59.50 | 4.04 | 55.13 | 9.79 |
| Physical Control | 49.75 | 6.13 | 45.50 | 5.20 | 47.63 | 5.73 |

*Note*. ECBI = Eyberg Child Behavior Inventory; HSQ = Home Situations Questionnaire; TAI = Therapy Attitude Inventory; PCC = Perceived Clinical Competency; SRS = Supervisory Rating Scale; MAPS = Multidimensional Assessment of Parenting Scale.

**Table 5:**

*Session 8 Means and Standard Deviations for Outcome Measures*

| | Session 8 | | | | | |
|---|---|---|---|---|---|---|
| | *Comparison* | | *Intervention* | | *Overall* | |
| Variable | *M* | *SD* | *M* | *SD* | *M* | *SD* |
| ECBI Intensity Scale | 65.25 | 10.53 | 60.50 | 11.90 | 62.87 | 10.71 |
| ECBI Problem Scale | 66.50 | 7.33 | 62.00 | 11.75 | 64.25 | 9.38 |
| HSQ Number of Problem Behaviors | 11.25 | 3.59 | 11.25 | 3.59 | 11.25 | 2.87 |
| HSQ Mean Severity Score | 5.03 | 2.09 | 4.45 | 1.18 | 4.74 | 1.60 |
| TAI | 43.75 | 6.13 | 39.00 | 8.64 | 41.38 | 7.39 |
| PCC Knowledge | 3.25 | 0.50 | 3.50 | 0.58 | 3.38 | 0.52 |
| PCC Effectiveness | 3.00 | 0.00 | 3.25 | 0.50 | 3.13 | 0.35 |
| SRS | 3.75 | 0.79 | 3.94 | 0.75 | 3.84 | 0.72 |
| MAPS | | | | | | |
| Broadband Positive Parenting | 53.75 | 10.24 | 56.00 | 6.22 | 54.88 | 7.94 |
| Proactive Parenting | 51.75 | 10.34 | 52.25 | 8.26 | 52.00 | 8.67 |
| Positive Reinforcement | 58.00 | 4.55 | 55.00 | 5.48 | 56.50 | 4.93 |
| Warmth | 51.00 | 10.42 | 55.50 | 3.70 | 53.25 | 7.63 |
| Supportiveness | 51.50 | 13.91 | 57.50 | 7.00 | 54.50 | 10.69 |
| Broadband Negative Parenting | 54.25 | 12.12 | 57.75 | 4.79 | 56.00 | 8.73 |

| | | | | | | |
|---|---|---|---|---|---|---|
| Hostility | 54.00 | 12.14 | 65.25 | 5.74 | 59.63 | 10.65 |
| Lax Control | 52.00 | 12.30 | 55.25 | 5.38 | 53.63 | 8.96 |
| Physical Control | 52.75 | 10.37 | 46.50 | 6.56 | 49.63 | 8.70 |

*Note*. ECBI = Eyberg Child Behavior Inventory; HSQ = Home Situations Questionnaire; TAI = Therapy Attitude Inventory; PCC = Perceived Clinical Competency; SRS = Supervisory Rating Scale; MAPS = Multidimensional Assessment of Parenting Scale.

**Table 6:**

*Follow-Up Means and Standard Deviations for Outcome Measures*

| | Follow-Up | | | | | |
|---|---|---|---|---|---|---|
| | *Comparison* | | *Intervention* | | *Overall* | |
| Variable | *M* | *SD* | *M* | *SD* | *M* | *SD* |
| ECBI Intensity Scale | 61.50 | 8.78 | 58.00 | 15.58 | 59.75 | 11.84 |
| ECBI Problem Scale | 67.00 | 5.03 | 59.50 | 14.20 | 63.35 | 10.65 |
| HSQ Number of Problem Behaviors | 10.75 | 2.22 | 11.25 | 4.35 | 11.00 | 3.21 |
| HSQ Mean Severity Score | 4.36 | 1.40 | 3.13 | 1.81 | 3.83 | 1.60 |
| PCC Knowledge | 3.50 | 0.58 | 3.00 | 0.82 | 3.25 | 0.71 |
| PCC Effectiveness | 3.00 | 0.00 | 3.00 | 0.82 | 3.00 | 0.54 |
| MAPS | | | | | | |
| Broadband Positive Parenting | 53.75 | 11.15 | 56.75 | 6.50 | 55.25 | 8.60 |
| Proactive Parenting | 55.00 | 8.37 | 56.00 | 9.20 | 55.50 | 8.16 |
| Positive Reinforcement | 56.25 | 7.80 | 57.75 | 4.03 | 57.00 | 5.81 |
| Warmth | 50.25 | 15.20 | 53.25 | 8.02 | 51.75 | 11.36 |
| Supportiveness | 51.50 | 12.40 | 56.25 | 6.60 | 53.88 | 9.54 |
| Broadband Negative Parenting | 52.25 | 13.89 | 54.50 | 3.87 | 53.38 | 9.52 |

| | | | | | | |
|---|---|---|---|---|---|---|
| Hostility | 53.50 | 13.77 | 61.25 | 4.50 | 57.38 | 10.35 |
| Lax Control | 48.00 | 12.83 | 57.50 | 5.80 | 52.75 | 10.53 |
| Physical Control | 52.75 | 10.37 | 44.00 | 4.24 | 48.38 | 8.70 |

*Note*: ECBI = Eyberg Child Behavior Inventory; HSQ = Home Situations Questionnaire; PCC = Perceived Clinical Competency; MAPS = Multidimensional Assessment of Parenting Scale.

**Table 7:**

*Overall Mean Changes Across Weeks*

| Variable | *Baseline to Session 4* | | | *Baseline to Session 8* | | | *Baseline to Follow-Up* | | |
|---|---|---|---|---|---|---|---|---|---|
| | C | I | O | C | I | O | C | I | O |
| ECBI Intensity Scale^ | -3.25 | -1.75 | -2.50 | -8.00 | -7.75 | -7.88 | -11.75 | -10.25 | -11.00* |
| ECBI Problem Scale^ | -3.00 | -2.75 | -4.87 | -8.00 | -7.00 | -7.50* | -7.50 | -9.50 | -8.50* |
| HSQ Number of Problem Behaviors ^ | +0.25 | +1.75 | +1.00 | -0.50 | -0.50 | -0.50 | -1.00 | -0.50 | -0.75 |
| HSQ Mean Severity Score ^ | -0.14 | +1.11 | +0.48 | -0.51 | +0.27 | -0.12 | -1.18 | -1.05 | -1.03 |
| TAI | - | - | - | - | - | - | - | - | - |
| PCC Knowledge | -0.25 | -0.25 | -0.25 | 0.00 | +0.25 | +0.13 | +0.25 | -0.25 | 0.00 |
| PCC Effectiveness | -0.00 | +0.25 | +0.13 | 0.00 | +0.25 | +0.13 | 0.00 | 0.00 | 0.00 |
| SRS | - | - | - | - | - | - | - | - | - |
| MAPS | | | | | | | | | |
| Broadband Positive | | | | | | | | | |
| Parenting | +2.00 | -1.75 | +0.13 | +1.25 | -0.50 | +0.38 | +1.25 | +0.25 | +0.75 |
| Proactive Parenting | 0.00 | +0.50 | +0.25 | -2.75 | -0.25 | -1.50 | +0.50 | +3.50 | +2.00 |

| | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| Positive Reinforcement | +2.75 | -3.50 | 0.00 | +3.75 | -4.00 | +0.25 | +2.00 | -1.25 | +0.75 |
| Warmth | +3.50 | -1.25 | +1.12 | +3.00 | -1.25 | +0.87 | +2.25 | -3.50 | -0.63 |
| Supportiveness | 0.00 | -1.25 | -0.62 | 0.00 | +3.50 | +1.75 | 0.00 | +2.25 | +1.13 |
| Broadband Negative Parenting^ | -8.00 | -3.00 | -5.50* | -6.00 | -2.50 | -4.25 | -8.00 | -5.75 | -6.87* |
| Hostility^ | -7.50 | -0.50 | -4.00 | -7.50 | +0.25 | -3.62 | -8.00 | -3.75 | -5.87* |
| Lax Control^ | -8.50 | -1.00 | -4.75* | -7.25 | -5.25 | -6.25 | -11.25 | -3.00 | -7.13* |
| Physical Control^ | -4.00 | -4.00 | -4.00 | -1.00 | -3.00 | -2.00 | -1.00 | -5.50 | -3.25 |

| | *Session 4 to Session 8* | | | *Session 4 to Follow-Up* | | | *Session 8 to Follow-Up* | | |
|---|---|---|---|---|---|---|---|---|---|
| | C | I | O | C | I | O | C | I | O |
| ECBI Intensity Scale^ | -4.75 | -6.00 | -5.38 | -8.50 | -8.50 | -8.50 | -3.75 | -2.50 | -3.12 |
| ECBI Problem Scale^ | -5.00 | -4.25 | -2.63 | -4.50 | -6.75 | -5.63* | +0.50 | -2.50 | -1.00 |
| HSQ Number of Problem Behaviors ^ | -0.75 | -2.25 | -1.50 | -1.25 | -2.25 | -1.75 | -0.50 | 0.00 | -0.25 |
| HSQ Mean Severity Score ^ | -0.37 | -0.84 | -0.60 | -1.04 | -2.16 | -1.51 | -0.67 | -1.32 | -0.91 |
| TAI | +3.50 | +1.75 | +2.63* | - | - | - | - | - | - |
| PCC Knowledge | +0.25 | +0.50 | +0.38 | +0.50 | 0.00 | +0.25 | +0.25 | -0.50 | -0.13 |
| PCC Effectiveness | 0.00 | 0.00 | 0.00 | 0.00 | -0.25 | -0.13 | 0.00 | -0.25 | -0.13 |

| | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| SRS | 0.00 | -0.31 | -0.16 | - | - | - | - | - | - |
| MAPS | | | | | | | | | |
| Broadband Positive | | | | | | | | | |
| Parenting | -0.75 | +1.25 | +0.25 | -0.75 | +2.00 | +0.62 | 0.00 | +0.75 | +0.37 |
| Proactive Parenting | -2.75 | -0.75 | -1.75 | +0.50 | +3.00 | +1.75 | +3.25 | +3.75 | +3.50 |
| Positive Reinforcement | +1.00 | -0.50 | +0.25 | -0.75 | +2.25 | +0.75 | -1.75 | +2.75 | +0.50 |
| Warmth | -0.50 | 0.00 | -0.25 | -1.25 | -2.25 | -1.75 | -0.75 | -2.25 | -1.50 |
| Supportiveness | 0.00 | +4.75 | +2.37 | 0.00 | +3.50 | +1.75 | 0.00 | -1.25 | -0.62 |
| Broadband Negative | | | | | | | | | |
| Parenting^ | +2.00 | +0.50 | +1.25 | 0.00 | -2.75 | -1.37 | -2.00 | -3.25 | -2.62* |
| Hostility^ | 0.00 | +0.75 | +0.38 | -0.50 | -3.25 | -1.87 | -0.50 | -4.00 | -2.25 |
| Lax Control^ | +1.25 | -4.25 | -1.50 | -2.75 | -2.00 | -2.38 | -4.00 | +2.25 | -0.88 |
| Physical Control^ | +3.00 | +1.00 | +2.00 | +3.00 | -1.50 | +0.75 | 0.00 | -2.50 | -1.25 |

*Note*. C = Comparison; I = Intervention; O = Overall (both groups); ECBI = Eyberg Child Behavior Inventory; HSQ = Home Situations Questionnaire; TAI = Therapy Attitude Inventory; PCC = Perceived Clinical Competency; SRS = Supervisory Rating Scale; MAPS = Multidimensional Assessment of Parenting Scale; '+' indicates an increase in score; '-' indicates a decrease in score; '^' represents scales in which a decrease in score indicates more positive behavioral changes; *Significant at the $p < 0.05$ level.

**Table 8:**

*Summary of Hypotheses and Results*

| Outcome Measure | Hypothesis Supported | Interaction x Time Statistic | Main Effect of Group Statistic |
|---|---|---|---|
| Hypothesis 1: The parents of clinicians participating in the deliberate practice program would report more positive child behavioral changes in outcomes than the comparison condition. | | | |
| ECBI Intensity Scale | No | $F(3, 18) = 0.03$, $p = .994$, partial $\eta 2 = .004$ | $F(1, 6) = 0.46$, $p = .525$, partial $\eta 2 = .071$ |
| ECBI Problem Scale | No | $F(3, 18) = 0.16$, $p = .923$, partial $\eta 2 = .026$ | $F(1, 6) = 0.98$, $p = .360$, partial $\eta 2 = .141$ |
| HSQ Total Number of Behavior Problems | No | $F(3, 18) = 0.40$, $p = .758$, partial $\eta 2 = .062$ | $F(1, 6) = 0.09$, $p = .776$, partial $\eta 2 = .015$ |
| HSQ Mean Severity Score | No | $F(3, 18) = 0.46$, $p = .711$, partial $\eta 2 = .072$ | $F(1, 6) = 1.30$, $p = .298$, partial $\eta 2 = .178$ |
| Hypothesis 2: Parents whose clinicians participated in the deliberate practice program would also report higher levels of consumer satisfaction | | | |
| TAI | No | $F(1, 6) = 1.03$, $p = .350$, partial $\eta 2 = .146$ | $F(1, 6) = 0.70$, $p = .435$, partial $\eta 2 = .105$ |
| Hypothesis 3: Participating in the deliberate practice program would produce greater changes in clinical competency of the clinicians than the comparison condition | | | |
| PCC: Knowledge | No | $F(3, 18) = 1.73$, $p = .197$, partial $\eta 2 = .224$ | $F(1, 6) = 0.03$, $p = .868$, partial $\eta 2 = .005$ |
| PCC: Effectiveness | No | $F(3, 18) = 0.18$, $p = .911$, partial $\eta 2 = .029$ | $F(1, 6) = 0.23$, $p = .648$, partial $\eta 2 = .037$ |

| | | | |
|---|---|---|---|
| Supervisory Rating of Clinical Skills | No | $F(1, 6) = 2.14$, $p = .194$, partial $\eta 2 = .263$ | $F(1, 6) = 0.43$, $p = .530$, partial $\eta 2 = .069$ |
| Hypothesis 4: Parents of clinicians participating in the deliberate practice program would report more of an increase in positive parenting strategies and more of a decrease in negative parenting strategies | | | |
| MAPS: Broadband Positive Parenting Scale | No | $F(3, 18) = 0.87$, $p = .475$, partial $\eta 2 = .127$ | $F(1, 6) = 0.16$, $p = .706$, partial $\eta 2 = .025$ |
| MAPS: Proactive Parenting Subscale | No | $F(3, 18) = 0.33$, $p = .806$, partial $\eta 2 = .052$ | $F(1, 6) = 0.01$, $p = .933$, partial $\eta 2 = .001$ |
| MAPS: Positive Reinforcement Subscale | No | $F(3, 18) = 1.19$, $p = .340$, partial $\eta 2 = .166$ | $F(1, 6) = 0.02$, $p = .902$, partial $\eta 2 = .003$ |
| MAPS: Warmth Parenting Subscale | No | $F(3, 18) = 1.41$, $p = .272$, partial $\eta 2 = .190$ | $F(1, 6) = 0.49$, $p = .510$, partial $\eta 2 = .076$ |
| MAPS: Supportiveness Parenting Subscale | No | $F(3, 18) = 0.76$, $p = .531$, partial $\eta 2 = .112$ | $F(1, 6) = 0.33$, $p = .586$, partial $\eta 2 = .052$ |
| MAPS: Broadband Negative Parenting Scale | No | $F(3, 18) = 0.83$, $p = .497$, partial $\eta 2 = .121$ | $F(1, 6) = 0.22$, $p = .654$, partial $\eta 2 = .036$ |
| MAPS: Hostility Parenting Subscale | No | $F(3, 18) = 2.20$, $p = .124$, partial $\eta 2 = .268$ | $F(1, 6) = 1.85$, $p = .223$, partial $\eta 2 = .236$ |
| MAPS: Lax Parenting Subscale | No | $F(3, 18) = 1.62$, $p = .219$, partial $\eta 2 = .213$ | $F(1, 6) = 0.35$, $p = .351$, partial $\eta 2 = .146$ |

| | | | |
|---|---|---|---|
| MAPS: Physical Control Subscale | No | $F(3, 18) = 0.83$, $p = .496$, partial $\eta 2 = .121$ | $F(1, 6) = 1.40$, $p = .282$, partial $\eta 2 = .189$ |

*Note*. ECBI = Eyberg Child Behavior Inventory; HSQ = Home Situations Questionnaire; TAI = Therapy Attitude Inventory; PCC = Perceived Clinical Competency; SRS = Supervisory Rating Scale; MAPS = Multidimensional Assessment of Parenting Scale.

**Table 9:**

*Two-Way Mixed Analysis of Variance Effect Sizes*

| Interaction x Time Effect Size | | Main Effect of Group Effect Size | |
|---|---|---|---|
| Outcome Measure | partial *η2* | Outcome Measure | partial *η2* |
| Large Effect Size | | Large Effect Size | |
| PCC: Knowledge | .224 | ECBI Problem Scale | .141 |
| Supervisory Rating of Clinical Skills | .263 | HSQ Mean Severity Score | .178 |
| MAPS: Positive Reinforcement Subscale | .166 | MAPS: Hostility Parenting Subscale | .236 |
| MAPS: Warmth Parenting Subscale | .190 | MAPS: Lax Parenting Subscale | .146 |
| MAPS: Hostility Parenting Subscale | .268 | | |
| MAPS: Lax Parenting Subscale | .213 | | |
| Medium Effect Size | | Medium Effect Size | |
| HSQ Total Number of Behavior Problems | .062 | ECBI Intensity Scale | .071 |
| HSQ Mean Severity Score | .072 | TAI | .105 |
| MAPS: Broadband Positive Parenting Scale | .127 | Supervisory Rating of Clinical Skills | .069 |
| MAPS: Supportiveness Parenting Subscale | .112 | MAPS: Warmth Parenting Subscale | .076 |
| MAPS: Broadband Negative Parenting Scale | .121 | | |
| MAPS: Physical Control Subscale | .121 | | |
| Small Effect Size | | Small Effect Size | |
| ECBI Intensity Scale | .004 | HSQ Total Number of Behavior Problems | .015 |

| | | | |
|---|---|---|---|
| ECBI Problem Scale | .026 | PCC: Knowledge | .005 |
| PCC: Effectiveness | .029 | PCC: Effectiveness | .037 |
| MAPS: Proactive Parenting Subscale | .052 | MAPS: Broadband Positive Parenting Scale | .025 |
| | | MAPS: Proactive Parenting Subscale | .001 |
| | | MAPS: Positive Reinforcement Subscale | .003 |
| | | MAPS: Supportiveness Parenting Subscale | .052 |
| | | MAPS: Broadband Negative Parenting Scale | .036 |

*Note*. ECBI = Eyberg Child Behavior Inventory; HSQ = Home Situations Questionnaire; TAI = Therapy Attitude Inventory; PCC = Perceived Clinical Competency; SRS = Supervisory Rating Scale; MAPS = Multidimensional Assessment of Parenting Scale; ES = effect size. Partial $\eta 2 = 0.01$ indicates a small effect, partial $\eta 2 = 0.06$ indicates a medium effect, and partial $\eta 2 = 0.14$ indicates a large effect.

**Table 10:**

*Effect Sizes Within Groups*

| Measure | Paired Sample *t* Test | Cohen's *d* | Paired Sample *t* Test | Cohen's *d* |
|---|---|---|---|---|
| | C | C | I | I |
| ECBI Intensity Scale | | | | |
| Post-Assessment | $t(3) = 1.24, p = .304$ | 0.62 | $t(3) = 2.70, p = .074$ | 1.35 |
| Follow-up Assessment | $t(3) = 1.83, p = .165$ | 0.92 | $t(3) = 2.03, p = .136$ | 1.01 |
| ECBI Problem Scale | | | | |
| Post-Assessment | $t(3) = 2.16, p = .119$ | 1.08 | $t(3) = 1.63, p = .202$ | 0.82 |
| Follow-up Assessment | $t(3) = 2.96, p = .060$ | 1.48 | $t(3) = 2.05, p = .132$ | 1.02 |
| HSQ Number of Problem Behaviors | | | | |
| Post-Assessment | $t(3) = 1.00, p = .391$ | 0.50 | $t(3) = 0.42, p = .703$ | 0.21 |
| Follow-up Assessment | $t(3) = 0.93, p = .423$ | 0.46 | $t(3) = 0.40, p = .718$ | 0.20 |
| HSQ Mean Severity | | | | |
| Post-Assessment | $t(3) = 1.85, p = .162$ | 0.92 | $t(3) = -0.18, p = .871$ | -0.09 |
| Follow-up Assessment | $t(3) = 1.08, p = .394$ | 0.62 | $t(3) = 0.91, p = .457$ | 0.53 |
| PCC Knowledge | | | | |
| Post-Assessment | - | - | $t(3) = 1.00, p = .391$ | 0.50 |
| Follow-up Assessment | $t(3) = 1.00, p = .391$ | 0.50 | $t(3) = -1.00, p = .391$ | -0.50 |

| | | | | |
|---|---|---|---|---|
| PCC Effectiveness | | | | |
| Post-Assessment | - | - | $t(3) = 1.00, p = .391$ | 0.50 |
| Follow-up Assessment | - | - | - | - |
| MAPS | | | | |
| Broadband Positive Parenting Scale | | | | |
| Post-Assessment | $t(3) = 0.74, p = .516$ | 0.37 | $t(3) = -0.52, p = .638$ | -0.26 |
| Follow-up Assessment | $t(3) = 0.76, p = .504$ | 0.38 | $t(3) = 0.17, p = .873$ | 0.09 |
| Proactive Parenting Subscale | | | | |
| Post-Assessment | $t(3) = -0.91, p = .432$ | -0.45 | $t(3) = -0.17, p = .873$ | -0.26 |
| Follow-up Assessment | $t(3) = 0.11, p = .921$ | 0.05 | $t(3) = 4.04, p = .027$* | 2.02 |
| Positive Reinforcement Subscale | | | | |
| Post-Assessment | $t(3) = 1.45, p = .244$ | 0.72 | $t(3) = -1.41, p = .252$ | -0.71 |
| Follow-up Assessment | $t(3) = 1.73, p = .182$ | 0.87 | $t(3) = -0.53, p = .633$ | -0.27 |
| Warmth Parenting Subscale | | | | |
| Post-Assessment | $t(3) = 1.57, p = .215$ | 0.78 | $t(3) = -1.00, p = .391$ | -0.50 |
| Follow-up Assessment | $t(3) = 1.71, p = .186$ | 0.86 | $t(3) = -1.61, p = .207$ | -0.80 |
| Supportiveness Parenting Subscale | | | | |
| Post-Assessment | - | - | $t(3) = 1.61, p = .207$ | 0.80 |
| Follow-up Assessment | - | - | $t(3) = 1.71, p = .186$ | 0.86 |
| Broadband Negative Parenting Scale | | | | |

| | | | | |
|---|---|---|---|---|
| Post-Assessment | $t(3) = 2.48, p = .089$ | 1.24 | $t(3) = 0.87, p = .448$ | 0.44 |
| Follow-up Assessment | $t(3) = 2.69, p = .074$ | 1.35 | $t(3) = 1.95, p = .147$ | 0.97 |
| Hostility Parenting Subscale | | | | |
| Post-Assessment | $t(3) = 3.04, p = .056$ | 1.52 | $t(3) = -0.01, p = .923$ | -0.05 |
| Follow-up Assessment | $t(3) = 2.29, p = .106$ | 1.15 | $t(3) = 4.39, p = .022$* | 2.20 |
| Lax Parenting Subscale | | | | |
| Post-Assessment | $t(3) = 2.67, p = .076$ | 1.33 | $t(3) = 1.17, p = .327$ | 0.58 |
| Follow-up Assessment | $t(3) = 3.09, p = .054$ | 1.55 | $t(3) = 0.79, p = .488$ | 0.39 |
| Physical Control Subscale | | | | |
| Post-Assessment | $t(3) = 0.41, p = .710$ | 0.20 | $t(3) = 1.10, p = .353$ | 0.55 |
| Follow-up Assessment | $t(3) = 0.41, p = .710$ | 0.20 | $t(3) = 2.29, p = .106$ | 1.15 |

*Note*. C = Comparison Group; I = Intervention Group; ECBI = Eyberg Child Behavior Inventory; HSQ = Home Situations Questionnaire; PCC = Perceived Clinical Competency; MAPS = Multidimensional Assessment of Parenting Scale. '-' indicates no change in the data. *Significant at the $p < 0.05$ level.

**Table 11:**

*Effect Sizes Compared to Previous BPT Research*

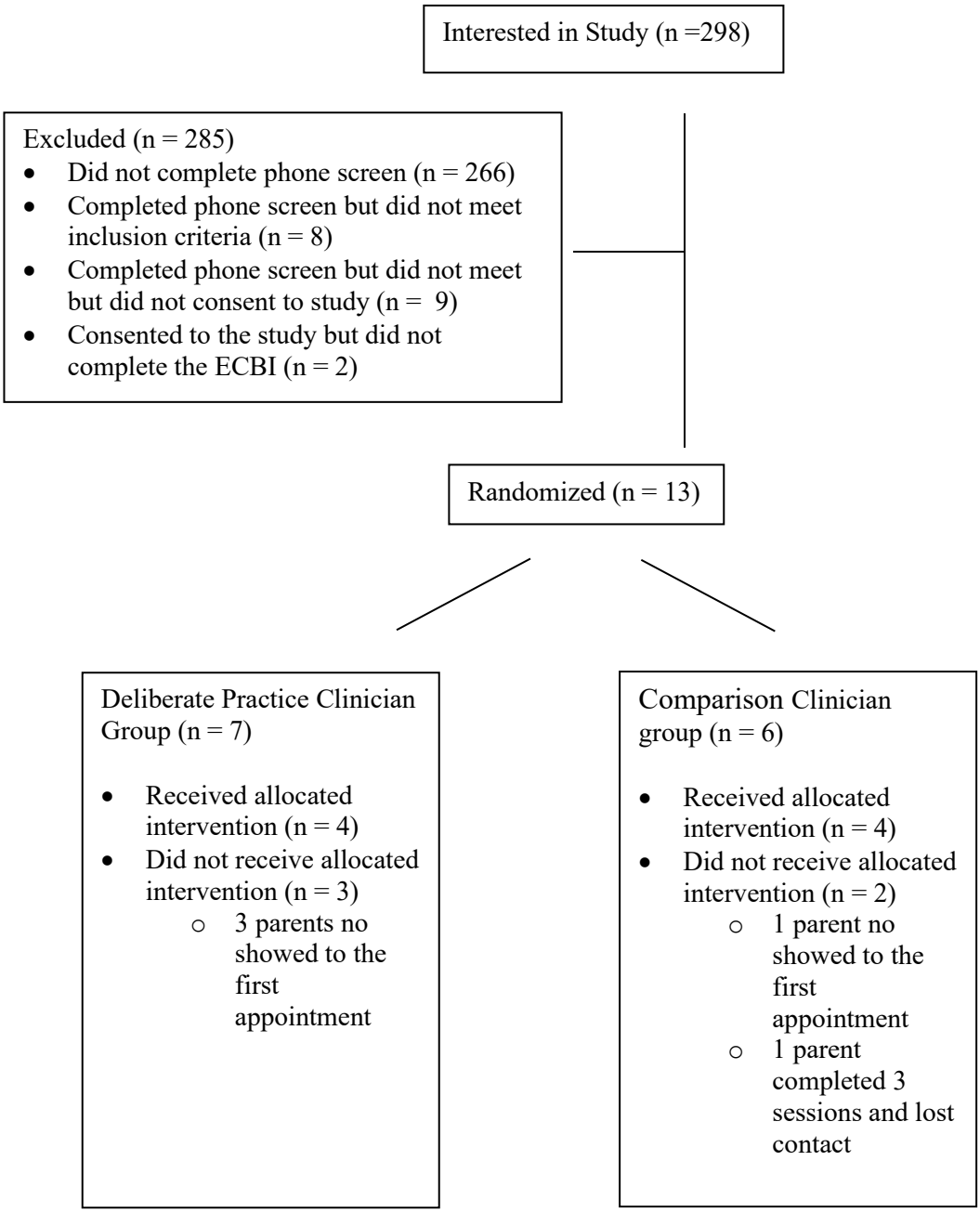
| Measure | Effect Size | | One-Sample *t* test | Effect Size | One-Sample *t* test |
|---|---|---|---|---|---|
| | MA | C | C | I | I |
| ECBI Intensity Scale | | | | | |
| Post-Assessment | 0.45^ | 0.80 | $t$ (3) = 0.54, $p$ = .626 | 0.78 | $t$ (3) = 1.13, $p$ = .340 |
| Follow-up Assessment | 0.49^ | 1.12 | $t$ (3) = 1.07, $p$ = .364 | 1.03 | $t$ (3) = 1.06, $p$ = .368 |
| ECBI Problem Scale | | | | | |
| Post-Assessment | 0.45^ | 0.80 | $t$ (3) = 0.95, $p$ = .414 | 0.70 | $t$ (3) = 0.58, $p$ = .602 |
| Follow-up Assessment | 0.49^ | 0.75 | $t$ (3) = 1.03, $p$ = .380 | 0.95 | $t$ (3) = 0.99, $p$ = .393 |
| HSQ Number of Problem Behaviors | | | | | |
| Post-Assessment | 0.45^ | 0.16 | $t$ (3) = -1.80, $p$ = .170 | 0.16 | $t$ (3) = -0.76, $p$ = .505 |
| Follow-up Assessment | 0.49^ | 0.32 | $t$ (3) = -0.49, $p$ = .661 | 0.16 | $t$ (3) = -0.81, $p$ = .475 |
| HSQ Mean Severity | | | | | |
| Post-Assessment | 0.45^ | 0.35 | $t$ (3) = -0.14, $p$ = .894 | -0.19 | $t$ (3) = -1.03, $p$ = .380 |
| Follow-up Assessment | 0.49^ | 0.65 | $t$ (3) = 0.27, $p$ = .813 | 1.00 | $t$ (3) = 0.47, $p$ = .685 |
| MAPS: Post Assessment Only | | | | | |
| Broadband Positive Parenting Scale | 0.56^^ | 0.13 | $t$ (3) = -2.56, $p$ = .083 | -0.05 | $t$ (3) = -6.37, $p$ = .008* |
| Proactive Parenting Subscale | 0.56^^ | -0.28 | $t$ (3) = -2.75, $p$ = .071 | -0.03 | $t$ (3) = -4.07, $p$ = .027* |

| | | | | | |
|---|---|---|---|---|---|
| Positive Reinforcement Subscale | 0.56^^ | 0.38 | $t$ (3) = -0.71, $p$ = .527 | -0.40 | $t$ (3) = -3.39, $p$ = .043* |
| Warmth Parenting Subscale | 0.56^^ | 0.30 | $t$ (3) = -1.36, $p$ = .268 | -0.13 | $t$ (3) = -5,48, $p$ = .012* |
| Supportiveness Parenting Subscale | 0.56^^ | 0.00 | $t$ (3) = -1.58, $p$ = .211 | 0.35 | $t$ (3) = -0.96, $p$ = .406 |
| Broadband Negative Parenting Scale | 0.56^^ | 0.60 | $t$ (3) = 0.17, $p$ = .879 | 0.25 | $t$ (3) = -1.08, $p$ = .360 |
| Hostility Parenting Subscale | 0.56^^ | 0.75 | $t$ (3) = 0.77, $p$ = .497 | -0.03 | $t$ (3) = -2.44, $p$ = .092 |
| Lax Parenting Subscale | 0.56^^ | 0.73 | $t$ (3) = 0.61, $p$ = .587 | 0.53 | $t$ (3) = -0.08, $p$ = .943 |
| Physical Control Subscale | 0.56^^ | 0.10 | $t$ (3) = -1.88, $p$ = .157 | 0.30 | $t$ (3) = -0.95, $p$ = .412 |

*Note*. MA = Meta-Analysis; C = Comparison Group; I = Intervention Group; ECBI = Eyberg Child Behavior Inventory; HSQ = Home Situations Questionnaire; MAPS = Multidimensional Assessment of Parenting Scale. Effect sizes are represented as standardized mean differences. '*' Significant at the $p < 0.05$ level; '^' indicates the effect size from Mingebach and colleagues (2018); '^^' indicates the effect size from Weber and colleagues (2019).

**Figure 1:**

*Consort Diagram*



## REFERENCES


Altepeter, T. S., & Breen, M. J. (1989). The Home Situations Questionnaire (HSQ) and the School Situations Questionnaire (SSQ): Normative data and an evaluation of psychometric properties. *Journal of Psychoeducational Assessment, 7*(4), 312–322. https://doi.org/10.1177/073428298900700404

American Psychological Association. (2014). *Guidelines for clinical supervision in health service psychology*. Retrieved from http://apa.org/about/policy/guidelines-supervision.pdf

American Psychological Association. (2015). *Standards of accreditation for programs in health service psychology*. Retrieved from https://www.apa.org/ed/accreditation/about/policies/standards-of-accreditation.pdf.

Barkley R. A., & Edelbrock C. (1987). Assessing situational variation in children's problem behaviors: The Home and School Situations Questionnaires. In: R. Prinz (Ed.) *Advances in behavioral assessment of children and families, (*pp. 157 – 76). JAI Press Inc.

Bearman, S. K., Weisz, J. R., Chorpita, B. F., Hoagwood, K., Ward, A., Ugueto, A. M., & Bernstein, A. (2013). More practice, less preach? The role of supervision processes and therapist characteristics in EBP implementation. *Administration and Policy in Mental Health and Mental Health Services Research*, *40*(6), 518–529. https://doi.org/10.1007/s10488-013-0485-5

Beidas, R., Barmish, A., & Kendall, P. (2009). Training as usual: Can therapist behavior change after reading a manual and attending a brief workshop on Cognitive Behavioral Therapy for youth anxiety. *The Behavior Therapist, 32*(5), 97–101.

Bernard, J. M., & Goodyear, R. K. (2008). *Fundamentals of clinical supervision.* Pearson.

Branson, A., Shafran, R., & Myles, P. (2015). Investigating the relationship between competence and patient outcome with CBT highlights. *Behaviour Research and Therapy, 68*, 19–26. doi:10.1016/j.brat.2015.03.002

Brestan, E. V., Jacobs, J. R., Rayfield, A. D., & Eyberg, S. M. (1999). A consumer satisfaction measure for parent-child treatments and its relation to measures of child behavior change. *Behavior Therapy, 30*(1), 17-30.

Chacko, A., Alan, C., Uderman, J., Cornwell, M., Anderson, L., & Chimiklis, A. (2015). Training parents of children with ADHD. In R. Barkley (Ed.) *Attention deficit hyperactivity disorder. A handbook for diagnosis and treatment*, (4th ed., pp. 513-536). The Guilford Press.

Chacko, A., Anderson, L., Wymbs, B. T., & Wymbs, F. A. (2013). Parent-endorsed reasons for not completing homework in group-based behavioural parent training for high-risk families of youth with ADHD. *Behaviour Change, 30*(4), 262-272.

Chacko, A., Jensen, S. A., Lowry, L. S., Cornwell, M., Chimklis, A., Chan, E., ... & Pulgarin, B. (2016). Engagement in behavioral parent training: Review of the literature and implications for practice. *Clinical Child and Family Psychology Review, 19*, 204-215.

Chow, D. L., Miller, S. D., Seidel, J. A., Kane, R. T., Thornton, J. A., & Andrews, W. P. (2015). The role of deliberate practice in the development of highly effective psychotherapists. *Psychotherapy*, *52*(3), 337–345. https://doi.org/10.1037/pst0000015

Clements-Hickman, A. L., & Reese, R. J. (2020). Improving therapists' effectiveness: Can deliberate practice help? *Professional Psychology: Research and Practice, 51*(6), 606.

Cohen, J. (1988). *Statistical Power Analysis for the Behavioral Sciences* (2nd ed.). Hillsdale, NJ: Lawrence Erlbaum Associates.

Dolan, E. L., & Collins, J. P. (2015). We must teach more effectively: Here are four ways to get started. *Molecular Biology of the Cell, 26*(12), 2151–2155.

Dunn, D. S., Saville, B. K., Baker, S. C., & Marek, P. (2013). Evidence-based teaching: Tools and techniques that promote learning in the psychology classroom. *Australian Journal of Psychology, 65*(1), 5–13. https://doi-org.jerome.stjohns.edu/10.1111/ajpy.12004

DuPaul, G. J., Kern, L., Belk, G., Custer, B., Daffner, M., Hatfield, A., & Peek, D. (2018). Face-to-face versus online behavioral parent training for young children at risk for ADHD: Treatment engagement and outcomes. *Journal of Clinical Child and Adolescent*, *47*(sup1), S369–S383. https://doi.org/10.1080/15374416.2017.1342544

Ericsson, K. A. (2006). The influence of experience and deliberate practice on the development of superior expert performance. In K. A. Ericsson, N. Charness, P. J. Feltovich, & R. R. Hoffman (Eds.), *The Cambridge handbook of expertise and*

*expert performance* (pp. 683–703). Cambridge University Press. https://doi.org/10.1017/CBO9780511816796.038

Ericsson, K. A., Krampe, R. T., & Tesch-Romer, C. (1993). The role of deliberate practice in the acquisition of expert performance. *Psychological Review, 100*(3), 363–406.

Ericsson, K. A., & Lehmann, A. C. (1996). Expert and exceptional performance: Evidence of maximal adaptation to task constraints. *Annual Review of Psychology, 47*, 273–305. http://dx.doi.org/10.1146/annurev.psych.47.1.273

Ericsson, A., & Pool, R. (2016). *Peak: Secrets from the new science of expertise*. Houghton Mifflin Harcourt.

Evans, S. W., Owens, J. S., & Bunford, N. (2014). Evidence-based psychosocial treatments for children and adolescents with attention-deficit/hyperactivity disorder. *Journal of Clinical Child & Adolescent Psychology, 43*, 527-551. http://dx.doi.org/10.1080/15374416.2017.1390757

Eyberg, S. M., Nelson, M. M., & Boggs, S. R. (2008). Evidence-based psychosocial treatments for children and adolescents with disruptive behavior. *Journal of Clinical Child & Adolescent Psychology*, *37*(1), 215–237. https://doi.org/10.1080/15374410701820117

Eyberg S. M., & Ross, A. W. (1978). Assessment of child behavior problems: The validation of a new inventory. *Journal of Clinical Child Psychology, 7*, 113–116. 10.1080/15374417809532835

Friedberg, R. D., Gorman, A. A., & Beidel, D. C. (2008). Training psychologists for cognitive behavioral therapy in the raw world. *Behavior Modification*, *33*(1), 104–123. https://doi.org/10.1177/0145445508322609

Gaba, D. M. (2004). The future vision of simulation in health care. *Quality and Safety in Health Care, 13(Suppl. 1)*, 2–10. https://doi.org/10.1136/qshc.2004.009878

Ghandour, R. M., Sherman, L. J., Vladutiu, C. J., Ali, M. M., Lynch, S. E., Bitsko, R. H., & Blumberg, S. J. (2019). Prevalence and treatment of depression, anxiety, and conduct problems in US children. *The Journal of Pediatrics*, *206*. https://doi.org/10.1016/j.jpeds.2018.09.021

Goldman, R. N., Vaz, A., & Rousmaniere, T. (2021). *Deliberate practice in emotion-focused therapy*. American Psychological Association. https://doi.org/10.1037/0000227-000

Goodyear, R. K., & Rousmaniere, T. (2017). Helping therapists to each day become a little better than they were the day before: The expertise development model of supervision and consultation. In T. G. Rousmaniere, R. K. Goodyear, S. D. Miller, & B. E. Wampold (Eds.), *The cycle of excellence: Using deliberate practice to improve supervision and training* (pp. 67–95). Wiley Publishers. http://dx.doi.org/10.1002/9781119165590.ch4

Graziano, P. A., McNamara, J. P., Geffken, G. R., & Reid, A. (2011). Severity of children's ADHD symptoms and parenting stress: A multiple mediation model of self-regulation. *Journal of Abnormal Child Psychology, 39*, 1073-1083.

Hill, C. E., Kivlighan, D. M., Rousmaniere, T., Kivlighan, D. M., Gerstenblith, J. A., & Hillman, J. W. (2020). Deliberate practice for the skill of immediacy: A multiple

case study of doctoral student therapists and clients. *Psychotherapy, 57*(4), 587–597. https://doi.org/10.1037/pst0000247

Hill, C. E., & Knox, S. (2013). Training and supervision in psychotherapy. In M. J. Lambert (Ed.), *Handbook of psychotherapy and behavior change* (6th ed., pp. 775–811). Wiley Publishers.

Hinshaw, S. P., & Lee, S. S. (2003). Conduct and oppositional defiant disorders. In E. J. Mash & R. A. Barkley (Eds.), *Child psychopathology* (2nd ed., pp. 144-198). The Guilford Press.

Kaminski, J., Valle, L., Filene, J., & Boyle, C. (2008). A meta-analytic review of components associated with parent training program effectiveness. *Journal of Abnormal Child Psychology: An Official Publication of the International Society for Research in Child and Adolescent Psychopathology*, *36*(4), 567–589. doi:10.1007/s10802-007-9201-9.

Kazdin, A. E., & Wassell, G. (2000). Predictors of barriers to treatment and therapeutic change in outpatient therapy for antisocial children and their families. *Mental Health Services Research, 2*(1), 27-40. doi:10.1023/A:1010191807861

Khan, K. S., Bawani, S. A., & Aziz, A. (2013). Bridging the gap of knowledge and action: A case for participatory action research (PAR). *Action Research, 11*(2), 157–175. https://doi-org.jerome.stjohns.edu/10.1177/1476750313477158.

Lee, E., Bowles, K., & Kourgiantakis, T. (2021). Coaching MSW students on interpersonal psychotherapy (IPT) using simulation-based learning (SBL): Developing competencies in clinical social work practice. *Smith College Studies in Social Work, 91*(2), 142–163. https://doi.org/10.1080/00377317.2021.1905135

Macnamara, B. N., Hambrick, D. Z., & Oswald, F. L. (2014). Deliberate practice and performance in music, games, sports, education, and professions: A meta-analysis. *Psychological Science, 25*(8), 1608–1618.

Martin, B. O., Kolomitro, K., & Lam, T. C. (2013). Training methods. *Human Resource Development Review*, *13*(1), 11–35. https://doi.org/10.1177/1534484313497947

Miller, S. D., Chow, D., Wampold, B. E., Hubble, M. A., Del Re, A. C., Maeschalck, C., & Bargmann, S. (2020). To be or not to be (an expert)? Revisiting the role of deliberate practice in improving performance. *High Ability Studies, 31*(1), 5–15. https://doi.org/10.1080/13598139.2018.1519410

Mingebach, T., Kamp-Becker, I., Christiansen, H., & Weber, L. (2018). Meta-meta-analysis on the effectiveness of parent-based interventions for the treatment of child externalizing behavior problems. *PloS one*, *13*(9), e0202855. https://doi.org/10.1371/journal.pone.0202855

Morawska, A., & Sanders, M. R. (2006). Self-administered behavioural family intervention for parents of toddlers: Effectiveness and dissemination. *Behaviour Research and Therapy, 44*(12), 1839–1848.

Nel, P. W., Pezzolesi, C., & Stott, D. J. (2012). How did we learn best? A retrospective survey of clinical psychology training in the United Kingdom. *Journal of Clinical Psychology*, *68*(9), 1058–1073. https://doi.org/10.1002/jclp.21882

Norman, G., Eva, K., Brooks, L., & Hamstra, S. (2006). Expertise in medicine and surgery. In K. A. Ericsson, N. Charness, P. J. Feltovich, & R. R. Hoffman (Eds.), *The Cambridge handbook of expertise and expert performance* (pp. 339–354). Cambridge University Press. http://dx.doi.org/10.1017/CBO9780511816796.019

Overholser, J. C. (2009). Clinical expertise: A preliminary attempt to clarify its core elements. *Journal of Contemporary Psychotherapy*, *40*(3), 131–139. https://doi.org/10.1007/s10879-009-9129-1

Overholser, J. C. (2019). Graduate training in psychotherapy: The importance of ongoing clinical activity for the training faculty. *Counselling and Psychotherapy Research*, *19*(3), 264-273. https://doi.org/10.1002/capr.12224

Owen, J., Wampold, B. E., Kopta, M., Rousmaniere, T., & Miller, S. D. (2016). As good as it gets? Therapy outcomes of trainees over time. *Journal of Counseling Psychology*, *63*(1), 12–19. https://doi.org/10.1037/cou0000112

Parent, J., & Forehand, R. (2017). The Multidimensional Assessment of Parenting Scale (MAPS): Development and psychometric properties. *Journal of Child and Family Studies, 26,* 2136-2151.

Patterson, G. R. (2005). The next generation of PMTO models. *Behavior Therapist, 28*(2), 27–33.

Patterson, G. R., Chamberlain, P., & Reid, J. B. (1982). A comparative evaluation of a parent training program. *Behavior Therapy*, *13*(5), 638–650. https://doi.org/10.1016/s0005-7894(82)80021-x

Phaneuf, L., & McIntyre, L. L. (2011). The Application of a Three-Tier Model of Intervention to Parent Training. *Journal of positive behavior interventions*, *13*(4), 198–207. https://doi.org/10.1177/1098300711405337

Ravitz, P., Lancee, W. J., Lawson, A., Maunder, R., Hunter, J. J., Leszcz, M., McNaughton, N., & Pain, C. (2013). Improving physician–patient communication

through coaching of simulated encounters. *Academic Psychiatry*, *37*(2), 87. https://doi.org/10.1176/appi.ap.11070138

Richardson, J. T. E. (2011). Eta squared and partial eta squared as measures of effect size in educational research. *Educational Research Review, 6*(2), 135-147.

Rousmaniere, T. (2016). *Deliberate practice for psychotherapists: A guide to improving clinical effectiveness.* Routledge. http://dx.doi.org/10.4324/9781315472256

Rousmaniere, T., Goodyear, R. K., Miller, S. D., & Wampold, B. E. (2017). Introduction. In T. Rousmaniere (Ed.), *Cycle of Excellence: Using deliberate practice to improve supervision and training* (pp. 3-22). Wiley Publishers.

Ryan, A. & Ladd, G. (2012). *Peer relationships and adjustment at school.* Information Age Publishing.

Sampson, H., & Johannessen, I. A. (2019). Turning on the tap: The benefits of using 'real-life' vignettes in qualitative research interviews. *Qualitative Research*, *20*(1), 56–72. https://doi.org/10.1177/1468794118816618

Scavenius, C., Chacko, A., Lindberg, M. R., Granski, M., Vardanian, M. M., Pontoppidan, M., Hansen, H., & Eiberg, M. (2020). Parent management training Oregon model and family-based services as usual for behavioral problems in youth: A national randomized controlled trial in Denmark. *Child Psychiatry & Human Development*, *51*(5), 839–852. https://doi.org/10.1007/s10578-020-01028-y

Scott, T. L., Pachana, N. A., & Sofronoff, K. (2011). Survey of current curriculum practices within Australian postgraduate clinical training programmes: Students' and programme directors' perspectives. *Australian Psychologist, 46*(2), 77–89. https://doi.org/10.1111/j.1742-9544.2011.00030.x

Sheen, J., McGillivray, J., Gurtman, C., & Boyd, L. (2015). Assessing the clinical competence of psychology students through objective structured clinical examinations (OSCEs): Student and staff views. *Australian Psychologist, 50*(1), 51–59. https://doi.org/10.1111/ap.12086

Sheen, J., Sutherland-Smith, W., Thompson, E., Youssef, G. J., Dudley, A., King, R., Hall, K., Dowling, N., Gurtman, C., & McGillivray, J. A. (2021). Evaluating the impact of simulation-based education on clinical psychology students' confidence and clinical competence. *Clinical Psychologist, 25*(3), 271–282. https://doi.org/10.1080/13284207.2021.1923125

Sullivan, G. M., & Feinn, R. (2012). Using effect size-or why the p value is not enough. *Journal of Graduate Medical Education*, *4*(3), 279–282. https://doi.org/10.4300/JGME-D-12-00156.1

Sullivan, A. D. W., Forehand, R., Acosta, J., Parent, J., Comer, J. S., Loiselle, R., & Jones, D. J. (2021). COVID-19 and the acceleration of behavioral parent training telehealth: Current status and future directions. *Cognitive and Behavioral Practice*, *28*(4), 618–629. https://doi.org/10.1016/j.cbpra.2021.06.012

Tehrani, H. D., Yamini, S., & Vazsonyi, A. T. (2023). The effectiveness of parenting program components on disruptive and delinquent behaviors during early and middle childhood: A component network meta-analysis. *Journal of Experimental Criminology.* Advance online publication. https://doi.org/10.1007/s11292-023-09562-0

Terjesen, M. D., Vidair, H, Ohr, P. S., Walsh, O. A. , K. A., Vaz, A., & Rousmaniere, T. (in-press). Deliberate practice in behavioral parent training. Essentials of deliberate practice. APA Books.

Tully, L., & Hunt, C. (2016). Brief parenting interventions for children at risk of externalizing behavior problems: A systematic review. *Journal of Child & Family Studies*, *25*(3), 705–719. https://doi-org.jerome.stjohns.edu/10.1007/s10826-015-0284-6

Tonelli, M. R. (2011). Integrating clinical research into clinical decision making. *Annali Dell'Istituto Superiore Di Sanita, 47*(1), 26–30. https://doi-org.jerome.stjohns.edu/10.4415/ANN_11_01_07

Tracey, T. J., Wampold, B. E., Lichtenberg, J. W., & Goodyear, R. K. (2014). Expertise in psychotherapy: An elusive goal? *American Psychologist*, *69*(3), 218–229. https://doi.org/10.1037/a0035099

Valenstein-Mah, H., Greer, N., McKenzie, L., Hansen, L., Strom, T. Q., Wiltsey Stirman, S., Wilt, T. J., & Kehle-Forbes, S. M. (2020). Effectiveness of training methods for delivery of evidence-based psychotherapies: A systematic review. *Implementation Science, 15*(1), 1–17. https://doi-org.jerome.stjohns.edu/10.1186/s13012-020-00998-w

Walsh, O. A., Gottschall, G. P., Militio, V. L., DeFilippo, D., & Terjesen, M. D. (2020). Deliberate practice to improve behavioral parent training skills among clinical trainees. *American Psychological Association Convention*, Poster Presentation, Virtual.

Wampold, B. E. (2015). How important are the common factors in psychotherapy? An update. *World Psychiatry*, *14*(3), 270-277. https://doi.org/10.1002/wps.20238

Watkins, C. E. (2011). Does psychotherapy supervision contribute to patient outcomes? Considering 30 years of research. *The Clinical Supervisor, 30*, 235–256. https://doi.org/10.1037/e680462011-001

Watkins, C. E. (2020). What do clinical supervision research reviews tell us? Surveying the last 25 years. *Counselling and Psychotherapy Research*, *20*(2), 190–208. https://doi.org/10.1002/capr.12287

Weber, L., Kamp-Becker, I., Christiansen, H., & Mingebach, T. (2019). Treatment of child externalizing behavior problems: a comprehensive review and meta-meta-analysis on effects of parent-based interventions on parental characteristics. *European Child & Adolescent Psychiatry*, *28*(8), 1025–1036. https://doi.org/10.1007/s00787-018-1175-3

Weisz, J. R., & Kazdin, A. E. (Eds.). (2010). *Evidence-based psychotherapies for children and adolescents – second edition*. The Guilford Press.

Wilkins, N., Thigpen, S., Lockman, J., Mackin, J., Madden, M., Perkins, T., Schut, J., Van Regenmorter, C., Williams, L., & Donovan, J. (2013). Putting program evaluation to work: A framework for creating actionable knowledge for suicide prevention practice. *Translational Behavioral Medicine, 3*(2), 149–161. https://doi-org.jerome.stjohns.edu/10.1007/s13142-012-0175-y

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