

## > Original Research

### **Attrition Rate in Multisession Gradual Exposure Treatment for Specific Phobia: A Meta-Analysis | 96**

John M. Malouff and Nicola S. Schutte

### **A PCIT-Informed Modular Treatment for Anxiety and Comorbid Disruptive Behavior in Early Childhood: Description of Brave START Program and a Pilot Feasibility Study | 105**

Steven J. Mazza, Anne Marie Albano, Mitchell L. Schare, Olenka S. Olesnycky, Phyllis S. Ohr

## > Clinical Practice Forum

### **Breaking The Cycle: Treating Intergenerational Trauma With Trauma-Focused ACT | 125**

Dennis A. Brown Jr.

## > Original Research

### **Introducing a Structured Evocative Activity for Functional Analytic Psychotherapy: A Single-Case Design Study | 137**

Maria Fernanda Monteiro, Luc Vandenberghe, Jocelaine Martins da Silveira

### **Mind-Body Connections: Acceptability and Feasibility of Taekwondo and Mindfulness for Adults on an Inpatient Psychiatric Unit | 149**

Emily R. Weiss, Victoria R. Hart-Derrick, Janet Brodie, Margaret T. Davis

[Editorial Board](#)

[Copyright transfer](#)

[Submission Guidelines](#)

## > ABCT MATTERS

A Centennial of Behavior Therapy:

The Clinical Psychological Science of Mary Cover Jones | 157

A Laboratory Study of Fear: The Case of Peter | 162

The Elimination of Children's Fears | 168

tBT's New Digital Platform: Ways to Explore and Share | 174

Why Foresight? Message from the Executive Director | 175

Let's Talk About ABCT's Clinical Directory: Feedback From  
the Recent Member Survey | 178

Fellows: Call for Applications | 179

Call for Book Proposals: Hogrefe's Best Assessment  
Practices in Clinical Psychology | 180

Podcast: Sanity x ABCT | 181

Webinars | 182

Call for Committee Members: DICEC | 183

ABCT Virtual Summit: Translating Neuroscience into CBT | 183

## > THIS MONTH'S ADVERTISERS

Hogrefe | 97

New Harbinger Publications | 99

Oxford University Press | 102

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ORIGINAL RESEARCH

## Attrition Rate in Multisession Gradual Exposure Treatment for Specific Phobia: A Meta-Analysis

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SPECIFIC PHOBIA involves fear and avoidance of reasonably safe stimuli such as heights, closed spaces, and insects. The disorder, which is relatively common, with a lifetime prevalence of 3–15% (Eaton et al., 2018), impairs a person's ability to function because of the avoidance involved. Specific phobias also create substantial fear, which can occur often and reduce a person's quality of life.

Gradual exposure is a common, usually effective treatment for specific phobia (Boehnlein et al., 2020; Wolitzky-Taylor et al., 2008). It involves creating a hierarchy of levels toward the most feared situation and then gradually exposing the client to one level for several minutes at a time, repeating the exposure, and then moving up a level when the client experiences a substantial drop in fear level, as indicated on a subjective units of distress scale, which often has anxiety response options from 0 to 100 (Maskey et al., 2014; Miltenberger, 2023). The gradual exposure, which leads to habituation to the feared stimulus, helps keep clients from experiencing overwhelming fear and leaving treatment. The treatment is used with adults and with children and is sometimes provided in a group format. A less used exposure treatment called flooding involves exposing the client for a prolonged period of time to the most feared situation (Boulougouris & Marks, 1969; Schumacher et al., 2015).

Gradual exposure treatment has traditionally been delivered over several sessions, following an assessment session. The exact number of sessions varies with the client and with how long each session lasts. Some therapists provide the gradual exposure in a single therapy session that lasts a few hours (Odgers et al., 2022). Studies have shown that gradual exposure treatment is as effective when delivered in one session as when provided over multiple sessions (Odgers et al., 2022). One potential advantage of providing the treatment in one session is that of eliminating client attrition between sessions. Clients might drop out between sessions due to changed life circumstances, illness, increased stress levels, or various other reasons.

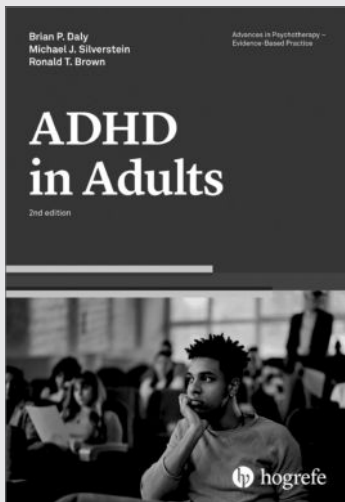
Attrition in exposure treatment involves a client leaving treatment prior to completing the exposure trials. Attrition can leave the problem unsolved, the client feeling pessimistic about overcoming the phobia, and the therapist feeling disappointed. Determining the rate of attrition across therapists may provide information about the extent of the problem of attrition and may point to ways to reduce it.

A meta-analysis found attrition of 16% for virtual reality exposure treatment for anxiety disorders (Benbow & Anderson, 2019). However, it is unknown how frequently clients drop out of multisession treatment for specific phobia. The main purpose of the present meta-analysis was to determine the extent of attrition in multisession gradual exposure treatment of specific phobia.



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## Background for Moderator Hypotheses

In addition to the aim of determining the meta-analytic attrition rate, we also examined four potential moderators of attrition rate we found in the included articles that might be of interest to researchers or to clinicians. These were (a) the number of planned sessions, with more sessions offering a greater chance of attrition, although there is no prior evidence for this expectation; (b) whether participants were compensated, with compensation likely motivating participants to continue treatment, although there is no prior evidence for this expectation; (c) whether the exposure sessions were provided to individuals or to groups, with no a-priori reason to believe there would be a difference between these modalities; and (d) whether the participants were adults or youths, with no a-priori reason to believe there would be differences between these two groups of participants. The studies that mentioned compensating participants described the compensation as for participating in the study; the reports did not specify whether compensation required completing treatment.

## Hypotheses

- We hypothesized that there would be a higher attrition rate with more planned sessions.
- We hypothesized that there would be a higher attrition rate if participants were not compensated.
- We had no hypotheses regarding the exploratory moderator analyses of group versus individual treatment or regarding adult versus young participants.

## Method

### Search

We searched for studies of multisession gradual exposure treatment for specific phobia. To simplify the search, we used the relevant studies found by Odgers et al. (2022), who evaluated the relative efficacy of multisession gradual exposure and single-session exposure for specific phobia. These researchers completed a comprehensive search through August 5, 2022. That search included comparisons of different treatments and pre-post studies. Odgers et al. limited the search to published studies to focus on the high-quality studies, and for the present meta-analysis we followed suit. We updated the search from August 5, 2022, through July 1, 2023.

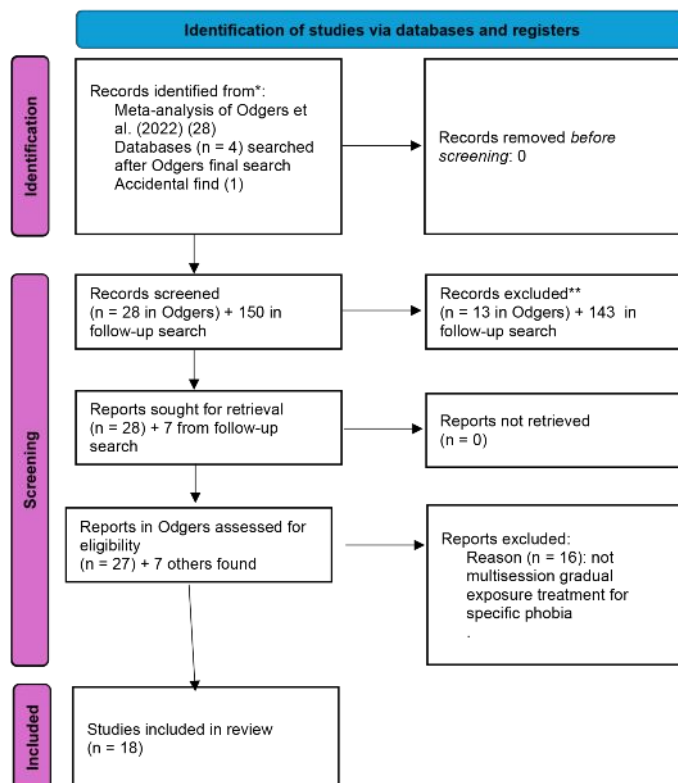
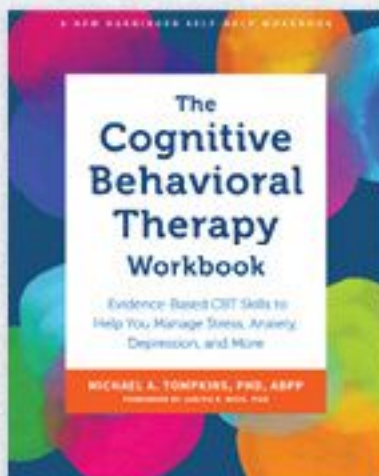
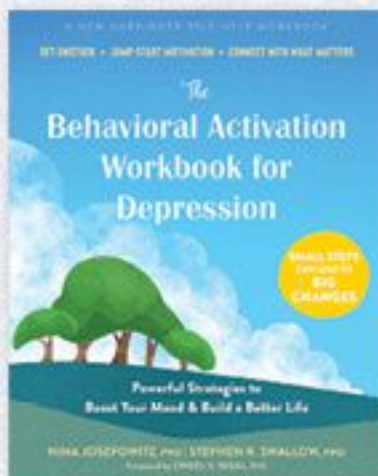


Figure 1. PRISMA diagram showing search steps

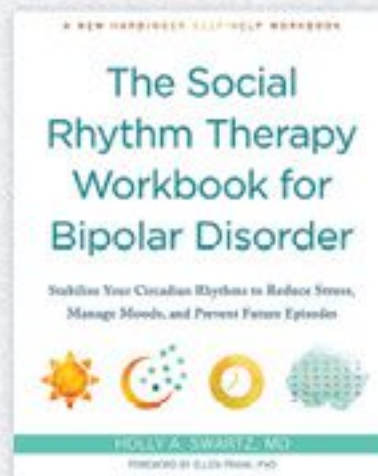
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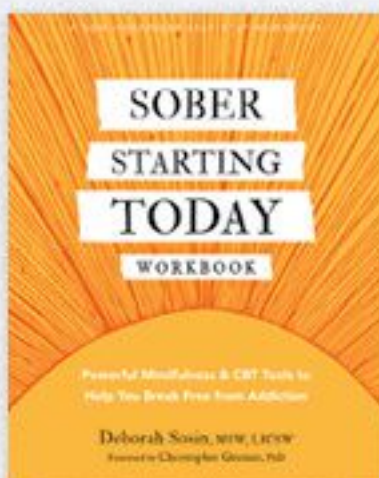
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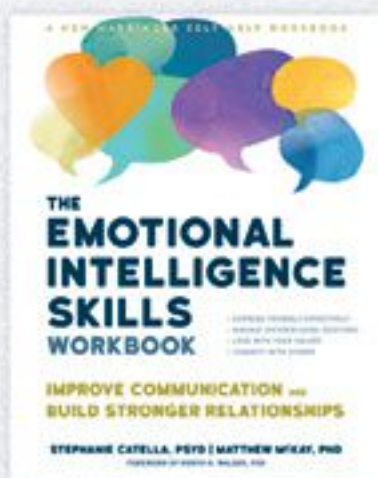
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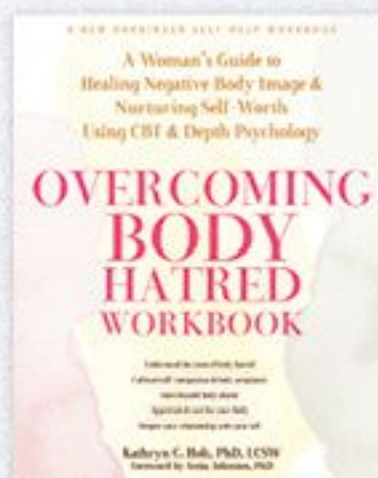
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We included studies if they reported the number of participants who started multi-session gradual exposure treatment for a specific phobia and the number who did not complete. We excluded studies that did not provide the needed numbers, that provided only one session of exposure, that provided exposure that was not gradual, or that provided treatment of some type other than gradual exposure or gradual exposure combined with another treatment.

Our updated search covered the same databases as in Odgers et al. (2022): PsycInfo, Embase (including Medline), and Cochrane. We used essentially the same search terms as in Odgers but excluded irrelevant terms such as “single session.” We searched titles and abstracts for: phob\*, exposure, AND treatment. Also, we found, by examining review articles, one relevant study, Walder et al. (1987), that seemingly could have been included in the meta-analysis of Odgers but was not.

Figure 1 shows the results of our search. In total, 18 studies met inclusion criteria. Author 1 entered all the data. To evaluate the reliability of data entry, Author 2 then independently entered a randomly selected 9 of the studies. The data entered included the number of participants, the number who did not complete treatment, the number of planned sessions, whether participants were compensated, whether the treatment was provided to individuals or to groups, and whether participants were adults or children. Across these six variables, the entries agreed exactly on 91%, with Cohen’s kappa = .81. Then Authors 1 and 2 decided by consensus on codings in dispute. The final agreed entries matched those of Author 1 98% of the time. Subsequently, the two authors jointly reviewed Author 1’s codings in the remaining 9 studies and made one additional change to data entry, consistent with Author 1 being correct on 98% of the independently checked entries. The data file is available at <https://hdl.handle.net/1959.11/55407>.

### Analytic Method

We used the random effects model for the meta-analysis because we wanted to generalize beyond the present studies to multisession exposure treatment in general. In this regard, we followed the suggestion of Borenstein et al., 2021 (p. 77).

## Results

Table 1 shows the attrition rate and other information for each study included in the meta-analysis. Figure 2 shows the attrition rates graphically. Across all 18 studies,

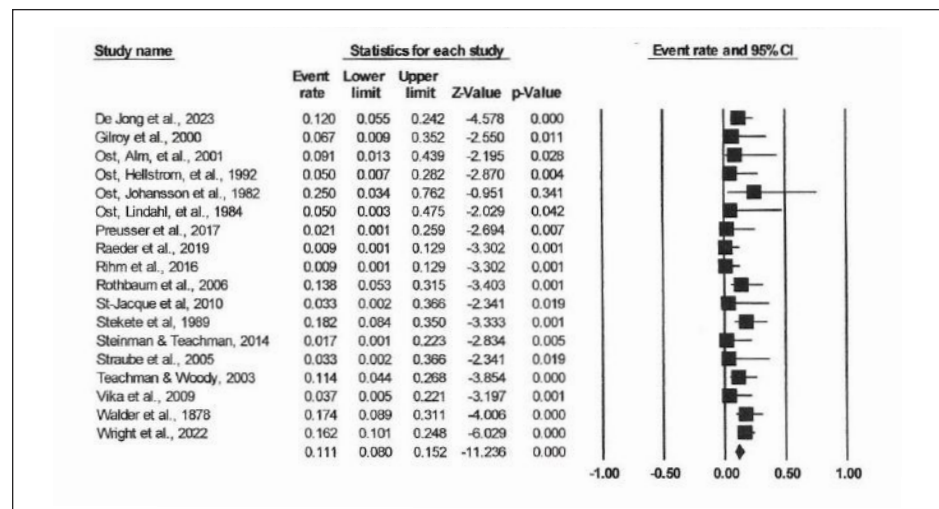


Figure 2. Attrition rates for studies

the meta-analytic attrition rate, using a random effects model, was .11 (95% CI .08, .15). The rates across studies were not heterogeneous,  $Q(17) = 20.78$ ,  $p = .23$ ,  $I^2 = 18.20$ .

The meta-regression of number of planned sessions on attrition produced a non-significant result, meta-analytic slope = .068 (CI -.035, .170),  $Q(1,16) = 1.66$ ,  $p = .20$ . Table 2 shows the comparisons of different levels of categorical moderators. They were all nonsignificant, with studies that had compensated clients closest to showing a significant difference.

## Discussion

The main purpose of this meta-analysis was to determine the attrition rate in multisession gradual exposure treatment for specific phobias. The results showed a client attrition level of 11% in treatment studies of multisession gradual exposure treatment for specific phobia. Researchers planning studies involving multisession gradual exposure for specific phobia can use that rate to estimate attrition.

The attrition rate we found for multisession gradual exposure treatment for specific phobia in the included studies is lower than the attrition rate for some other types of problems and treatment, e.g., for virtual reality exposure therapy for anxiety disorders (16%; Benbow & Anderson, 2019), cognitive behavior therapy in general (26%; Fernandez et al., 2015), psychotherapy (11–28%, depending on the disorder and the specific type of treatment; Swift & Greenberg, 2014), psychosocial substance abuse treatment (30%; Lappan et al., 2020). The attrition rate for multisession gradual exposure treatment for specific phobias is lower, but premature withdrawal from treatment of 11% is something meaningful to avoid. It is unclear why the overall attrition rate in the present meta-analysis is lower than for treatment of other disorders or by other methods. Perhaps gradual exposure treatment for specific phobia leads to fast gains or fast increases in self-efficacy, thus fortifying the client's drive to overcome the problem.

A report on 3,728 psychotherapy clients at a community health clinic (Roseborough et al., 2016) provided no overall attrition rate, but it indicated that younger, less edu-

**Table 1.** Studies Included to Determine Attrition Rate for Multisession Treatment of Specific Phobia

Study	N	Attrition rate	Number of Sessions	Compensated	Participant Age	Individual Treatment	Phobia Stimulus	Nation
De Jong et al., 2023	50	.12	3	no	youths	individual	various	Netherlands
Gilroy et al., 2000	15	.067	3	no	adults	individual	spiders	Australia
Ost, Alm, et al., 2001	11	.091	5	no	adults	individual	closed spaces	Sweden
Ost, Hellstrom, et al., 1992	20	.05	5	no	adults	individual	injection	Sweden
Ost, Johansson et al., 1982	4	.25	9	no	adults	individual	closed spaces	Sweden
Ost, Lindahl, et al., 1984	9	0	8	no	adults	individual	blood	Sweden
Preussner et al., 2017	23	0	2	yes	adults	individual	spiders	Germany
Raeder et al., 2019	54	0	2	yes	adults	individual	spiders	Germany
Rihm et al., 2016	54	0	2	no	adults	group	spiders	Germany
Rothbaum et al., 2006	29	.138	6	no	adults	individual	flying	USA
Steinman & Teachman, 2014	28	0	2	yes	adults	individual	heights	USA
Steketee et al, 1989	33	.182	2	no	adults	individual	various	USA
St-Jacques et al., 2010	14	0	5	no	youths	individual	spiders	Canada
Teachman & Woody, 2003	35	.114	3	yes	adults	group	spiders	USA
Vika et al., 2009	27	.037	5	no	adults	individual	oral injection	Norway
Walder et al., 1987	46	.174	3	no	adults	group	flying	UK
Wright et al., 2022	99	.162	9	no	youths	individual	various	UK

**Table 2.** Categorical Moderator Results

	Number Studies	Attrition Rate	Attrition 95% CI
Participant Age, Q(1) = 2.02, <i>p</i> = .16			
Adults	15	.11	.08, .15
Youths	3	.14	.10, .21
Participants Compensated, Q(1) = 3.31, <i>p</i> = .07			
No	14	.13	.10, .17
Yes	4	.04	.10, .14
Individual/Group Treatment Q(1) = .01, <i>p</i> = .94			
Individual	15	.11	.08, .16
Group	3	.10	.04, .26

cated, and lower income clients had a significantly higher rate of attrition in treatment for various types of problems. We found no significant association between study-sample age and attrition, but we had low power due to the relatively small sample of studies included in the meta-analysis. We were unable to examine education level and income level.

It may be possible for clinicians to decrease intersession attrition by using specific strategies, such as providing the client with progress feedback (de Jong et al., 2021). Clients in gradual exposure may automatically receive this sort of feedback as they progress up a fear hierarchy.

The meta-analysis also examined whether there were moderators of the attrition rate in included studies. Finding no significant moderators of attrition rate was unsurprising in light of the relatively small number of included studies. However, the subcategories examined may have value. For estimating attrition in clinical practice, it could be useful to focus on studies that used individual treatment, no compensation to



clients, and whichever age group is of interest, and to consider whether a high number of planned sessions may be a factor in attrition.

### Conclusion

The results of the present meta-analysis indicate that there is a noteworthy but low level of attrition in multisession gradual exposure treatment for specific phobias. Single-session treatment, which has similar outcomes to multisession treatment (Odgers et al., 2022), may be a valuable approach for treating specific phobia because it eliminates the risk of attrition between sessions.

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## A PCIT-Informed Modular Treatment for Anxiety and Comorbid Disruptive Behavior in Early Childhood: Description of Brave START Program and a Pilot Feasibility Study

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ANXIETY DISORDERS are the most common psychiatric problem in children, affecting 9% of individuals during early childhood (Costello et al., 2005; Egger & Angold, 2006; Lebrun-Harris et al., 2022). Additionally, children with an anxiety disorder are significantly more likely to have comorbid internalizing and externalizing disorders, including another anxiety disorder, a disruptive behavior disorder, and attention-deficit/hyperactivity disorder (ADHD; Angold et al., 1999; Franz et al., 2013; Overgaard et al., 2012). Although genetic factors contribute to the development of these disorders, parenting style and parent-child interactions maintain and reinforce maladaptive behaviors in children in accordance with behavioral principles (Barrett et al., 2005; Gomes et al., 2017; Hettema et al., 2001; Kagan et al., 1987; Lebowitz et al., 2013; McRae et al., 2020; Merlo et al., 2009; Mowrer, 1951; Salloum et al., 2018; Settiani et al., 2013; Skinner, 1958).

Parent-Child Interaction Therapy (PCIT) is an empirically supported behavioral intervention that targets parent-child interactions as a means of reducing disruptive child behaviors and strengthening the parent-child relationship (Eisenstadt et al., 1993; Phillips & Mychailyszyn, 2021; Schuhmann et al., 1998; Thomas et al., 2017; Ward et al., 2016). Traditionally used to treat children between the ages of 2 and 7, PCIT leads to less disruptive behavior, improved parental locus-of-control, generalization across settings, and effects maintained up to 6 years after treatment (Bussing et al., 2020; Funderburk et al., 1998; Hood & Eyberg, 2003; McNeil et al., 1991; Schuhmann et al.).

PCIT includes a baseline observation session, two psychoeducational “teach” sessions before each of the two phases of treatment, and in-vivo coaching sessions that continue until parents demonstrate competence with relevant skills. The parent-child dyad plays in a room containing three creative toys, such as blocks, art materials, or train sets. The therapist is stationed in an adjacent room, observing through an observational glass. Using a handheld transceiver and earpiece, the therapist coaches the parents to avoid questions, commands, and negative talk, to ignore inappropriate attention-seeking behaviors, to reflect appropriate verbalizations, and to describe and praise positive child behaviors (Eyberg et al., 2005). These skills are employed during the Child-Directed Interaction (CDI) phase of PCIT, in which the parent is instructed to allow the child to take the lead during the play. The goal of this phase is to improve the parent-child relationship while teaching parents how to reinforce appropriate behaviors and ignore maladaptive behaviors (Zisser-Nathenson et al., 2017).

After reaching CDI goal criteria, the parent progresses to the Parent-Directed Interaction (PDI) phase, in which parents are instructed to utilize direct commands and follow through on a time-out sequence when their children do not comply. Graduation from PCIT occurs when parents' competence using both CDI and PDI skills and parent-rated disruptive behavior falls within a normal range.

In addition to reducing disruptive behaviors, in-vivo coaching of parent-child interactions has shown great promise in reducing anxious behaviors in young children (Carpenter et al., 2014; Catchpole et al., 2019; Comer et al., 2012; Comer et al., 2018; Hood & Eyberg, 2003; Phillips & Mychailyszyn, 2021; Pincus et al., 2008). For example, a nonmodular PCIT-based program called PCIT-CALM (Coaching Approach behaviors and Leading by Modeling) has demonstrated effectiveness in the treatment of anxiety disorders that present in early childhood using live parent coaching (Comer et al., 2012; Puliafico et al., 2013). The CALM program is composed of 12 sessions including a CDI teach session, a psychoeducational and hierarchy construction session, and four CDI coach sessions. The CALM program introduced the DADS (Describe, Approach, Direct command, Selective attention) phase, in which live coaching of exposures is employed. The DADS phase consists of a teach session and six coaching sessions in which parents guide their children through a variety of relevant exposures described in the fear hierarchy. Notably, the PDI phase was not included in the CALM program. Hence, it does not directly address disruptive/aggressive behaviors. Also, it does not provide therapists with modules containing explicit directions tailored to target specific symptoms, like reassurance-seeking behaviors and aggression during exposures. That said, the CALM program's employment of CDI skills and in-vivo exposure coaching sessions greatly inspired the current protocol. While existing research supports the use of in-vivo parent coaching for the treatment of anxiety and disruptive behaviors, to date, no such modular protocol exists for the use in the treatment of comorbid anxiety and disruptive behavior disorders in early childhood.

According to Chorpita, Daleiden, and Weisz (2005a), modularity generally refers to "breaking complex activities into simpler parts that may function independently" (p. 142). Modules are defined as "self-contained functional units that connect with other units, but do not rely on those units for their own stable operations" (p. 142). Thus, modular treatment approaches contain independently functioning, self-contained units that operate as a whole when integrated. Modularity is helpful because it provides flexibility within a treatment protocol that can be individually tailored but also subjected to standardized, empirical methods of study. Recent literature has suggested that modular sequencing should instead be labeled as a model of coordinated strategic action, "which is about knowing what to do when, given the context, the set of available resources, and the relevant knowledge bases" (Chorpita & Daleiden, 2018, p. 11). Notably, modularity is "not an all-or-nothing feature of designs but can be described in degrees" (Chorpita et al., 2005a, p. 143).

Investigations on how to enhance the efficacy of existing evidence-based protocols have emphasized the importance of identifying and synthesizing the key mechanistic components of these treatments into interchangeable and movable modules (Chorpita et al., 2005a). Modular treatment designs provide flexibility and allow clinicians to strategically coordinate interventions to multitudinous comorbid presentations (Chiu et al., 2013; Chorpita et al., 2004) and modular approaches have yielded impressive results when applied to childhood anxiety disorders and comorbidities (Chorpita et al., 2004; Chorpita et al., 2017; Weisz et al., 2012). However, a transdiagnostic, modular treatment program targeting both anxiety and comorbid disruptive behavior disorders

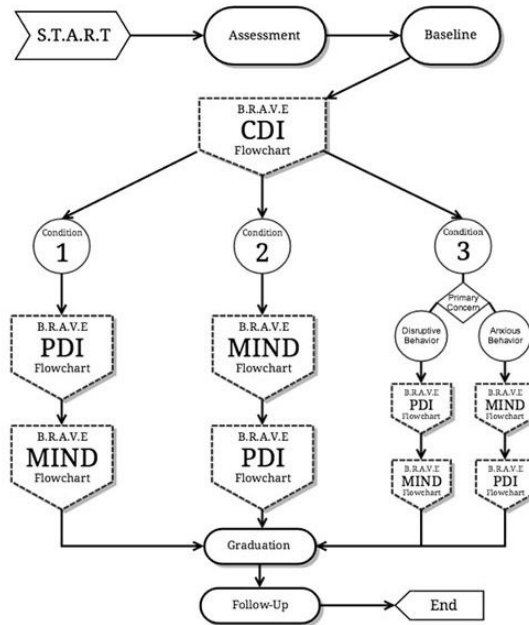


Figure 1. Brave START Coordination Module

in early childhood does not exist, although this has been recommended as a future direction of research: “Building on the promise of modularized therapies supported in the treatment of older youth, future research may do well to evaluate a modularized program in the treatment of early-onset child anxiety, whereby the focus on effective parental discipline is incorporated only when the child presents with co-occurring disruptive behavior problems” (Puliafico et al., 2013, p. 526). Thus, the creation and implementation of a transdiagnostic, modular, in-vivo parent coaching program for use in the treatment of anxiety and comorbid disorders in early childhood is warranted. The current paper aims to provide an overview of the Brave START program and to present the data from the pilot feasibility study.

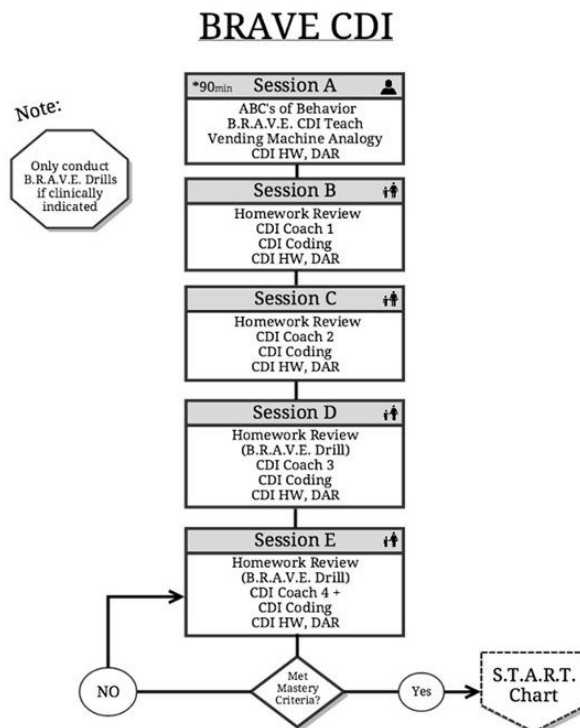


Figure 2. Brave CDI Coordination Module

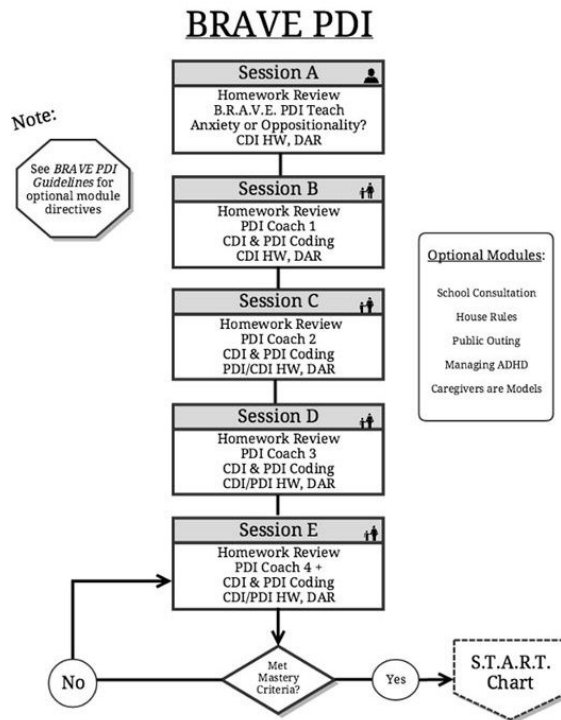


Figure 3. Brave PDI Coordination Module

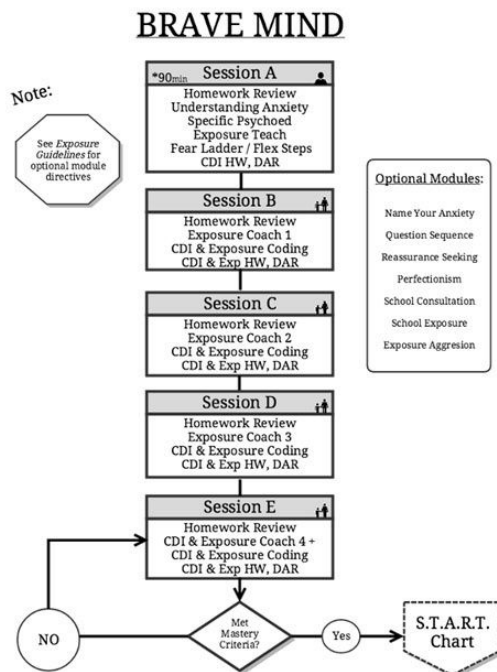


Figure 4. Brave MIND Coordination Module

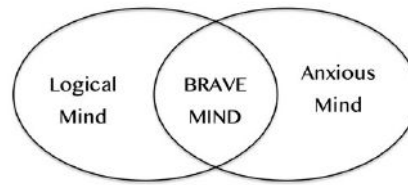
## The Brave START Program

### Overview of Intervention

The Brave START program is a transdiagnostic, modular, PCIT-informed treatment for children with anxiety disorders and comorbid disruptive behavior. It contains three primary “coordination” or “flowchart” modules and many more “content” modules. Content modules are the building blocks of a treatment protocol and contain information pertinent to conducting therapy (e.g., anxiety psychoeducation, homework review, coding of parent-child observations, etc). Coordination modules, alternatively, provide

rules that dictate the relationship and dependencies between content modules. Coordination modules govern the sequence of content modules and instruct clinicians how to integrate them effectively, given the client’s unique constellation of symptoms. Brave START’s coordination modules include adapted versions of CDI and PDI from standard PCIT, titled Brave CDI (B-CDI) and Brave PDI (B-PDI), respectively (see Figure 1). An exposure coordination module, called Brave MIND (B-MIND), was also created in which parents learn to lead exposures for their children. Each coordination module contained various content modules (e.g., “ABC’s of Behavior”; “Understanding Anxiety”; “Anxiety or Oppositionality?”), which were utilized in sessions.

**Practice feeling these difficult emotions (Anxious Mind) while using the skills that help in the moment (Logical Mind). Access your BRAVE MIND!**

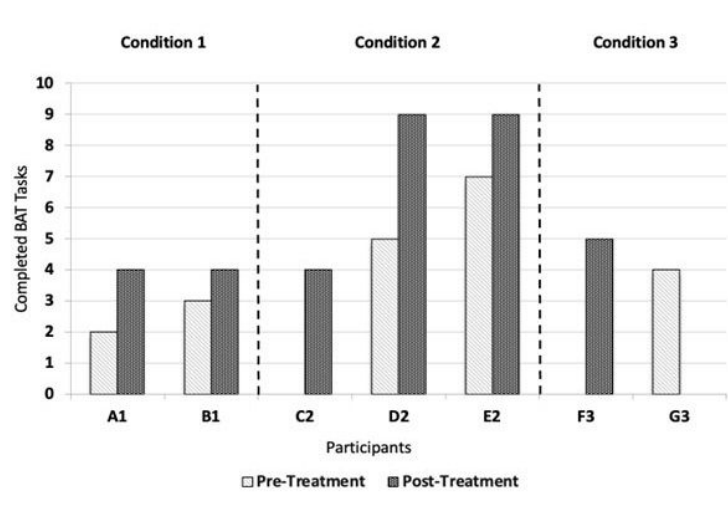


**Figure 5.** BRAVE MIND Venn Diagram from Parent Handout

The B-CDI and B-PDI coordination modules contained 4–5 sessions each, whereas the B-MIND coordination module contained 4–6 sessions. The session number caps were consistent with prior PCIT adaptations: CDI was limited to four sessions in the CALM and PCIT-Emotion Development (PCIT-ED; Lenze et al., 2011; Luby et al., 2012) programs, PDI was limited to four coaching sessions in the PCIT-ED program, and exposure coaching was limited to six sessions in the CALM approach. Following B-CDI, the sequence of modules was dependent on the participant’s randomly assigned condition. A variety of optional content modules were also available for targeting perfectionism, aggression during exposure, reassurance seeking, and more. The Brave START protocol included a treatment recommendations section that elaborated on when to administer the optional content modules depending on symptom presentation. All sessions were held in-person and utilized a playroom and observational room.

*Description of Primary Coordination Modules and Treatment Procedures*

**Brave CDI.** The B-CDI phase (Figure 2) resembled traditional CDI because parents were coached in-vivo using a “bug-in-the-ear” to respond most effectively to their child’s behaviors using a set of skills. However, instead of using the PRIDE skills (Praise,



**Figure 6.** Completed Behavioral Approach Tasks by Condition

Note. Participants’ pre- and posttreatment BAT tasks. Maximum BAT tasks is 10 for each participant except C2, whose maximum was 4. For participant ID numbers C2, F3, and G3, 0 signifies that no BAT tasks were completed, despite being attempted (this is not missing data).

Reflect, Imitate, Describe, Enjoy) from traditional PCIT, parents were taught the BRAVE skills (Behavior description, Reflection, Affection, Validation, Effective Praise). B-CDI also includes explicit psychoeducation about behavioral principles, unlike the traditional CDI phase of PCIT. In B-CDI, parents were taught about the relationship between antecedents, behaviors, and consequences and were guided to determine the function of their children's behaviors. The CDI phase of standard PCIT does not include such specific education about operant conditioning processes and terminology.

*Brave PDI.* The B-PDI phase (Figure 3) was identical to standard PDI, except that the BRAVE skills were coached and coded, rather than the PRIDE skills. As with standard PDI, the command sequence was taught and time-outs were employed after noncompliance. Direct commands and time-outs were not given for anxiety-related tasks (i.e., tasks that were included in exposure hierarchies) in this treatment program.

*Brave MIND (exposure).* The B-MIND phase of treatment (Figure 4) started with anxiety psychoeducation, during which the MIND skills (Model, Incentivize, Negotiate, Deliberate ignoring) were taught. These differ somewhat from the DADS (Direct command, Approach, Describe, Selective attention) skills that are used within the CALM program, which require the use of direct commands. The MIND skills emphasize providing exposure options, offering incentives, and adjusting these factors in the moment to encourage exposure task completion. Because direct commands were associated with time-outs in the B-PDI module, they were not incorporated in the exposures during treatment. Instead, incentives (e.g., points, stickers, and prizes), selective attention, and exposure options ("would you rather pet the dog's head, back or tail?") were used to facilitate exposures. The parents were taught to first "Model" approach behaviors for the child, then to Incentivize these behaviors by offering a reward. The Negotiate skill involved providing exposure options, making "if, then statements" (e.g., "if you speak loud enough for me to hear you, I will give you two stickers"), and negotiating the appropriate reward (e.g., providing more points for executing the most difficult exposure tasks). "Deliberate ignoring" was recommended for use when the child was engaging in inappropriate or anxious behaviors as a means of procrastination or avoidance. When engaging in exposures, parents were trained to use both the BRAVE skills and the MIND skills, hence the term "BRAVE MIND," which was adapted from Dialectical Behavior Therapy's "Wise Mind" (Linehan, 1993; Rathus et al., 2017; see Figure 5).

In Dialectical Behavior Therapy (DBT), Wise Mind is the overlap between "Emotion Mind" (behavior is driven by emotional urges) and "Reasonable Mind" (behavior is driven by rational thought). Wise Mind, then, is when both rational thought and emotions are considered and in balance when making decisions. Within Brave START, "Anxious Mind" is similar to "Emotion Mind," in that parents may be driven to accommodate their child's avoidance due to their own feelings of anxiety and discomfort. "Logical Mind" is similar to "Reasonable Mind," in that skill use is logical but often counter to our emotional drives. In Brave START, "BRAVE MIND" is the overlap between Logical Mind and Anxious mind; parents are encouraged to be aware and accepting of both their own and their child's emotions, while also using the BRAVE and MIND skills taught throughout treatment.

*Goal criteria.* Each coordination module included goal criteria that governed progression to the next treatment phase. The goal criteria for B-CDI and B-PDI were identical to the goal criteria from CDI and PDI in standard PCIT. The B-MIND goal criteria required the parent to use at least 30 total BRAVE skills and a maximum of 3 instances of accommodation, invalidation, or other behaviors that reinforce avoidance during 5 minutes of exposure coding. After either goal criteria were met or the maximum number

**Table 1.** Participant Conditions and Demographics

Child	Age	Gender	Ethnicity	Pretreatment Diagnoses (CSR)	Mother's Age	Months in Study
A1	5	Female	White	SA (5), GAD (5), ODD (6)	-	7.5
B1	7	Female	Asian	SA (5), ODD (5)	36	8.8
C2	3	Female	White	SepA (6), ODD (6)	32	6.2
D2	7	Female	White	SA (5), ADHD (5), ODD (6)	41	4.8
E2	6	Male	White	SA (6), ADHD (5), GAD (4), ODD (6)	45	8.4
F3	5	Female	White	SA (5), ODD (6)	29	7.3
G3	5	Female	White	SepA (4), OCD (5), ODD (6)	52	5.9

**Note.** CSR = ADIS-5 Clinician Severity Rating; SA = Social Phobia; GAD = Generalized Anxiety Disorder; ODD = Oppositional Defiant Disorder; SepA= Separation Anxiety Disorder; ADHD = Attention Deficit Hyperactivity Disorder; Condition 1 = disruptive behavior targeted before anxiety; Condition 2 = anxiety targeted before disruptive behavior; Condition 3 = most impairing behavior targeted first.

**Table 2.** Diagnoses Pre- and Posttreatment

Child/Condition	Pretreatment Diagnoses	Posttreatment Diagnoses
A1	SAD, GAD, ODD	GAD, ODD
B1	SAD, GAD, ODD	SAD
C2	SepA, ODD	None
D2	SAD, ADHD, ODD	ADHD
E2	SAD, ADHD, ODD, GAD	None
F3	SAD, ODD	None
G3	SepA, OCD, ODD	OCD, ODD

**Note.** SAD = Social Anxiety Disorder; SepA = Separation Anxiety Disorder; ODD = Oppositional Defiant Disorder; ADHD = Attention-Deficit/Hyperactivity Disorder; GAD = Generalized Anxiety Disorder; Condition 1 = disruptive behavior targeted before anxiety; Condition 2 = anxiety targeted before disruptive behavior; Condition 3 = most impairing behavior targeted first.

of sessions of each phase was reached, treatment ended with a graduation module similar to standard PCIT.

### The Pilot Study of Brave START Protocol

#### Method

##### Participants

Eight parent-child dyads seeking treatment presented to a community training clinic. Inclusion criteria were as follows: the child (1) was aged 3–7; (2) met *Diagnostic and Statistical Manual of Mental Disorders*, 5th Edition (DSM-5; American Psychiatric Association, 2013) criteria for at least one anxiety disorder; and (3) had comorbid disruptive behavior (as determined by a disruptive behavior disorder diagnosis and/or a score of 131 or above on the Eyberg Child Behavior Inventory [ECBI; Eyberg, 1980]). Participants were excluded if they were (1) diagnosed with intellectual disability, a psychotic disorder, or an autism spectrum disorder that could significantly interfere with participation in treatment; (2) were receiving treatment for anxiety/mood symptoms or disruptive behaviors elsewhere; (3) the primary caregiver was not willing or able to consistently to engage in treatment; and/or (4) the parent and/or child's proficiency in English was insufficient for effective treatment. Participants were asked not to start, stop, or change psychiatric medications during the course of the study.

Eight participants met eligibility; however, one participant dropped out of treatment due to unrelated familial challenges. It is also notable that participant E2 started a new

**Table 3.** Mean ECBI Scores for Conditions 1 and 3

Child	BL (t=)	CDI (t=)	PDI (t=)	EXP (t=)	FU (t=)
A1	140.66 (62)	132 (60)	117.66 (56)	110.28 (54)	–
B1	135 (61)	122.8 (58)	101.16 (51)	87.14 (47)	72 (43)
F3	158.66 (67)	118.2 (56)	108 (53)	99.5 (51)	85 (47)
G3	116.6 (56)	98.2 (50)	98.83 (51)	109.75 (54)	110 (54)

**Note.** Conditions 1 and 3 are presented together because the sequence of modules was identical between them. Daily avoidance ratings were not provided by A1's mother during follow-up. BL = Baseline; CDI = Child-Directed Interaction; PDI = Parent-Directed Interaction, EXP = Exposure phase; FU = Follow-Up.

**Table 4.** Mean ECBI Scores for Condition 2

Child	BL (t=)	CDI (t=)	EXP (t=)	PDI (t=)	FU (t=)
C2	123 (58)	131 (60)	96.285 (50)	91.43 (48)	88 (48)
D2	131.66 (60)	129.4 (59)	129.33 (59)	123.85 (58)	108 (53)
E2	145.66 (64)	127.8 (59)	124.57 (58)	131.71 (60)	112 (54)

**Note.** CDI = Child-Directed Interaction; PDI = Parent-Directed Interaction, EXP = Exposure phase; FU = Follow-Up.

psychiatric medication mid-treatment. The final study sample consisted of seven parent-child dyads. All participants lived within travel distance of the community training clinic on Long Island, NY, were from varying socioeconomic statuses, and received free treatment for participating in the research study. All participants were White, with the exception of one participant of Asian descent.

### *Design*

This pilot study employed a single-subject, repeated measures, multiple-baseline, alternating treatment design. The participants' baseline data served as their own controls. The independent variable was participation in the Brave START program. After baseline data collection, which occurred across two sessions, participants were randomly assigned to one of three treatment conditions, with two participants in condition 1 (targeting disruptive behavior before anxiety; A1 and B1), three participants in condition 2 (targeting anxiety before disruptive behavior; C2, D2, and E2), and two participants in condition 3 (characterized by flexible sequencing of the modules, targeting the diagnosis with the highest Clinician Severity Rating (CSR) from the ADIS-5 first; F3 and G3). See Table 1 for participant conditions and demographics.

### *Measures*

**Diagnostic Interview.** The Anxiety Disorders Interview Schedule for DSM-5–Parent Version (ADIS-5; Albano & Silverman, 2023) was used to screen and diagnose participants. This semistructured interview assesses for an exhaustive list of symptoms and diagnoses including multiple anxiety disorders, disruptive behavior disorders, and depressive disorders, among others. Parents reported symptom severity ratings on a 9-point Likert scale and the evaluator provided a Clinician Severity Rating (CSR) for each diagnostic category; clinical significance was indicated by ratings of a 4 or above. The ADIS-IV (Silverman & Albano, 1996) has shown to have good construct validity (Tracey et al., 1997), good test-retest reliability (Silverman et al., 2001), and good interrater reliability (Lyneham, et al., 2007).

**Table 5.** Mean PAS & SCAS-P T-Scores for Conditions 1 and 3

Child	BL	CDI	PDI	EXP	FU
A1	79.33	74.6	63	64	--
B1	68.33	66.8	60.6	59.87	58
F3	63.33	61	63	64.85	64
G3	56	52.2	52.33	50.86	51

**Note.** Conditions 1 and 3 are presented together because the sequence of modules was identical between them. PAS scores were not provided by A1's mother during follow-up. BL = Baseline; CDI = Child-Directed Interaction; PDI = Parent-Directed Interaction, EXP = Exposure phase; FU = Follow-Up.

**Table 6.** Mean PAS and SCAS-P T-Scores for Condition 2

Child	BL	CDI	EXP	PDI	FU
C2	44.33	42	39.6	41	42
D2	60.33	54.8	55.33	55.43	42
E2	61.6	58.6	59.1	58.5	51

**Note.** CDI = Child-Directed Interaction; PDI = Parent-Directed Interaction, EXP = Exposure phase; FU = Follow-Up.

*Parent Behavioral Observation.* Parent verbalizations were coded using an adaptation of the Dyadic Parent-child Interaction Coding System (DPICS; Eyberg et al., 2005). The DPICS has been shown to demonstrate psychometric convergence between parent ratings and observed child behavior, which strengthens clinical interpretation (Cotter & Brestan-Knight, 2020). In addition to coding Behavior Descriptions, Reflections, Praises, Questions, Commands, and Negative Talk, instances of physical affection and validation were also coded during B-CDI. During exposures, parent behaviors were coded as either "BRAVE" skills (Behavior descriptions, Reflection, Affection, Validation, Effective Praise, or Other - Reinforcing Approach) or "Avoid" skills (Accommodation, Invalidation, or Other - Reinforcing Avoidance). The coding periods for all phases of treatment were 5 minutes long. This adapted DPICS coding system was coined Brave Parent-child Interaction Coding System (BPICS).

*Child Behavioral Observation.* Child approach behaviors were measured using a Behavioral Approach Test (BAT), pre-and posttreatment. The BAT has been utilized in many prior child studies (Barrett et al., 2002; Cochrane et al., 2010; Creswell et al., 2020; Ollendick et al., 2011) to measure approach and avoidant behaviors in a variety of anxiety disorders (Castagna et al., 2016), including specific phobias (Hamilton & King, 1991; Ollendick et al., 2012) and OCD (Olatunji et al., 2009; Steketee et al., 1996). In a traditional BAT, a fear and avoidance hierarchy is first created. Participant behaviors are then observed as they attempt to approach the feared stimuli from the hierarchy. When administered pre- and posttreatment, this behavioral measure is helpful in determining if a child's approach and avoidance behaviors have changed over time.

In the present study, the BAT was administered during the baseline observation session and during the graduation session while therapists coded parent exposure skills using BPICS. The BAT exposure hierarchy was developed in accordance with specific symptoms and fears endorsed by the parent within the ADIS-5. During the BAT in the present study, the parent guided the child through increasingly difficult anxiety-provoking tasks. For example, one participant with social anxiety disorder first spoke with

an unfamiliar adult, then had a conversation with an unfamiliar adult while wearing a silly hat, and eventually worked up to making an announcement to a room full of people, all while parents used exposure skills to encourage brave behavior.

#### *Parent Report Measures*

*The Spence Children's Anxiety Scale-Parent Version* (SCAS-P; Nauta et al., 2004) was administered weekly for children aged 6–7. The SCAS-P was developed to assess anxiety symptoms of children aged 6–18. The SCAS-P consists of 39 items measuring six domains: panic/agoraphobia, separation anxiety, social phobia, obsessive-compulsive disorder, generalized anxiety, and physical injury fears. Parents can rate each item with a response of “Never,” “Sometimes,” “Often,” or “Always.” The interrater reliability of most subscales on the SCAS-P was satisfactory to excellent with high internal homogeneity, and discriminant, convergent, and divergent validity has also been demonstrated (Nauta et al., 2004; Whiteside & Brown, 2008), and overall is a widely used assessment measure that has been translated in to 22 languages (Essau et al., 2011).

*The Pre-School Anxiety Scale* (PAS; Spence et al., 2001) was administered weekly to parents of children aged 3–5. It was adapted from the SCAS and was developed to assess anxiety symptoms of children 3–6, measuring five domains: separation anxiety, social anxiety, obsessive-compulsive disorder, generalized anxiety, and physical injury fears. Like the SCAS-P, it also contains 39 items and parents respond to each item with “Never,” “Sometimes,” “Often,” or “Always.” Broeren and Muris (2008) found that it had moderate to high reliability coefficients ( $\alpha = .59-.86$ ) and had good convergent and discriminant validity.

*The Daily Avoidance Rating form* (Gold, 2016) was used to measure intensity of participating children's avoidant behaviors. Parents were asked to provide a rating on a daily basis from the pretreatment intake to the posttreatment follow up.

*The ECBI* (Eyberg Child Behavior Inventory; Eyberg, 1980) was administered weekly to assess change in disruptive behaviors. It is a sensitive parent-response questionnaire with predictive power that consists of 32 items assessing the frequency of the child's behavior problems (Rich & Eyberg, 2001). Parents rate the frequency of behaviors on a scale of 1 (*never*) to 7 (*always*). The total score resulting from these items yield an “Intensity Scale” score. Parents also endorse whether or not the behavior that the items pertain to are “problems,” yielding a “Problem Scale” score. The Intensity and Problem Scales have a test-retest reliability coefficients of  $r = 0.86$  and  $r = 0.88$ , respectively (Eyberg & Pincus, 1999). Examples of behaviors include “refuses to obey until threatened with punishment” and “hits parents.” The ECBI has been shown to have discriminant validity (Aragona & Eyberg, 1981), concurrent validity (Boggs et al., 1990), and high internal consistency (Robinson et al., 1980), and has demonstrated sound psychometric properties across multiple countries (Abrahamse et al., 2015; Panahandeh et al., 2020; Rhee & Rhee, 2014).

To measure treatment satisfaction, an adapted version of the Therapy Attitude Inventory (TAI; Brestan et al., 1999) was administered during the graduation session. This 10-item measure of parental attitude toward treatment has traditionally been used in standard PCIT and other behavioral parent training program studies (Chacko et al., 2007; Fabiano et al., 2009) and contains items referring to disruptive child behaviors. Its external validity has been demonstrated by moderate correlations of .36–.49 between alternate measures of symptom variations and the TAI. Internal consistency was supported by a Cronbach alpha of .91 (Brestan et al., 1999). The TAI was adapted to include several questions regarding exposure skills and child anxiety for use in this study.

## *Procedure*

### *Qualification of Therapists*

Five lead therapists conducted the treatment sessions for the seven participants. All five therapists were White doctoral students with master's degrees in clinical psychology who were trained in PCIT (completed a 40-hour course), exposure therapy, and in the Brave START protocol and its adapted coding system. Four lead therapists were female and one was male. All therapists achieved at least 80% coding reliability with the primary investigator, a certified PCIT therapist, while watching video role-plays. Therapist sessions were observed and coded via video recordings and from behind a one-way mirror to ensure treatment fidelity and all met 80% of criteria for treatment fidelity for observed sessions (one session from each phase was observed per therapist). Feedback and supervision were provided regularly. The principal investigator, trained in the administration of the ADIS by its developer and one of the co-authors, conducted pre- and posttreatment ADIS-5 assessments.

### *Pretreatment*

After parents called the clinic to set up an intake appointment, participants were screened using the ADIS-5 to determine eligibility. If eligible, a fear hierarchy was created in collaboration with the parent at this time, which was subsequently employed during the BAT administration in the baseline session.

### *Baseline*

Parent-child interactions were observed and parent-report measures were administered. During the baseline, via a bug-in-the-ear and through an observational glass, parents were instructed to engage their children in four BPICS coding scenarios: child-led play, parent-led play, clean-up, and the BAT.

### *Intervention*

The intervention included the B-CDI module, followed by either the B-PDI module or B-MIND module, depending on the participant's assigned condition. The ECBI, SCAS-P, PAS, and DAR were administered weekly. BPICS coding occurred in all sessions that included the child.

### *Graduation*

During the final session, the assessments measures (ECBI; SCAS-P; PAS; DAR) and behavioral observations (BPICS; BAT) were administered.

### *Follow-up*

After 2 weeks, the ECBI, SCAS-P, PAS, DAR, and the ADIS-5 were administered to the parent once again.

### *Measure Administration*

Parents of participants aged 3–5 and aged 6–7 completed the PAS and the SCAS-P, respectively. Parents of all children completed the ECBI and DAR. Measures were administered in the waiting room before every session, except for the DAR form, which was provided weekly but filled out daily at home.

## *Results*

### *Diagnostic Interview (ADIS-5)*

At follow-up, three participants of the seven no longer met criteria for any prior diagnoses. All seven participants no longer met criteria for at least one of their pretreatment

anxiety disorder diagnoses and four participants no longer met criteria for any anxiety disorder. Four participants no longer retained any disruptive behavior disorder diagnosis while five participants no longer met criteria for at least one of their pretreatment disruptive behavior disorder diagnoses (Table 2).

#### *Behavioral Approach Test*

Six out of seven participants completed more BAT tasks posttreatment compared to pretreatment (Figure 6). Participant G3 refused to participate in the posttreatment BAT. Of the participants who did engage in the posttreatment BAT, and additional three exposure tasks were completed, on average, as compared to the pretreatment BAT.

#### *Disruptive Behavior*

All participants' ECBI scores decreased between baseline and follow-up (Tables 3 and 4). All participants' ECBI scores were below the graduation criteria for traditional PCIT ( $<114$ ;  $t = 55$ ; Eyberg, 1980), and far below the clinically significant cut-off ( $<132$ ;  $t = 60$ ; Eyberg, 1980). The mean reduction between the first and last ECBI scores for each participant was 46.42 ( $t = 13.14$ ). All participants demonstrated reduction in disruptive behavior at follow-up as compared to baseline averages, while two participants (A1 and G3) maintained their ODD diagnoses posttreatment.

#### *Parent-Rated Anxiety*

All participants saw a reduction on the PAS and SCAS-P Total Anxiety Scores between the first and last administration, with a mean reduction of  $t = 9.86$ . All but one participant experienced a reduction in their Total Anxiety Score at follow-up as compared to baseline (Tables 5 and 6). With the exception of G3, all participants experienced reductions in their specific diagnosis subscales as well, with a mean reduction of 8.4 across subscales for all participants. Participant E2, who started SSRI medication mid-treatment, had baseline subscale scores well above the normative population for Total Anxiety ( $t = 61.6$ ), SA ( $t = 55$ ), and GAD ( $t = 63$ ). At follow-up, E2's subscale scores were all below that of the normative population (Total Anxiety = 51; SA = 45; GAD = 41). This, in addition to no longer meeting criteria for any of the four disorders diagnosed at pretreatment, suggests that combining treatment and psychiatric medications may be especially effective. This is supported by prior research in which combined medication and CBT treatment was shown to be more effective than medication or CBT administered independently (Piacentini et al., 2014).

Regarding the Daily Avoidance Ratings (DAR), five of seven participants showed a reduction in DAR scores at follow-up as compared to baseline. The DAR scores in those five participants averaged a decrease of 58% (1.73 points), with a starting average of 2.98 (out of 8) at baseline. Of the other two participants, one did not provide follow-up data and the other saw an increase from baseline (1.2) to follow-up (3.38).

#### *Positive Parenting Skills*

The B-CDI skills increased for all participants' mothers at follow-up as compared to baseline, with the exception of the graduation session for E2. However, all of E2's sessions prior to the graduation session showed an increase in B-CDI Skills as compared to baseline. The mean increase in the number of B-CDI skills used by parents during 5 minutes of coding, from baseline to follow-up sessions, was 23. The exposure "Do Skills" increased for all mothers at follow-up compared to baseline, except for G3, who refused to participate in the follow-up BAT. The mean increase in the number of exposure "Do Skills" from baseline to follow-up was 13.66. The CDI Don't Skills (Questions,

Commands, Criticisms) were reduced for all participants at follow-up as compared to baseline, without exception, with the mean reduction being 18.86 skills.

#### *Parent Treatment Satisfaction*

The possible range of scores from the adapted TAI measure is between 10 and 50, with a score of 50 indicating the greatest satisfaction with the program being evaluated. The TAI total scores ranged from 37 to 49, with a mean score of 44.

### **Discussion**

The Brave START program is a novel, comprehensive, transdiagnostic adaptation of PCIT that provides clinicians with content modules to target a variety of problematic behaviors, flowcharts to coordinate these modules, and guidelines for conducting PCIT-informed exposure sessions for various anxiety disorders. It combines the central components of modularity (Chorpita et al., 2005b) with the principles of operant conditioning, respondent conditioning, exposure therapy, evidence-based parenting practices (e.g. PCIT), and skills from DBT (e.g., “validation” and “BRAVE MIND,” a variation of “Wise Mind”). In this treatment program, parents were taught to differentiate between their children’s oppositional and anxious behaviors and respond to them differentially with evidence-based approaches. Parents were trained to judiciously use antecedents (modeling, incentivizing, negotiating, validation) and consequences (behavior descriptions, reflections, effective praise, deliberate ignoring, and material rewards) to shape their children’s brave and prosocial behaviors. The findings from the study provide evidence that the Brave START program shows promise in reducing anxiety and comorbid disruptive behavior in children, as well as improving parenting skills.

#### *Child and Parent Outcomes*

Perhaps one of the strongest aspects of the current study is the persuasive and consistent child and parent outcomes. Between baseline and follow-up, all child participants showed a decrease in disruptive behavior, anxious, and avoidant behaviors on at least one of the various measures. After engagement in the Brave START program, three out of seven participants (42%) no longer met diagnostic criteria for any of their prior comorbid anxiety or disruptive behavior pretreatment diagnoses.

Brave START showed encouraging results in the treatment of anxiety disorders as 100% of participants ( $n = 7$ ) no longer met diagnostic criteria for at least one of their pretreatment anxiety disorders and 57% of participants ( $n = 4$ ) no longer met criteria for any anxiety disorder. Approach behaviors demonstrably increased, given that six out of seven participants (85%) completed more BAT tasks. Decreases in anxiety were also observed by parent-rated measures. Scores on the PAS and SCAS-P subscales indicate that all parents noticed an observable reduction in their child’s anxiety symptoms at the end of treatment.

The present study also showed favorable results in the reduction of disruptive behavior as 71% of participants ( $n = 5$ ) no longer met diagnostic criteria for at least one of their pretreatment disruptive behavior disorders and 57% of participants ( $n = 4$ ) no longer retained any disruptive behavior diagnosis at follow-up. Five of the seven participants had baseline ECBI scores that were clinically significant ( $\geq 13$ ;  $t \geq 60$ ), and the remaining two participants had baseline ECBI scores above the PCIT graduation criteria ( $<114$ ;  $t < 55$ ). The results showed that all seven participants’ ECBI scores decreased below PCIT graduation criteria, demonstrating that all parents observed reductions in their child’s disruptive behavior and that no participants had clinically significant disruptive behavior as measured by the ECBI at follow-up. In terms of parent outcomes, all

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parents showed improved parenting skills, as positive parenting skills generally increased and negative parenting skills generally decreased, which is in line with parent skill development in traditional PCIT. The reductions in child anxiety and behavior problems as well as increases in positive parenting skills provide preliminary evidence for this transdiagnostic, modular, in-vivo parent coaching protocol in the treatment of comorbid anxiety and disruptive behavior disorders.

Although the DAR showed a reduction in avoidant behaviors among most participants, these results should be interpreted with caution. Given that parents were required to provide a daily rating over the course of several months (ranging from 4.8–8.8 months), it was perhaps unrealistic to expect that parents would provide thoughtful ratings on a daily basis. Some parents reported having difficulty remembering to record ratings daily and would often retroactively attempt to remember avoidance while filling it out one week at a time.

The present study serves as a preliminary investigation into the sequence of modules and whether they are predictive of outcomes. It is potentially true that certain presentations (e.g., comorbid disruptive behavior that is primarily the function of anxiety) will be better treated by tailored modular sequencing of evidence-based interventions. If so, flexibility in the application of modules may still be an important area of study, though not directly supported by the present data.

The clinical outcomes of the present study are in line with related extant research highlighting the efficacy of PCIT and its adaptations (Elkins et al., 2016; Phillips & Mychailyszyn, 2021). Specifically, results aligned with findings from larger clinical trials demonstrating decreases in disruptive behaviors (Ward et al., 2016) and anxiety symptoms including those of separation, social, and generalized anxieties (Comer et al., 2021), and increases in positive parenting skills (Thomas et al., 2017).

#### *Limitations*

There are several limitations to the current study. As a single-subject design, the sample size is small, which limits the generalizability of these findings and does not hold enough power to accurately piece apart the impact of modular sequencing on outcomes. As visual inspection of the data was utilized in order to determine the rate and magnitude of change in the outcome measures, the absence of advanced statistical analysis is also a limitation. The ADIS-5 administration may also be subject to investigational bias, as the primary investigator administered the ADIS-5 to all participants pre- and post-intervention and was not blind to the participants' conditions. These results

should be interpreted with caution.

Additionally, the parent behaviors coded during exposures were highly dependent on the exposures at hand, which were often unpredictable. Given that the BPICS coding system was created for this study, the validity and reliability of this measure requires further clarification.

Moreover, the sample lacks diversity, as six of the seven child participants were White and only one was male, and all parents were in heterosexual relationships. Additionally, only mothers participated in completing the measures consistently. Two fathers attended many of the sessions, but these fathers did not complete any of the measures.

In an effort to target multiple diagnoses, the intervention was rather long. Consequently, the natural social, emotional, and biological development expected during 8 months of early childhood alone may have contributed to the changes in child behaviors and anxiety symptoms throughout the study.

Another limitation is that follow-up occurred only 2 weeks posttreatment. A long-term follow-up would prove beneficial in determining whether gains were maintained long after treatment ended.

### *Future Directions*

There are several areas of potential further research. Future studies would do well to increase the diversity of the participants. Race, ethnicity, child gender identity, parent gender, and sexual identity are variables worth investigating, among others. Additionally, an investigation of Brave START with a larger sample size and higher statistical power to identify the effect of modular sequencing is necessary. The question of whether or not disruptive behaviors should be targeted prior to conducting exposures is still debated within the field and requires continued investigation. It may be useful for future research to utilize more sophisticated methods (i.e., coordinated strategic action model; Chorpita & Daleiden, 2018) to analyze modular components, decision and coordination rationale, and real-time feedback to aid in the thoughtful application of the evidence-based interventions within the foundation of Brave START.

It would be informative to compare the Brave START and CALM programs in treating early childhood anxiety disorders. Rather than promoting the use of direct commands during exposures, the Brave START protocol teaches parents to provide children with choices (“would you rather speak to the child or the adult?”) and to use if-then statements tied to incentives (“if you speak to the child, you earn one sticker, but if you speak to the adult, you earn two stickers”). Further investigation into the effectiveness of using Brave START’s “BRAVE MIND” skills versus CALM’s “DADS” skills is warranted. Lastly, the CALM and Brave START studies lack a wait-list control group, as do other PCIT adaptation investigations (Carpenter et al., 2104), so including one would be beneficial in the future.

### *Conclusion*

The results of the current investigation evince preliminary support that the Brave START program can help reduce anxiety and disruptive behavior in children while improving parenting skills. Although further research is necessary to solidify the effectiveness of this treatment, the results herein demonstrate that training parents to differentially respond to their children’s anxious and oppositional behaviors helps to reduce these behaviors. This study augments the existing research base supporting the use of in-vivo parent coaching in treating various early childhood disorders. Lastly, the Brave START program shows potential in addressing the prevalence of comorbid anxiety and disruptive behaviors in early childhood. The protocol’s transdiagnostic and modular

nature may aid in the dissemination and implementation of evidence-based treatment to effectively address the prevalent comorbidities found in early childhood clinical practice.

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## Breaking The Cycle: Treating Intergenerational Trauma With Trauma-Focused ACT

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IN SOCIETY, parents and caregivers have a role in helping the future generation grow and prosper as productive adults. Parents teach their children emotional and social skills. However, some parents might need help developing these skills themselves (Khuu, 2020). There is an expectation for parents and caregivers to be influential role models for their children, but what if parents and caregivers teach maladaptive skills? Overtly or covertly, teaching maladaptive skills can cause harm.

In a child's eye, his or her parent may be a superhero that cannot be hurt. However, everyone experiences pain to some degree, whether physical, like getting a paper cut, or emotional, like losing a loved one (Payne, 2022). Physical pain can be easier to experience or witness than emotional suffering. People cope with emotional suffering differently in their lives. Some individuals acknowledge their pain, heal, and move forward, while others ignore their pain until it becomes too much, or dwell in their pain until it turns into suffering or anguish (Payne). When someone cannot cope with their pain, they may become tremendously harmed by their suffering and harm the people around them. For instance, unchecked or uncontrolled pain can be harmful to a person: it affects their motivations and drive. It decreases the individuals' self-esteem (Payne).

Parents are models for their children. However, if a parent models an ineffective way to handle emotional pain and suffering, then pain will not only persist in the parent's life but in their children's lives as well. Emotional suffering can come from many things in life. To address the consequences of enduring pain, this article examines the sources of emotional suffering that result from intergenerational trauma. This paper also analyzes how a new therapy model, Trauma-Focused Acceptance and Commitment Therapy (TFACT), can be used to raise awareness of trauma, relieve pain symptoms, and address the cycle of suffering that results from intergenerational trauma.

### Trauma

"Trauma is the Greek word for wound, and psyche is the Latin word for soul. From these ancient words, we get both the clinical term psychological trauma and the poetic term soul wound" (Harris, 2021, p. 2). Trauma is not just a sum of traumatic experiences, but also the current imprint of the pain, horror, and fear that lives inside one from those experiences (Van der Kolk, 2014). Van der Kolk shares many examples of human suffering from unresolved trauma. People with wounded souls often have core beliefs that they are beyond redemption or forever damaged. These beliefs are rooted in their fear of being negatively viewed or rejected by others because of their experiences (Van der Kolk). People who do not take the time to build awareness of their experiences often lose themselves in these beliefs. Terror and isolation are at the core of trauma and reshape our brains and body (Van der Kolk,). Van der Kolk discusses how biologically, humans are wired to express an emotional or physical reaction to experiencing trauma. Most individuals who have experienced trauma want to move away from it. An example of this is when people avoid trauma responses. Biology shows that the human brain is not programmed to cope with traumatic experiences. Instead, many indi-

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**Biology shows that the human brain is not programmed to cope with traumatic experiences. Instead, many individuals use denial as a defense mechanism, which provides a false sense of survival. Furthermore, when people ignore the residual effects of experiencing trauma and pain, suffering may become exacerbated for the individuals and those in their lives.**

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viduals use denial as a defense mechanism, which provides a false sense of survival. Furthermore, when people ignore the residual effects of experiencing trauma and pain, suffering may become exacerbated for the individuals and those in their lives. Despite the denial and false sense of survival, people may experience thoughts and feelings that relate to their past traumas, which can be used to foster growth in overcoming that trauma (Van der Kolk).

An abundant current literature discusses traumatic experiences that occur between the parent and child (Bachem et al., 2018; Freeberg, 2023; Joe et al., 2019; Khuu, 2020; McDonnell et al., 2022; Menakem, 2017; Robinson, 2022; Subasi et al., 2022). Unprocessed or unresolved trauma in the early stages of childhood has significant long-term effects on children's health and behaviors throughout the lifespan (Shin et al., 2023). Parents who are survivors of trauma can unconsciously or consciously pass down their trauma, known as intergenerational trauma. This keeps that trauma alive throughout generations.

### **Intergenerational Trauma/Inherited Trauma**

Intergenerational trauma has many synonyms: cultural trauma, historical trauma, inherited trauma, transgenerational trauma, secondary trauma, and multigenerational trauma (Freeberg, 2022; Joe et al., 2019; Lee et al., 2023; Pol-Lim, 2018; Robinson, 2022). Many studies integrate any combination of those terms to discuss the process of intergenerational trauma. Before describing the process, cultural or historical trauma should be identified as a contributing factor to inherited trauma. Cultural trauma is when a group has been subjected to a horrific event that leaves unforgettable marks on the group's consciousness and forever changes the group's identity (Danieli, 2007). Populations that have experienced cultural trauma include survivors of the holocaust and their descendants and enslaved Africans and African Americans and their descendants. Like cultural trauma, historical trauma refers to populations historically subjected to long-term, massive trauma such as colonialism, slavery, war, and genocide (Sotero, 2006). Furthermore, historical trauma theory suggests populations that survived war, slavery, long-term colonialism, and genocides also display later symptoms of depression, isolation, memory loss, hypervigilance, depersonalization, denial, survivor guilt, unresolved grief, nightmares, and fixation on trauma (Pol-Lim, 2018, p. 10; Sotero).

The process of transmitting intergenerational trauma can be examined from a cultural lens. Menakem (2017) suggests that intergenerational trauma occurs in multiple aspects through families, unsafe or abusive systems, and our genes. Furthermore, cul-

tural trauma in the African American community is internalized and embedded and then passed down from one generation to the next (Menakem). Menakem explains this process: Individuals may not remember past traumatic experiences that later internalize into traumatic responses. These responses are usually viewed by others as a personality defect. When these internalized responses get passed down from generation to generation, they will start to be viewed as culture. Clinicians call this traumatic retention (Menakem, 2017).

An example of trauma retention is minority groups experiencing corporal punishment as a part of their upbringing or culture, especially in the African American community (Menakem, 2017). Menakem (2017) discusses his experience as a child, being asked to give his grandmother branches off a willow tree and watching his grandmother make a switch out of those materials. He knew the switch would be used for future punishments. He reflects on how his grandmother's grandparents worked on a sharecropping plantation where they were whipped repeatedly as punishment from their enslavers. Menakem recognizes the behavior of whipping someone until they are obedient or submissive as internalized oppression that is passed down from generation to generation. Overall, cultural trauma provides insight into the prevalence of intergenerational trauma in today's society.

There is significant literature on the impacts of intergenerational trauma on family systems (Bowers & Yehuda, 2016; Danieli, 2007; Lee et al., 2023). For example, Danieli explains the link between cultural trauma and the transmission of intergenerational trauma within families. Intergenerational transmission is when children learn how to interact with their surroundings, similar to how their parents react in the same environment (Bowers & Yehuda; Lee et al.). The populations that were examined included generations of Cambodians, Japanese, Jewish, Latin American, and Southeast Asians (Danieli). Danieli reported, "From this perspective, the most malignant component of the transmission is the raw, unintegrated effect that has never been processed in the parents' generation, consequently, becomes internalized in the children in another place and time" (p. 76). The unprocessed trauma leaks into the offspring's lives and cements, which creates a secondary traumatic effect. Intergenerational trauma affects central themes in the family context, including children's behaviors and how the exposed children will parent as adults.

#### *The Initial Changes in Childhood*

To work towards disrupting the cycle of intergenerational trauma, it is important that caregiver trauma or trauma within the family system be brought to the forefront of the conversation when discussing intergenerational trauma (McDonnell et al., 2022). Examining parental trauma is imperative because the children of abused parents and caregivers are particularly at risk of experiencing childhood abuse (McDonnell et al.). Studies have discussed the genetic and environmental factors within the transmission of trauma between parents and their children, including children's everyday actions when experiencing secondary trauma (Bachem et al., 2017; McDonnell et al.; Robinson, 2022). Two examples that will be used to illustrate this are recidivism and parents suffering from posttraumatic stress disorder (PTSD).

Freeberg (2023) conducted a study to identify if intergenerational trauma was a leading factor in recidivism in minors. Recidivism is a person's relapse into criminal behavior, often after receiving sanctions or undergoing intervention for a previous crime (Freeberg). The challenges that come along with recidivism can influence the progress of the youth's residential treatment (Freeberg). The study examined whether the pres-

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## Intergenerational trauma affects central themes in the family context, including children's behaviors and how the exposed children will parent as adults.

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ence of mothers was unhelpful to children's progress in residential care. Freeberg established that there was a relationship between intergenerational trauma in family systems and youths' progress in residential care. The children reported that their mother's depressive symptoms were due to traumatic experiences. As a result, the children became overwhelmed by their mothers in spite of their attempts to make progress while in residential care. Freeberg established a link between the mothers' depression and children's trauma symptomology. The results found the need for community-based intervention and the incorporation of psychoeducation on intergenerational trauma as a part of the residential treatment program to help reduce recidivism (Freeberg).

Another study (McDonnell et al., 2022) discussed parents with PTSD who experienced physical, emotional abuse, and continued suffering from the effects of the abuse after having children. PTSD occurs when an individual has been subjected to a shocking, grotesque, dangerous, or traumatic event (McDonnell et al.). People with this disorder often have difficulty recovering from their traumatic experiences or exposure to traumatic events (McDonnell et al.). Some symptoms of PTSD that are included in the *Diagnostic and Statistical Manual of Mental Disorders (DSM-5)* are unwanted memories, heightened reactions, depressed mood, and anxiety (American Psychiatric Association, 2013). McDonnell et al. examined intergenerational trauma in autistic youth whose parents were diagnosed with PTSD and reported inflicting physical and emotional abuse on their children. McDonnell et al. found that the children of parents with PTSD had high levels of irritability and hyperactivity in multiple settings.

Similarly, McDonnell et al. (2022) found that the highest number of youth hospitalizations, especially those that occur within the first 2 months before being admitted to inpatient care, are youth whose parents experienced childhood abuse and were diagnosed with PTSD (McDonnell et al.). To address this problem, parents who have suffered from traumatic experiences such as physical or emotional abuse may need opportunities to process the thoughts, feelings, or memories related to their trauma. Doing so provides a protective factor for their children, given that the parents processing their trauma minimizes the risk of those parents reenacting their traumatic experiences with their children.

Child behavior often becomes negatively influenced when a child is exposed to secondary trauma, and those behaviors may present as increased aggression or hypervigilance (Subasi et al., 2022). Aggression is a violent behavior or attitude toward another person (Subasi et al.). Hypervigilance is a heightened awareness of potential threats to oneself or others. Further consideration must be given to what happens when the child becomes a parent (Joe et al., 2019). In other words, what influence does secondary trauma have on a parent's parenting?

### *Parenting Styles*

When family systems are unaware or unconscious of the negative behavioral patterns being transmitted, they are bound to repeat this transmission to the next genera-

tion (Robinson, 2022). The younger generations of parents tend to internalize their childhood experiences with their parents, and this, in turn, affects their parenting style. Some parents might get stuck on feelings they had during childhood when experiencing secondary trauma. Other parents and caregivers might ignore their feelings as a way of coping. Parenting styles are psychological constructs representing parents' strategies to raise their children (Yilmaz et al., 2021). These constructs are related to how and to what extent the parents respond to children's physiological and psychological needs (Yilmaz et al.). Several studies discuss the link between intergenerational trauma and styles of parenting, which will be reviewed in the following sections.

#### *Helicopter Parenting*

When parents let their thoughts and emotions become too overwhelming, they can become overbearing or helicopter parents. Helicopter parents care for their children, but may become obsessed, overly protective, and highly programmatic, striving for their child to be perfect (Yilmaz et al., 2021). These attributes can transfer to or manifest as stress and anxiety in the child. A study by Joe et al. (2019) discusses helicopter parenting styles in African American mothers. The mothers experience hypervigilance and psychological distress as a result of the racial and social contexts to which they are exposed. African American mothers do not just concern themselves with random incidents of violence, but also the continuous systematic experiences of psychological trauma spanning across decades (Joe et al.). Mothers expressed experiencing race-related PTSD symptoms from indirect violent experiences (Joe et al.). Race-related PTSD is defined as the body's recurrent or inescapable sense that danger is just around the corner or something terrible will happen at any moment (Menakem, 2017). This overlooked trauma response is called trauma ghosting (Menakem, 2017). In response to their race-related PTSD, African American mothers attempt to protect their sons through overprotective and hypervigilant parenting (Joe et al.). More specifically, mothers reported micromanaging, hovering over, and limiting the movement of their sons (Joe et al.). The mothers' actions caused their sons to experience emotional distress. Another response to race-related PTSD seen in African American mothers is emotional distance and empathic isolation (Menakem). For instance, in both the home and work settings, mothers would put on "masks" to hide their emotions for the benefit of others. By masking their emotions, they believe they are preventing any future harm from exposing their emotions to their sons. Hiding emotions or ignoring them has been a common thread in literature.

#### *Silent Parenting*

In some cultures, parents respond to their experiences of trauma by staying silent (Khuu, 2020). Khuu studied the intergenerational trauma between first generations of Vietnamese Americans (FGVA) and second-generation Vietnamese Americans (SGVA). Both generations seem to adopt the trait of being silent and not sharing their emotions. The FGVA experienced direct trauma while participating in the Vietnamese war and hid behind their pride and self-determination as a "coat of armor," ultimately diminishing their ability to be vulnerable (Khuu, p. 136). It was found that FGVA experienced unexplained anger in different settings and ignored the fact that those moments resulted from their experiences of trauma (Khuu). FGVA parents often isolate themselves emotionally and physically (Khuu). Khuu stated that there was an overall theme of silence among the participant's parents, to which the trauma contributed. One of the sub-themes of silence was the next generation continuing that trait with their children.

SGVA reported that their parents' inability to disclose their feelings and thoughts

was taught to them, and they realized that they incorporated this into their parenting (Khuu, 2020). SGVA participants discussed the messages they often received from the first generation, including that they should be grateful for their lives or that their life is not so hard. These messages invalidated second generation's emotional states, mental states, and life experiences (Khuu). These messages stem from beliefs and values that are derived from experiencing trauma. These “values” or “beliefs” are communicated directly or indirectly. SGVA parents might relay these messages through lectures or demands (Khuu). SGVA parents recognized the effects it has on their relationships with their children. For instance, participants realized they still wanted to reclaim a deep connection with their parents, despite never having experienced praise or validation for their achievements. SGVA are acting out their yearning for connection in relation to their children (Khuu). Khuu also makes a connection between FGVA values and authoritarian parenting.

#### *Authoritarian, Authoritative, and Permissive Parenting*

Intergenerational trauma has also been linked to Baumrind's (1971) three styles of parenting: authoritarian, permissive, and authoritative. Historically, Holocaust survivors were characterized as having an authoritarian parenting style by their descendants (Yaffe, 2017, as cited in Khuu, 2020). Furthermore, Subasi et al. (2022) looked at Turkish mothers who experienced childhood trauma vs. Turkish mothers who did not and how it affected their way of parenting.

They found that with greater instances of childhood abuse, authoritative parenting styles decrease (Subasi et al., 2022). However, permissive and authoritarian parenting styles increase with greater childhood abuse occurrences (Subasi et al.). The emotional abuse was further described as emotional neglect and maltreatment from the children's parents (Subasi et al.). Parents who have experienced direct or indirect trauma allow these traumatic responses to leak into their relationships with their children. This results in continuing the cycle of children witnessing and holding that trauma. Parents have these beliefs that shielding their pain, focusing more on their child's achievements, and protecting their children from the world's dangers will benefit the future generation; however, these same beliefs can be a way to ignore or dwell on their past experiences (Subasi et al.). If parents conceal their pain or make their child the main focus, they are likely not aware of the impact of their trauma experience. Parents might use protection for their children as an excuse to dwell on the fact that the world has traumatized them, and they cannot move forward.

These parents would benefit from a solution to help them gain awareness and acceptance of their pain, decrease the weight of their fears or core beliefs, and reverse their cycle of suffering. Trauma-focused acceptance and commitment therapy (TFACT) is a solution that could be applied.

### **Acceptance and Commitment Therapy**

"Acceptance and commitment therapy (ACT) is an existential, humanistic, mindfulness-based, cognitive behavioral therapy" (Harris, 2021, p. 8). ACT's aim is to help people reduce psychological suffering and build rich, meaningful lives (Harris). ACT is based on relational frame theory (RFT), a theory of language and cognition. RFT states that human language and cognition can mutually associate unrelated events, and individuals can establish relationships and connections between events (Harris et al., 2006, as cited in Dursun & Akkaya, 2022). RFT focuses on the effect of language and cognition on the level of pain experienced by other individuals. In other words, painful experiences in one's environment may affect how an individual speaks or thinks. Chal-

lenging these effects on language is one of the main goals for ACT (Dursun & Akkaya, p. 341). In relation to RFT, ACT wants individuals to learn how to live with their painful experiences, instead of avoiding them. ACT's only solution to foster this amount of acceptance and awareness is to help people become psychologically flexible (Dursun & Akkaya, 2022, p. 341). Psychological flexibility is a skill that allows people to act appropriately when understanding their pain and use their values to guide or reinforce their actions to create a better life. If individuals have greater psychological flexibility, their quality of life will improve. This is reached through being fully conscious, opening to one's own experience, and acting in line with their values. Psychological flexibility enables people to respond effectively to their problems and develop deep meaning and purpose (Harris, p. 11). Psychological flexibility is at the forefront of the ACT Hexaflex. The hexaflex includes six core processes:

- **Contact with the present moment** – developing an awareness of yourself.
- **Acceptance** – making spaces for those unwanted thoughts, emotions, sensations, and memories.
- **Cognitive defusion** – taking the time to acknowledge those thoughts or feelings but not letting them become overwhelming.
- **Self-as-Context** – creating a moment to imagine yourself in the future or past and being a witness to others' viewpoints or perspectives. It gives individuals an opportunity to take a step back and make room for difficult thoughts and feelings when needed to be observed.
- **Values** – Values are not limited to someone's tradition, or morality. It explores personal values like friendship, knowledge, honesty, or wealth. It is establishing a person's desired behavior of others and themselves.
- **Committed Action** – following those values, using the inspiration to keep those values by creating an action plan or goal to work on in and outside therapy (Harris, 2021, pp. 9–11).

### *Pain vs. Suffering*

Payne (2022) conceptualizes ACT and discusses it as a solution for traumatized African Americans. ACT is a psychological intervention that allows people to use their pain to get closer to what individuals care about or value in life. ACT encourages therapists to explore human responses to pain and normalize their experience of suffering instead of blaming the victim (Payne). Normalizing can help with teaching the difference between pain and suffering. Pain is a part of life, while suffering is a choice. Suffering can relate to those insufficient coping mechanisms employed by people dealing with intergenerational trauma, avoidance, the need for control, and self-medication (Payne). Payne expands on the psychological flexibility element of ACT. Psychological flexibility builds awareness for suffering people who cannot see a way out. Being psychologically flexible is the ability to witness your own painful experiences and consciously choose to move forward in a direction that aligns with your values (Payne). Payne also argues that psychological flexibility creates moments of freedom: the freedom not to be tied down to our thoughts and emotions. Through the lens of ACT, freedom is the ability to experience one's own pain but not let that pain dictate one's life (Payne). ACT also benefits people suffering from pain or trauma and wanting to improve their lives (Payne; Sairanen et al., 2022; Waern, 2018). As previously discussed, parents conceal their pain from their children and obsess over their children's lives (e.g., grades, safety, and success) as an unconscious or conscious way to avoid the exploration of their feelings or traumatic experiences, developing the cycle of suffering. Conversely, parents dwell on their feelings,

reinforcing their obsessive acts over their children's lives. For instance, parents suffering from trauma often take on obsessing actions like being hypervigilant in their children's lives or using an authoritarian parenting style (Khuu, 2020; Waern, 2018). Incorporating ACT concepts of acceptance and cognitive defusion may help parents decrease their avoidant behaviors.

#### *Awareness vs. Avoidance*

ACT capitalizes on being in the present moment, self-as-context, and acceptance to build awareness (Sairanen et al., 2022). Sairanen et al. investigated the benefit of an online ACT intervention on parents experiencing burnout with their children. The study examined the parents and their children's quality of life through self-reporting. The researchers explained that some components used in the intervention were non-reacting to one's inner experiences and acting with awareness. Parents who can communicate with their children in an adaptive manner can also look inward at their own traumatic experiences (Sairanen et al.). The researchers also found that using these mindful parenting styles indicates positive psychological functioning and decreased stress, depression, and anxiety for the parents (Sairanen et al.).

Waern (2018) presented a case study of parents incorporating acceptance and being in the present moment as tools to help a mother with her issues with being hypervigilant around her daughter. The mother had conflicting feelings and beliefs regarding her daughter's illness. She spent considerable time searching for alternative treatments for her daughter. Using ACT principles, the mother realized that these actions hindered her from spending time with her daughter (Waern). The mother began to accept the pain she felt for her daughter. She understood how ignoring these intense emotions only ensured her need to find a solution. Instead of being her mother, she tried to become her savior (Waern). Once she realized acting this way was hindering her relationship with her daughter, she decided to take a moment and finally become present (Waern). This mother was able to be in the present moment in different settings and not let herself get trapped in her thoughts. She realized that despite her daughter's illness, she could enjoy Christmas like other children (Waern). The mother's story ended in a positive light as she gave herself time to witness her feelings and thoughts. Even after experiencing those thoughts, she took the time to be in the moment with her daughter instead of obsessing over her daughter's illness. By establishing that awareness, ACT helped this woman understand her feelings and negative thoughts. Building this awareness is the first step in the battle, and finding ways to let go of those negative thoughts and emotions is the next step.

#### *Control vs. Freedom to Let Go*

Clinicians understand that people might obsess over negative thoughts and feelings (Payne, 2022). The "inner battle" is described by Payne as how people attempt to control their feelings, creating physical and emotional weakness. The solution ACT provides is defusion, which will not eliminate one's thoughts or emotions but help one overcome the struggle with those thoughts (Payne). Payne discusses her experience dealing with overpowering thoughts and emotions, which affected her behavior in multiple settings (home, school, work). Payne explains that people "handcuff" themselves to their thoughts, and using defusion helps people get rid of those cuffs or "unhook" (Payne). "ACT helps us alter our relationship with thoughts, freeing us from an enslaver/enslaved person relationship with each thought" (Payne, p. 72). It helps individuals not to limit themselves or place themselves in a box. ACT stops people from being reactive and

develops proactive actions/thinking. Although painful thoughts remain, they no longer take over someone's life.

Payne (2022) also shares a case study of an overweight Black woman stuck in harmful habits. The reason for her habits was her thoughts. Despite valuing good health, she consistently believed she would always be fat (Payne). An ACT therapist helped her find the agency to unhook or unshackle herself from those thoughts to move forward and work towards her value of good health (Payne). This literature helps support the efficacy of ACT components for people who avoid thoughts or feelings and have a high need for control. This relates to how parents suffering from intergenerational trauma often cope with negative and unprocessed emotions or thoughts. People might argue that individuals who suffer from direct or indirect trauma have difficulty unhooking (Payne). In those instances, the therapist can incorporate trauma-focused acceptance and commitment therapy.

### Trauma-Focused ACT

TFACT does not solve just one specific disorder (Harris, 2021). TFACT draws upon many different approaches, including transdiagnostic, exposure-based, interpersonal, integrative, compassion-based, bottom-up, top-up, comprehensive, and brief. For parents dealing with intergenerational trauma, approaches that could be most beneficial include transdiagnostic, integrative, and compassion-based (Harris, 2021). The transdiagnostic approach, being flexible with diagnoses, will help people who suffer from trauma and are likely to show comorbid disorders. The integrative approach provides the opportunity to include attachment theory, which may help parents establish the link between their relationship with their children and their relationship with their own parents. The compassion-based approach helps build self-compassion and understanding of one's pain and suffering. Responding to intergenerational trauma with authentic kindness may further the healing and recovery progress (Harris, 2021).

Beyond the transdiagnostic, integrative, and compassion-based approaches, TFACT also capitalizes on trauma-sensitive mindfulness (Harris, 2021). Mindfulness ensures effective living through having a flexible, open, curious, and kind mindset (Harris, 2021). One aspect of trauma-sensitive mindfulness is cultivating flexible attention. Flexible

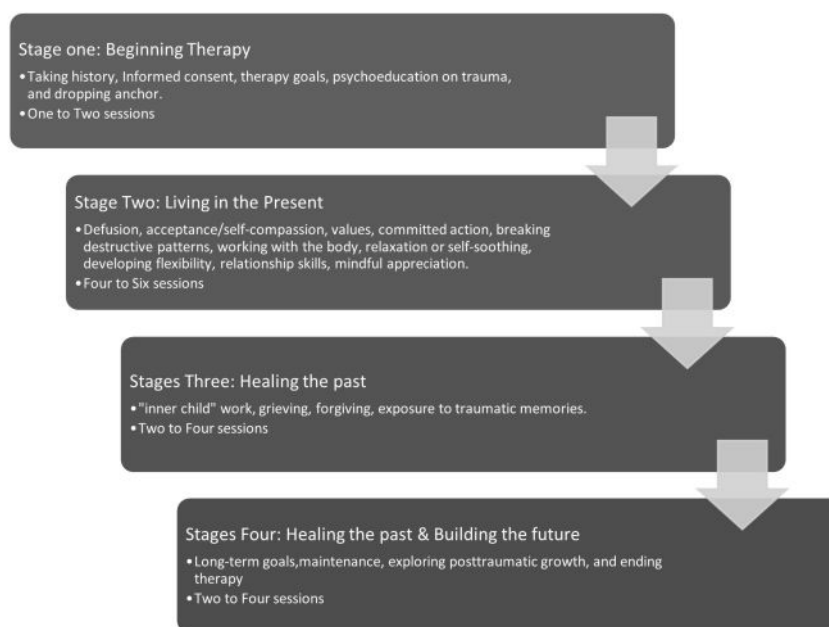


Figure 1. Harris' Four Flexible Stages

attention is accepting unwanted emotions and refocusing on useful or meaningful things in life (Harris, 2021). Flexible attention gives humans the opportunity to broaden, narrow, sustain, or shift their attention to different aspects of their “here-and-now experience” (Harris, 2021, p. 35). TFACT includes three strands that apply to trauma-related issues: living in the present, healing the past, and building the future (Harris, 2021).

- **Living in the present** – teaching clients’ ways to center themselves, realize moments when they are disengaging, connect with themselves emotionally and physically, regulate overwhelming emotions, develop communication skills, and create a values-based living.
- **Healing the past** – Helping clients understand the link between their past experiences and present-shaped thoughts and feelings. This may include the client doing “inner child” work, exposure to traumatic memories, forgiveness, and grief.
- **Building the future** – Creating values-based goals with the clients and relapse prevention plans to help prepare for the future. The aim for clients dealing with trauma is to create “post-traumatic growth,” which is the client changing positively through understanding the past and applying that strength and insight to their lives, building a better future (Harris, 2021, p. 4).

Harris implements these strands in his four stages of therapy. He breaks down what a TFACT therapist focuses on with a client from the first session to the last. Harris defines this as the stages of TFACT or the “Four Flexible Stages” (Harris, 2021, p. 55).

The stages of TFACT might differ between clients (Harris, 2021). Clients might require more sessions to undergo exposure to traumatic memories or grief, and then create acceptance and defusion depending on the person’s grasp of this concept. The common pitfalls for TFACT therapists are diagnostic labels, active practice, and avoidance from therapists (Harris, 2021). The first is a diagnostic label, defined as the process of clarifying if a person has signs and symptoms of a disease or disorder. Diagnostic labels harm therapy due to the increased stigma, associated with those labels, which is the development of fusion. The fusion process might involve feelings or thoughts of defectiveness or inadequacy. This will affect therapists’ and clients’ goals to help develop effective defusion (Harris). The second hindrance is the omission of active practice. Therapists must practice these skills in session with the client rather than only discussing the process of ACT or giving metaphors (Harris). The final difficulty that is common in TFACT is avoidance from therapists. Therapists might avoid their vulnerable thoughts and feelings, modeling for clients not to explore traumatic memories, memories, or suicidal thoughts. This could lead to ineffective therapy (Harris). Reviewing the literature on ACT and TFACT can be an effective tool to help parents manage their feelings and recurring thoughts related to their traumatic experiences.

### **Limitations**

The literature on transgenerational trauma has significant limitations. Most studies only focus in-depth on certain minority populations affected by intergenerational trauma (Joe et al., 2019; Khuu, 2020; Lee et al., 2023; Payne, 2022; Pol-Lim, 2018; Robinson, 2022). Future investigation is needed with other cultures (e.g., Japanese, Chinese, Korean, Russian) suffering from intergenerational trauma. Another limitation is the high prevalence of self-reporting and case studies from parents and children (Khuu, 2020; McDonnell et al., 2022; Pol-Lim, 2018; Sairanen et al., 2022; Subasi et al., 2022). Future research could implement more objective measures and more rigorous quanti-

tative analyses. Finally, most research focuses on mothers suffering from traumatic experiences (Joe et al., 2019; Subasi et al., 2022; Yilmaz et al., 2021). Future research could investigate fathers' experiences or look at the difference between biological parents versus legal guardians when passing down trauma to children. This can help determine if there is more of a biological or environmental impact. In regard to TFACT, a prominent limitation of this therapy is the common error of not having set goals or fixed direction in therapy (Masuda & Rizvi, 2019). TFACT promotes flexibility in client progress. However, this may hinder clients who would respond to/benefit from a more structured therapeutic process. Additionally, future studies need to assess the efficacy of TFACT; quantitative research specifically can study the potential benefits of TFACT.

Overall, future research implementing new forms of measurement, gaining the perspective of nonbiological legal guardians, understanding the influence of fathers, and expanding to other cultures could enhance the research on how prevalent intergenerational trauma is in society.

### Conclusion

Solutions incorporating trauma-informed care are a promising route for people dealing with intergenerational or inherited trauma. Understanding that trauma-informed care is beneficial supports that TFACT could be an additional solution for parents suffering from intergenerational trauma. TFACT helps clients build awareness and acceptance of their emotions or thoughts after experiencing trauma responses. Then, clients unhook or unhandcuff themselves from their overwhelming feelings and thoughts and no longer experience those thoughts or emotions as devastating. TFACT therapists help their clients identify values and use that information to make new behavioral choices (Harris, 2021; Payne, 2022). Clinicians can incorporate TFACT concepts in therapy. Additional research may examine TFACT as a treatment for individuals exposed to direct or indirect trauma.

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## Introducing a Structured Evocative Activity for Functional Analytic Psychotherapy: A Single-Case Design Study

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FUNCTIONAL ANALYTIC PSYCHOTHERAPY (FAP) is a behavioral therapy that harnesses the contingencies of the therapist-client relationship for therapeutic change. The proposed treatment mechanism involves the therapist's contingent responding to client behavior when interacting within the session. Client behavior in session that is functionally equivalent to daily life behavior is called clinically relevant behavior (CRB). CRB1 denotes problem behavior; CRB2, improved target behavior. The therapist responds in ways that weaken problematic behavior and strengthen adaptive response classes (Kohlenberg & Tsai, 1991; Tsai et al., 2009).

In a typical FAP interaction (Weeks et al., 2012), the therapist observes in-session behavior that is functionally equivalent to problematic behavior and discusses this parallel with the client. As an example, the therapist may say: "You reported feeling threatened when you sense someone gets emotionally close to you. Do you feel my questions right now are evoking that same reaction?"

When the client first answers with a CRB1, such as: "Maybe. I'm not used to it," the therapist might respond by saying: "I understand that to trust someone to the point of letting them get really close to you is a risky decision. At the same time, it might create the kind of connection you said you miss in your life." A CRB2 then might sound like: "I feel like, now you are pushing me about all this, I feel threatened. Yes. You make me feel uncomfortable." The therapist can then reveal something of his or her deepest feelings about the client's candidness: "Knowing how difficult it is and you don't cover it up for me makes me admire you even more. I admire your courage in allowing me to get closer by asking personal questions. I believe we can create a connection here, and later, this experience can help you develop something like this with other people around you. What do you think of that?"

Improved target behavior (CRB2) is often related to clients' ability to self-disclose, while typical problem behavior (CRB1) may be related to a deficient repertoire of expressing needs and feelings (Holman et al., 2017; Tsai et al., 2013; Tsai et al., 2019). This makes talking about difficult topics an expected contribution by the client. It helps therapists to refine the case conceptualization, promotes the development of an intimate therapeutic relationship, and often constitutes CRB2.

While self-disclosure is a key element, its function may vary widely when conceptualized with the use of behavioral principles, as proposed in Interpersonal Behavior Therapy (IBT; Callaghan & Follette, 2020). Research that links behavioral principles to mechanisms of change and treatment outcomes is still scarce and could provide therapists with more effective interventions (Muñoz-Martínez et al., 2022).

Deficient self-disclosure may result from a history of negative reinforcement, pun-

ishment, or lack of positive reinforcement and may be maintained by social reinforcement or escape and avoidance (Callaghan & Follette, 2020). Having difficulty with self-disclosure might hinder the occurrence of improved target behavior in session, thus reducing therapists' opportunities to shape CRB2. In those cases, a typical solution consists of evoking CRB, one of FAP's five basic guidelines alongside instructions for therapists to observe the occurrence of CRB; to reinforce CRB; to continuously assess the therapist impact on CRB; and to share their analyses, promoting generalization of improvements obtained in session (Tsai et al., 2009).

Therapists can either create an evocative therapeutic environment or evoke CRB with specific techniques, such as asking to fill out forms or to analyze lyrics. Such structured tasks rarely emerge in the client's daily life, but they can increase therapeutic intimacy and help clients talk about difficult topics (Nelson et al., 2016; Tsai et al., 2014). While the FAP literature discourages arbitrary therapist responses to CRB, the use of arbitrary tasks to evoke CRBs is not frowned upon, provided it be tied to a clear case conceptualization and functional assessment.

While contingent responding is the most underscored therapeutic strategy, research on evoking CRB is also needed to better understand FAP as a treatment process (Weeks et al., 2012). To date, four studies have investigated evocation in FAP (Haworth et al., 2015; Lizarazo et al., 2015; Mayo & Graciano, 2014; Vartanian, 2017). The literature suggests that evoking CRB without contingent responding might have no substantial effects on self-disclosure or social connectedness (Haworth et al., 2015; Lizarazo et al., 2015), although evoking may be needed to increase the occurrence of CRB to create the opportunity to reinforce these behaviors (Mayo & Graciano, 2014; Nelson et al., 2016; Vartanian, 2017). As far as we know, the use of structured activities as arbitrary evocation strategies has been investigated only by Haworth and colleagues (2015) and its effects still need to be compared to other forms of evocation.

A comparison of arbitrary and natural strategies can provide a better understanding of their capacity to evoke CRB2 and inform interpersonally focused therapies such as FAP and IBT. The present study aimed to investigate the effects of a structured evocation strategy on the frequency of CRB, and to compare it to evocation without the structured activity.

## Method

### *Participants*

Participants were two Brazilian adults who self-referred for treatment at a Brazilian university training clinic. They met the criteria that had been set out for participation in the study: (1) being 18 or older; (2) presenting difficulties with interpersonal closeness, self-disclosure, and emotional expression, by their own reports and by the clinic's screening. Alice and George are fictional names.

Alice was a 19-year-old single cisgender woman. She was a student and lived with two roommates from college. She complained of having difficulty in refusing unreasonable requests, such as doing someone else's academic tasks for them and lending them money. This difficulty became more frequent when she felt sad or vulnerable and it affected her academic performance and finances. While helping others out, she found her problems not important enough to ask for support from people close to her.

As examples of CRB1, when requested to talk about herself in sessions or to analyze possible functions of her behavior, Alice changed the subject, saying her feelings were "silly" or that she did not know how to describe them. When asked about moments when she seemed uncomfortable during sessions, Alice responded with avoidance and

often said that she felt in debt to the therapist for receiving free care. These issues and proposed changes were discussed during the first four sessions of therapy. Changing the avoidance behavior was agreed upon as a goal for therapy and behavior that would improve her ability to negotiate her needs and set limits was targeted for development. As such, expected CRB2 for the client included reporting aversive feelings, accessing the function of her behavior, and providing feedback to the therapist.

George was a 38-year-old cisgender man. He was single, self-employed and sought help to cope with the aftermath of a romantic relationship. After the break-up about a year and a half before, his ex-girlfriend started asking for money and favors. George rarely refused, which generated financial problems. He hardly interacted with anyone outside his family and reported his father and brother treated him aggressively. The only person he considered developing a caring relationship with was his mother.

The therapist identified George's constant complaining about others as a CRB1 with the function of avoiding talking about himself, making it difficult for the therapist to intervene. Sometimes, the client would send text messages during the weekends, to get something off his chest, but he would avoid talking about them in session. As another CRB1, he had difficulty establishing therapy goals, arguing therapy was a place to "vent." However, he accepted the therapist's suggestion that expected CRB2 included talking about his own feelings and behaviors, setting therapeutic goals, engaging in change, and analyzing the function of his own behavior.

A psychology master's student, a Brazilian cisgender woman, implemented the intervention in both cases. She had 5 years of clinical experience and received theoretical and practical training in FAP. Throughout the study, she received weekly clinical supervision from a Ph.D.-level FAP expert (third author).

### *Material and Instruments*

*Dixit.* Dixit is a board game utilizing 84 cards. The cards are illustrated with elements such as tears, musical notes, and facial expressions, among others, usually associated with emotions. Dixit cards were chosen for evocation for the following reasons. As the meanings of the images are vague, they are able to evoke idiosyncratic aspects of the client repertoire. Dixit is available in several countries, facilitating broad replication. Libellud, and its distributor in Brazil, Galápagos Jogos, authorized the use of the game, the mention of the name Dixit, and the reproduction of the images (see Figure 1).



**Figure 1.** Examples of Dixit cards. Note. Dixit is a game by Jean-Louis Roubira, illustrated by Marie Cardouat, edited by Libellud

### *FAP Case Conceptualization Form (Tsai et al., 2009).*

This form, filled out by therapists, includes the relevant history of the client, possible variables maintaining problems, therapeutic goals, and other information. It allows systematization of potential CRB and the therapist's problematic and target behaviors.

*Functional Analytic Psychotherapy Rating Scale (FAPRS; Callaghan & Follette, 2008).* A coding system that provides codes for client and therapist behavior according to its function in the interaction. All the original FAPRS categories were used, with the addition of the code "ERBC," representing evocation through the use of Dixit cards. If a turn appeared to have multiple functions, being assigned two or more codes, the hierarchy provided by FAPRS Manual was followed.

*Functional Idiographic Assessment Template Questionnaire (FIAT-Q; Callaghan, 2006).* The FIAT-Q is a 117-item questionnaire that allows therapists to evaluate clients' interpersonal relationships inside and outside the therapeutic relationship. Its results are presented as scores in five response classes: (1) assertion of needs (identification and expression), (2) bidirectional communication (impact and feedback); (3) conflicts; (4) disclosure and interpersonal closeness; and (5) emotional experience and expression.

*Inventário de Habilidades Sociais [Social Skills Inventory] (IHS; Del Prette & Del Prette, 2001).* The IHS is a Brazilian self-report social skills inventory. It provides a general score and five social skills subscales: (F1) Confrontation and Self-affirmation with Risk; (F2) Self-affirmation by Expressing Positive Feeling; (F3) Conversation and Social Resourcefulness; (F4) Self-exposure to the Unknown and to New Situations; and (F5) Self-control of Aggressiveness. The instrument has good internal consistency, with a Cronbach's alpha coefficient of 0.75 (Del Prette & Del Prette, 2001).

*Working Alliance Inventory (WAI; Horvath & Greenberg, 1989).* A self-report instrument that evaluates therapeutic alliance in terms of Bond, Goal and Task, WAI has been used in recent research to assess the impact of FAP on the therapeutic relationship (Gifford et al., 2011; Maitland & Gaynor, 2016; Maitland et al., 2016). In the present study, only the 36-item version for therapists was used. Cronbach's alpha coefficient for this instrument was of 0.93.

*The Outcome Questionnaire (OQ-45; Carvalho & Rocha, 2009; Lambert et al., 2004).* A self-report instrument that aims to assess clients' progress throughout the therapy process, the OQ-45 consists of 45 questions and measures three primary dimensions: (1) Symptomatic Distress, (2) Interpersonal Relations, and (3) Social Role Performance. The translated and adapted version for Brazilian population was used in this study (Carvalho & Rocha, 2009). For the Brazilian version of the instrument, a Cronbach's alpha coefficient of 0.93 and 0.92 was verified, from the total score of nonclinical and clinical samples, respectively (Silva et al., 2016).

### *Design*

This study used an experimental single-case design with systematic reversal-replication. Conditions were alternated between the two participants (A-B-BC-B-BC/A-BC-B-BC-B). Each phase consisted of four weekly sessions. A 2-month follow-up was conducted after the end of the last phase, totaling 21 sessions per client.

For both clients, the experiment started 5 months into treatment to mitigate effects of treatment initiation, early dropout, and habituation to treatment. None of the participants had been in therapy before. Sessions before data collection were conducted by the same therapist.

### *Procedure*

During baseline (phase A) the client's daily life was discussed without attempts to bring the issues into the therapist-client relationship. During phase B, the FAP logical interaction model was applied as described by Weeks et al. (2012), encompassing the five guidelines in sequence. Phase BC added to this the use of 10 cards from Dixit at least once during each session. When needed, the therapist would discuss urgent demands or daily life distress before starting the activity. No specific timing was specified for the use of the cards to avoid making the activity artificial.

In each session, the therapist randomly selected 10 cards in front of the client and asked to talk about the therapeutic relationship or any other topic previously discussed in session, using at least one card related to the topic and explaining their choice. The final choice made by the client and the behavior it would evoke was expected to depend

on the client's learning history.

A follow-up session was conducted 2 months after the 20th session, repeating phase A and reapplying the instruments. During these 2 months between procedure and follow-up, the clients remained in treatment, without the use of the cards or application of the instruments.

#### *Coding and Interobserver Agreement*

Four undergraduate psychology students, divided into two pairs, coded the sessions. They concluded a 4-week training on FAP principles and FAPRS, conducted by the researcher and the therapist of the study. After the training, each coder was allocated a session to code independently. Interobserver agreement was measured between each pair of coders and the "model pair" (therapist and researcher), providing kappa agreements higher than 0.60. These results indicate acceptable agreement between coders (Cohen, 1960; Kratochwill et al., 2012). After correspondence training, the coders, divided into pairs, received George or Alice's case conceptualization based on the FAP Case Conceptualization Form.

#### *Data Collection and Analysis*

The measures (FIAT-Q, IHS, WAI and OQ-45) were administered in the last session of phases A, B1, BC1, B2 and BC2. The therapist filled out the WAI and the client filled out the other measures. The Friedman Test was conducted to verify whether there were significant differences between the phases, represented by the  $p$  value. The DMS Test was used to confirm the level of significance presented by the Friedman Test.

The statistical advisory team from the Laboratory of Applied Statistics conducted the Statistical analysis using the frequency of FAPRS codes and the scores of FIAT-Q, IHS, OQ-45 and WAI. A transitional probability analysis based on Markov's multi-state model (Jackson, 2011) was conducted to compare the probability of CRB1 or CRB2 emission after therapist evocation, adopting Lag 1. In the BC phases, ERBC codes (evocation with Dixit cards) were calculated separately to verify the probability of CRB with and without the use of the cards, even in BC sessions. The transitional probability analysis sought to answer the question: "Considering that an ERB/ERBC has occurred, what is the probability of occurrence of a CRB1 or CRB2?"

#### *Ethical Considerations*

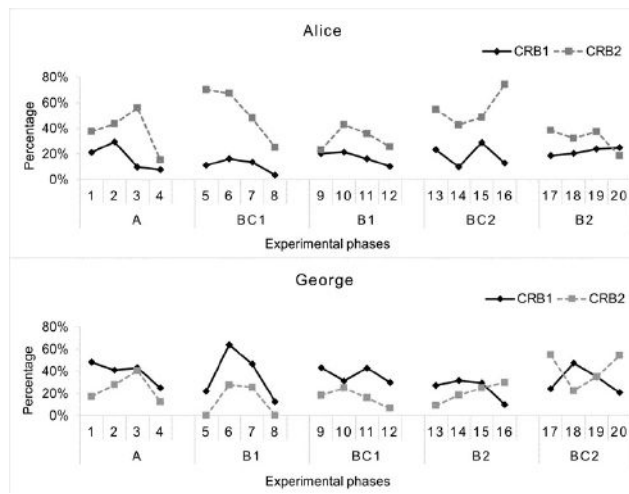
This study was conducted with the approval of the Research Ethics Committee of the Faculty of Health Sciences of the University (ethics approval number: 99893218.0.0000.0102). The therapist and collaborators signed an informed consent to participate in the study and to ensure the confidentiality of the data. The clients signed a form authorizing the recording of the sessions and the publication of the data.

## **Results**

Results are presented in the following order: (1) FAPRS transitional probabilities and code percentages, (2) examples of interactions during the use of Dixit cards, and (3) WAI, OQ-45, FIAT-Q and HIS results. To facilitate the identification of the phases, the first B and BC phases are called B1 and BC1, while the second phases are called B2 and BC2.

#### *Transitional Probabilities*

The analysis of interactions in Alice's sessions indicated that after evocation (ERB or ERBC), CRB2 occurred with higher probability than CRB1, in all phases. The probabil-



**Figure 2.** Frequency of Clinically Relevant Behaviors per session.  
 Note. CRB1= problematic clinically relevant behavior; CRB2= improved clinically relevant behavior.

ity of CRB2 In phases B1 and B2 (TP = 0.610 and 0.637, respectively) was comparable to phase A (TP = 0.655).

In phases BC1 and BC2, the probability of CRB2 increased after both evocation codes. There was an even higher probability of CRB2 after ERBC in phases BC1 and BC2 (TP= 0.846 and 0.846, respectively), compared to ERB in the same phases (TP= 0.765 and

0.750, respectively). As such, the probability of CRB1 was lower in phases BC1 and BC2. Data from the transitional probability analysis of Alice's sessions are shown in Table 1.

For George, results indicated a higher probability of CRB1 after evocation in phase A (TP = 0.556). In phase B1, the probability of CRB1 was even higher (TP = 0.733) and remained prevalent in phase BC1 after ERB (TP = 0.600). However, still in phase BC1, after evocation with the cards (ERBC), the probability of CRB2s (TP = 0.833) was higher than of CRB1s (TP=0.167).

In phase B2, the probabilities were reversed again, with higher probability of CRB1, although lower than in phase B1 (TP= 0.592). In phase BC2, there was a new inversion, with higher probability of CRB2 after both ERB and ERBC (TP= 0.550 and 0.800, respectively). Table 2 shows data from the transitional probability analysis of George's sessions.

#### Code Percentages

Alice showed a higher percentage of improved target behavior (CRB2) than problem behavior (CRB1) in all phases, except for the last session in phase B2. Nevertheless, the highest percentages of CRB2 occurred in phases BC1 and BC2. The frequency of CRB1 decreased and that of CRB2 increased from phase A to BC1. The frequency of CRB1 increased and that of CRB2 decreased from phase BC1 to B1. From phase B1 to BC2, the frequency of CRB1 presented slight changes, while CRB2 increased. Finally,

**Table 1.** Transitional Probabilities of Alice's CRBs After Evocation Codes

	A		BC1		B1		BC2		B2			
	ERB n=29		ERB n=17		ERB n=13		ERB n=41		ERBC n=13		ERB n=33	
	TP	n	TP	n	TP	n	TP	n	TP	n	TP	n
CRB1	0.345	41	0.235	28	0.154	28	0.390	56	0.250	62	0.154	62
CRB2	0.655	82	0.765	132	0.846	132	0.610	105	0.750	184	0.846	184

**Note.** CRB1= problematic clinically relevant behaviors; CRB2= improved clinically relevant behaviors; ERB= direct evocation; ERBC= evocation with Dixit cards; TP= transitional probability; n= gross frequency of the code.

from phase BC2 to B2, CRB1 remained stable, while CRB2 decreased.

In George's sessions, the percentages of CRB1 were higher than the percentages of CRB2 from phase A to B2, shifting only in phase BC2. The frequency of CRB2 decreased from phase A to B1, increasing in phases BC1 and B2. Finally, in phase BC2, an inversion occurs, in which CRB2 has its highest frequency, surpassing or getting equal to the frequency of CRB1 for three of the four sessions. Figure 2 presents the frequency of CRB1 and CRB2 per session for Alice and George.

#### Results of OQ-45, IHS, FIAT-Q and WAI

The Friedman test for OQ-45 and IHS scores indicated no significant change for either client. The total OQ-45 score went down from 71 for Alice's phase A to 67 at follow-up ( $p = 0.73$ ); while for George, the total score went up from 71.50 to 82 ( $p = 0.26$ ). The total IHS scores remained stable for Alice 95 to 98 ( $p = 0.44$ ); and for George varied from 58 to 63 ( $p = 0.41$ ). The most deficient factor in IHS, for both clients, was subscale F3, Conversation and Social Resourcefulness. As for FIAT-Q, significant improvement was observed for Class C (Conflict) scores, for both clients. In Alice's case, a significant decrease was seen between phases B1 and BC1 ( $p = 0.027$ ). For George, the decrease occurred between phases A and BC2 ( $p = 0.004$ ).

The WAI scores, filled out by the therapist, showed significant improvements for both clients. For Alice, the Friedman test indicated a significant difference between phase A and follow-up in the Bond dimension ( $p = 0.012$ ), although not confirmed by the DMS test. The scores for George showed significant improvement for both the Task ( $p = 0.007$ ) and Goal ( $p = 0.00008$ ) dimensions, confirmed by the DMS test. The shift occurred between phases A and the follow-up for Task and between phases B1 and follow-up, and BC2 and follow-up for Goal.

### Discussion

The design used in the present study allowed a comparison between baseline and FAP conditions, with and without the use of Dixit cards. The transitional probability analysis indicated a higher probability of CRB2 in phases BC for Alice and George, mainly after the ERBC codes, which represented evocation through Dixit cards. The percentage of CRB2 in phases BC was higher than in the other phases. Percentages of CRB also indicated that the use of cards had a higher evocative effect on improved behavior (CRB2) than on problematic behavior (CRB1). This effect remained clear despite the inversion of B and BC phases between clients and the differences between the clients' case conceptualizations.

While the present study used FAP as its treatment model, the mechanisms of change involved in Alice and George's cases fit Callaghan and Follette's (2020) pro-

**Table 2.** Transitional Probabilities of George's CRB After Evocation With or Without Cards

	<b>A</b>		<b>B1</b>		<b>BC1</b>		<b>B2</b>		<b>BC2</b>					
	<b>ERB n=27</b>		<b>ERB n=15</b>		<b>ERB n=20</b>		<b>ERB n=27</b>		<b>ERB n=20</b>	<b>ERBC n=10</b>				
	TP	<i>n</i>	TP	<i>n</i>	TP	<i>n</i>	TP	<i>n</i>	TP	<i>n</i>	TP	<i>n</i>		
CRB1	0.556	57	0.733	55	0.600	74	0.167	74	0.592	52	0.450	53	0.200	53
CRB2	0.444	38	0.267	21	0.400	134	0.833	134	0.408	39	0.550	70	0.800	70

**Note.** CRB1= problematic clinically relevant behaviors; CRB2= improved clinically relevant behaviors; ERB= direct evocation; ERBC= evocation with Dixit cards; TP= transitional probability; *n*= gross frequency of the code.

posal of IBT. The use of Dixit cards functioned as a discriminative stimulus as it provided an opportunity for CRB2, due to an increased availability of reinforcement (Michael et al., 2007; Muñoz-Martínez et al., 2022). Skinner (1957) suggests that speaking directly about polemical topics may have a high probability of being punished by the verbal community, while mentioning the same topic indirectly, in a literary work, for example, may be reinforced. Thus, metaphors in session may signal low probability of punishment for talking about difficult topics. As motivating operations (MOs), the cards may also change the demand characteristics in the session directing the client to provide different material.

Alice used a card to metaphorically describe her discussing challenging issues in session as having her heart “hammered.” Although she showed concerns about how the therapist would react, she also acknowledged this was a productive part of the therapeutic process, allowing her daily life to profit from what she learned in session (described as the “forge”). Her case conceptualization and her difficulty to self-disclose and provide feedback indicate this can be considered a CRB2.

The use of the cards might have functioned as an MO, which is an event that alters (a) the reinforcing or punishing effectiveness of a consequence (value-altering effect) and (b) the frequency of operant responses related to these consequences (behavior-altering effect). The effects of SDs and MOs might occur together, in which a motivating operation increases the evocative effectiveness of discriminative stimuli (Edwards et al., 2019; Michael, 2007).

Structured evocative activities can be seen as MOs since they make consequences more reinforcing or less punitive. They may, for example, change the probability of clients providing more information about their history or private events, which might aid the therapist in observing and responding more accurately. Additionally, while antecedent conditions such as SDs and MOs affect the present frequency of behavior, reinforcers and punishers alter the future frequency (Michael, 2007). This is consistent with the role of contingent responding as the mechanism of change in interpersonally focused therapies such as FAP and IBT.

Concerning the debate about the use of arbitrary evocation compared to natural evocation, the difference between phases B (evocation without arbitrary tasks) and BC (evocation with Dixit cards) suggests that the use of an arbitrary strategy can effectively increase CRB2. Although the FAP interventions in phases B were expected to increase CRB2 and decrease CRB1, evocative sessions increased CRB1 (Busch et al., 2009). In George’s case FAP was introduced without the cards. His learning history involving punishment of self-disclosure by his father and brother and the restriction of his social environment to family, barred access to reinforcement for self-disclosure. When FAP was introduced in phase B1, George continued avoiding any type of self-disclosure or feedback to the therapist and the frequency of CRB1 increased.

After the introduction of the cards in phase BC1, George started to discuss his thoughts and feelings. As an early example of this, George chose a card showing a frog wearing a luxurious outfit and holding an umbrella (see Figure 1, top right). The therapist then asked him to tell about his experience of the therapy process. George explained that the frog, in its extravagant situation, represented how he felt free to be genuine in session, despite his history of punishment for this behavior. While some studies indicated immediate improvements through the introduction of FAP (Oshiro et al., 2012; Vartanian, 2017), other studies using FAPRS codes found no immediate improvement; however, they did not describe arbitrary evocation strategies (Busch et al., 2009; Dias & Silveira, 2016; Lizarazo et al., 2015; Mayo & Graciano, 2014).

Based on their results, Lizarazo et al. (2015) suggested that in long-term therapies, CRB would occur naturally, making direct evocation unneeded. In the present study, however, evocation had a substantial impact on CRB for both clients. Also heeding the suggestion that it is often more beneficial to strategically evoke CRB instead of waiting for it to occur spontaneously (Tsai et al., 2013), we suggest the need for evocation strategies depends more on the case conceptualization than on the duration of the treatment. Evoking raises the emission of CRB2, thus boosting opportunities for the therapist to contingently respond to them (Nelson et al., 2016; Vartanian, 2017; Tsai et al., 2013). The increased frequency of CRB2 observed in the phases BC, for both clients, suggests that the use of Dixit cards was helpful in this sense.

Results obtained with OQ-45 (Carvalho & Rocha, 2009) and IHS (Del Prette & Del Prette, 2001) indicated no significant change, although many issues measured by OQ-45, FIAT-Q and IHS were related to CRB1 and were targeted during interventions. Changes in these behaviors may take longer to be generalized to daily life and be measurable in questionnaires. For both clients, the FIAT-Q (Callaghan, 2006) indicated significant changes in Class C scores, referring to problematic discriminative control and response repertoire in the area of conflicts, such as excessive appeasing or unwillingness to compromise in conflict. This is consistent with the case conceptualization of both clients who frequently described conflict situations as a cause of intense suffering.

The WAI (Horvath & Greenberg, 1989), filled in by the therapist to evaluate the therapeutic relationship, showed significant changes for both clients. These changes indicated a general improvement in the therapist's perception of the therapeutic relationship. This progressive development of the therapeutic relationship is essential for good application of interpersonally focused interventions. The paucity of significant findings from the questionnaires also occurred in Vartanian's (2017) study, with OQ-45. Meyer and Oshiro (2019), analyzing 28 empirical studies in psychotherapy, found that the measurement of events outside session has not produced satisfactory data, although the importance of instruments to enrich case conceptualization, assessment of behavioral repertoires, and follow-up of clinical progress has been recognized (Callaghan, 2006; Callaghan et al., 2003; Lizarazo et al., 2015; Mayo & Graciano, 2014; Vartanian, 2017). This remains an important challenge for future research.

### **Limitations**

The limitations of the present study can be considered directions for future research. The single-case design is limited in terms of generalization, considering its idiographic approach. On the other hand, it allows for investigation of functional relationships between variables of interest (Perone & Hursh, 2013). Due to this, single-case designs have been frequently used in empirical research with FAP (Kanter et al., 2017).

In addition, although participants differed in terms of age, gender, and socio-cultural background, intervention consisted of one specific structured activity: Dixit cards. The cards used in the study were chosen randomly—they were not related to the clients' case conceptualizations.

Having started data collection 5 months after the beginning of the treatments may have influenced baseline before the first intervention (B1 or BC1). Replications using shorter and longer treatments may verify this issue. Due to the goals of the present study, only Lag 1, following ERB and ERBC codes, was considered. This allowed verifying the immediate impact of evocation. Future studies may seek an in-depth analysis of contingent responding over longer interactions using more lags for analysis, and providing lag sequential analysis (Bakeman et al., 1997).

Finally, a limitation of the study was the choice of instruments, considering that the scores obtained for both participants were not sensitive to treatment, except for FIAT-Q and WAI. The OQ-45 measures therapy outcomes and the IHS social skills; as such, they do not evaluate specific changes in relationships. Their value in the present study may be limited because changes in the items they measure need time to take place after specific changes in relationships have occurred. Future research may employ more instruments that, in addition to assessing the client's clinical progress, enable a more comprehensive investigation of the impact of interventions in the context and language of interpersonally focused therapies such as FAP and IBT.

### Conclusion

This study investigated the evocative effects of a structured activity on two clients' clinically relevant behavior. This was the first empirical study to evaluate an arbitrary task as an evocation strategy in FAP. The use of FAPRS (Callaghan & Follette, 2008) percentages and transitional probabilities allowed an analysis at a molecular level, that is, the moment-to-moment interaction between clients and therapist, providing an in-depth description of the process (Busch et al., 2009). In addition, linking behavioral principles, such as discriminative stimuli and motivating operations to the outcomes obtained, can contribute to "fill the process-to-outcome gap" (Muñoz-Martínez et al., 2022, p. 103).

Results support the potential of a specific arbitrary activity to evoke CRB2 in clients that struggle with self-disclosure problems. Further research is needed to investigate other types of structured activities and the role of evocation in FAP as a mechanism of change.

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## Mind-Body Connections: Acceptability and Feasibility of Taekwondo and Mindfulness for Adults on an Inpatient Psychiatric Unit

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TAEKWONDO is a Korean martial art that emphasizes values of respect, integrity, and perseverance in its training curriculum. Establishing a strong connection between the mind and body and the importance of psychological fulfillment are central to Taekwondo practices (Park & Gerrard, 2000). Consistent with this emphasis on psychological growth, empirical studies have found associations between Taekwondo training and high self-esteem, positive body image perceptions (Weiss & Miller, 2019), reduced anxiety (Kurian et al., 1993), increased positive mood (Toskovic, 2001), reduced aggression (Harwood et al., 2017), enhanced capacity to cope with stress (Petrovic, 2017), and increased cognitive and affective self-regulation in children (Lakes & Hoyt, 2004). Likewise, adult practitioners report benefits including camaraderie, positive social interactions, and increased confidence linked to their Taekwondo practice (Weiss & Miller, 2019).

In clinical populations, exercise interventions have been shown to facilitate symptom improvement across psychiatric conditions, including depression (e.g., Kvam et al., 2016), generalized anxiety disorder (Herring et al., 2012), posttraumatic stress disorder (PTSD; Fetzner & Asmundson, 2015), and a decreased risk for suicide in United States (U.S.) veterans receiving PTSD treatment (Davidson et al., 2013). With respect to Taekwondo, studies have demonstrated notable outcomes in child and adolescent clinical populations, including improved selective attention (Kadri et al., 2019), executive functioning (Kadri et al., 2021), and decreased substance use (Kadri & Nasri, 2022). Descriptive and qualitative findings showed improved social participation in children with autism spectrum disorder (ASD) after Taekwondo classes (Calinog et al., 2021). Given these positive findings, additional work examining the potential effect of Taekwondo as it applies to adult mental health is warranted.

Of further interest, Taekwondo, and other martial art forms, is well suited to integration with the practice of mindfulness. Specifically, the principal emphasis on mind-body integration sets martial arts apart from other forms of physical exercise and may enhance its impact on psychological health and chronic stress (Naves-Bittencourt et al., 2015). Martial arts can be characterized as a meditative movement practice; the paced routine and deliberate commitment to nonjudgment has the potential to organically stimulate a mind-body connection (Naves-Bittencourt et al., 2015). In fact, both cross-sectional (Lothes et al., 2013) and longitudinal (Lothes et al., 2015) evidence demonstrates martial arts practice can promote increased mindfulness, and interventions combining martial arts and mindfulness practices have demonstrated positive outcomes. For instance, middle school students participating in a Tai Chi and Mindfulness

program reported increased well-being and relaxation (Wall, 2005). Integra Mindfulness Martial Arts (IMMA), a 20-week program combining mixed martial arts techniques, yoga, mindfulness instruction, and cognitive therapy techniques (e.g., Milligan et al., 2016), has yielded positive results in samples of children and adolescents with learning disorders and mental health conditions. Among such improvements include increased reports of calmness, self-understanding, tolerance of discomfort, and improved peer relationships (Milligan et al., 2016). Compared to controls, IMMA participants saw significant improvements in self-reported secondary cognitive control ( $d = 0.49$ ) and decreases in reported cognitive distortions ( $d = 0.44$ ; Milligan et al., 2017).

Of note, empirical evidence concerning a Taekwondo-specific intervention is limited, specifically in adult psychiatric samples for which it may be particularly well-suited. Previous evidence suggests that Taekwondo provides physical and psychological benefits throughout adulthood (e.g., Weiss & Miller, 2019). For example, a mixed-methods study of Taekwondo practitioners aged 18–61 found higher levels of reported self-esteem in more experienced practitioners, even when controlling for age. Despite their potential utility in psychiatric treatment, employing exercise-based interventions on inpatient psychiatric units presents a unique set of challenges (e.g., space limitations, diverse diagnoses limited mobility, varied lengths of stay, limited resources/equipment). Taekwondo may be particularly well-suited to address these challenges, as movements can be adapted to accommodate patients' physical limitations, no physical contact is required, and beginner-level techniques can be performed in small spaces without external equipment. In concert with its emphasis on mind-body connection (Park & Gerard, 2000) and benefits for individuals across adulthood (Weiss & Miller, 2019), Taekwondo may be an optimal mindful movement intervention for inpatient settings due to its accessible and adaptable nature.

The present study, which aimed to address a noted gap in the literature, examined the acceptability and feasibility of a novel Taekwondo and mindfulness group in an adult inpatient psychiatric sample. We examined quality-assurance data (mood ratings and qualitative feedback) from six, single-dose sessions of a novel, pilot intervention combining Taekwondo with mindfulness techniques adapted from Dialectical Behavior Therapy (DBT). We aimed to better understand participants' experience of the intervention using qualitative feedback. Additionally, we hypothesized that group participation would positively affect mood states.

## Methods

### *Participants*

Participants were patients ( $N = 19$ ) in an adult mood disorders unit at a psychiatric hospital in the Northeastern U.S. While diagnostic information for participants was not collected, the most commonly presenting diagnoses on the unit include depression, anxiety, and refractory mania. All participants were patients who volunteered to participate in the group. Fifteen patients participated in the group once, 2 participated twice, and 2 participated four times. Ages ranged from 29–78 ( $M = 48.35$ ,  $SD = 13.97$ ). 52.60% were biologically male, and 68.40% identified as White (see Table 1).

### *Measures*

#### *Mood Ratings*

Participants rated their current emotional experiences on a scale of 1 (not at all) to 5 (very) across four dimensions (happiness, relaxation, anxiety, and sadness) at the beginning and end of each group. Specifically, participants were asked to "please rate

**Table 1.** Demographic Information for Group Participants

Variable	Group 1	Group 2	Group 3	Group 4	Group 5	Group 6
<b>N</b>	5	2	6	6	4	4
<b>Age (M, SD)</b>	55 (20.2)	50 (12.7)	46.2	39.5 (8.9)	46 (15.4)	50 (6.2)
<b>Age range</b>	29-78	41-59	(19.4)	29-54	29-59	43-57
<b>Sex (N) %</b>			29-74			
Male	(2) 40%	(1) 50%		(3) 50%	(3) 75%	(3) 75%
Female	(2) 40%	(1) 50%	(4) 67%	(3) 50%	(1) 25%	(1) 25%
Missing	(1) 40%	-	(2) 33%	-	-	-
<b>Race (N) %</b>						
White	(4) 80%	(2) 100%	(4) 67%	(3) 50%	(4) 100%	(3) 75%
Black	-	-	(1) 17%	(2) 33%	-	(1) 25%
Hispanic	-	-	(1) 17%	(1) 17%	-	-
Missing	(1) 20%	-	-	-	-	-

your feelings of [happiness, etc.] on a scale from 1–5." We aimed to capture the effect of the intervention on self-reported mood state with an intention to minimize subject burden. For analyses, ratings for participants who participated in multiple groups were averaged into a single data point for each dimension.

#### *Qualitative Feedback*

At the end of each group, participants were asked to indicate which parts of the group they found to be the most helpful, least helpful, and why. They were also asked to provide feedback on which aspects of the group could be improved, by answering the question, "How would you change this group to improve it?"

#### *Group Content, Procedure, and Structure*

##### *Group Content and Procedure*

All patients were eligible to participate each week. However, the short-term nature of the unit often limited participation to a single session. The group was designed such that a different, stand-alone mindfulness skill was taught each week. As such, patients could participate in either a single session or in multiple sessions and still receive new mindfulness training upon repeated participation in the group. Two of the study's authors (ERW & JB), who have been trained in DBT, co-facilitated the groups. Mindfulness lessons were adapted from the "What" (Observe, Describe, and Participate) and "How" (Nonjudgmentally, Effectively, and One-Mindfully) lessons described in the DBT Skills Training Manual (Linehan, 2014). Lessons included teaching participants to observe internal and external experiences, participate fully in the present moment, and take a nonjudgmental stance towards themselves and others (Linehan). DBT was selected as the framework for mindfulness practice due to its efficacy in treating emotion dysregulation (Asarnow et al., 2021).

Moreover, DBT mindfulness techniques are skill-based, allowing them to be tied explicitly to the Taekwondo routine. For example, Taekwondo movements served as a medium for participants to practice observing and letting go of self-judgments while participating in the present moment. During the Taekwondo portion, led by one of the group's co-facilitators (ERW) who has 10 years of Taekwondo teaching experience, participants were led through dynamic stretches and taught foundational Taekwondo movements, including stances, hand motions, and one kicking technique. These techniques are well-suited for beginners and mirror those taught during an introductory Taekwondo class. Unlike the mindfulness component, the same Taekwondo routine was taught during the intervention each week.

### Group Structure

Figure 1 contains an overview of the general structure of the group, which is described in detail below. At the beginning of each group, participants were asked to complete questions about mood; participation was not contingent on measure completion. Next, group leaders facilitated a mindfulness mini-lesson, focusing each week on a different DBT mindfulness skill.

Following mindfulness skill instruction, participants engaged in a seated mindfulness exercise. This practice lasted approximately 3–5 minutes and matched the lesson content. For instance, to practice the “One-Mindfully” skill, participants engaged in paced breathing, attending to their breath.

Following the mindfulness lesson and practice, group leaders introduced the Taekwondo routine. Prompts were provided to help facilitate connections between mindfulness and Taekwondo practices and to encourage participants to engage mindfully with the movement practice. For example, to practice the “Observe” skill, participants were asked to observe their movements and connect them to body sensations during the routine without judgment. Following the Taekwondo routine, participants were asked to provide reflections and observations. If time permitted, the group concluded with a second, seated mindfulness practice related to the mindfulness skill taught earlier in the group. Finally, participants were asked to provide post-group mood ratings and completed qualitative questions.

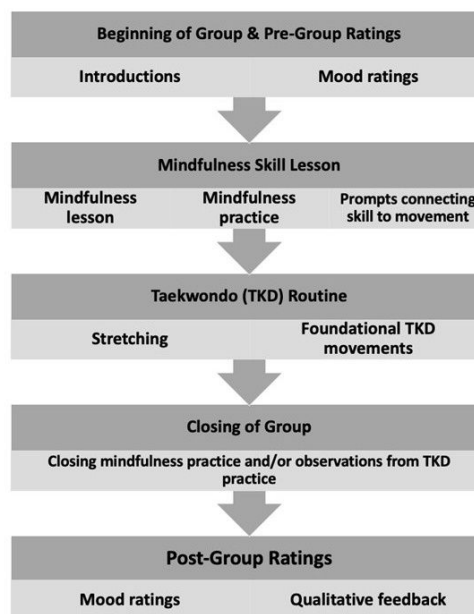


Figure 1. Overview of the Group Structure and Content

## Results

### Mood Ratings

See Table 2 for results of pre- and post-group mood-ratings. Participants reported significant decreases in feelings of anxiety following group ( $t = 2.98, p = .008, d = .68$ ). Moderate increases in relaxation and happiness were also observed ( $d$ 's =  $-.46$ – $.48$ ) but did not reach statistical significance ( $p$ 's =  $.05$ – $.06$ , respectively). No change in reported sadness was observed ( $t = 0.28, p = .782$ ). Exploratory analyses using change scores (i.e.,  $T1 - T2$ ) revealed no differences in mood-related outcomes based on age ( $r$ 's =  $-.03$ – $.37, p$ 's  $> .05$ ) or biological sex ( $t$ 's =  $0.51$ – $1.129, p$ 's  $> .05$ ).

Table 2. Mood Ratings Before and After Group Participation

Variable	t	df	p	d	T1	T2	$M_{Diff}$	95% CI
					M (SD)	M (SD)		
Anxiety	2.98	18	.008	.68	3.08 (1.32)	2.58 (1.08)	0.50	[0.14, 0.85]
Relaxation	-2.00	18	.06	-.46	3.09 (0.86)	3.50 (1.04)	-0.41	[-0.84, 0.20]
Happiness	-2.10	18	.05	-.48	2.72 (1.28)	3.13 (1.03)	-0.41	[-0.82, 0.01]
Sadness	0.28	17	.782	.06	2.61 (1.33)	2.58 (1.11)	0.07	[-0.45, 0.59]

### Qualitative Feedback

All participants who provided qualitative feedback ( $n = 7$ ), identified at least one component of the group they found helpful. When asked to identify the most helpful component, 57% ( $n = 4$ ) of participants indicated "all of it," the "whole thing," or "DBT somewhat of TKD," suggesting they found both key components (mindfulness and Taekwondo) to be helpful. Others identified "stretching" and "learning new skill" as the most beneficial parts of the session. When asked why these components were helpful, participants reported increased "focus" and "relaxation."

Of note, one participant reported that they did not find Taekwondo helpful due to difficulties identifying the "correlation between the movement and 'mindfulness.'" Conversely, 71% ( $n = 5$ ) of participants did not find any parts of the session "unhelpful." When asked to identify if or why part of the group had been unhelpful, 50% ( $n = 3$ <sup>1</sup>) again indicated "nothing" had been unhelpful, and the remaining participants ( $n = 3$ ) indicated they were "unsure" or had difficulties focusing. Finally, 71% ( $n = 5$ ) reported that they would not change any aspect of the group if given the option. The remaining participants stated they were unsure what they would change and suggested the addition of relaxing music or sounds.

### Discussion

Overall, results provide preliminary support for the acceptability and feasibility of a group-based Taekwondo and mindfulness intervention for use in an adult psychiatric inpatient sample. The group was generally well-received. All participants who provided qualitative feedback identified at least one helpful component of the intervention, and most reported that they would not want to change any components. Additionally, participation resulted in significant decreases in state anxiety levels and moderate, though not significant, increases in happiness and relaxation ( $p$ 's = .05-.06). Notably, participation in a single session resulted in affect-related changes, suggesting potential utility for emotion regulation and anxiety reduction for patients during their inpatient stay.

Additionally, the preliminary evidence suggests that Taekwondo is an acceptable form of physical activity for a diverse range of patients. Outcomes were comparable between participants across age and gender. This finding is consistent with past research demonstrating positive relationships between Taekwondo engagement and self-esteem, regardless of age (Weiss & Miller, 2019). Relatedly, Taekwondo motions are easily adaptable for patients with physical limitations. Many motions can be executed from a seated position, and the movements' complexity can be individualized or modified based on patient needs. The adaptability of the motions may increase the inclusivity of this intervention, making mindful movement accessible for individuals otherwise unable to participate.

Further, the use of a Taekwondo and mindfulness group appears to be both feasible and cost-effective for use in inpatient settings, wherein space and resources may be limited. The movements and stretches can be practiced in a relatively small space and do not require external equipment. The sequence of Taekwondo movements is simple and can be taught by staff without extensive background training in martial arts, as the series of movements are those typically taught to beginners during their first several Taekwondo classes (Calinog et al., 2021). Thus, the intervention could potentially be delivered by a range of clinicians with basic martial arts training, increasing its cost-effectiveness.

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<sup>1</sup> Only 6 participants responded to this question.

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**Taekwondo motions are easily adaptable for patients with physical limitations. Many motions can be executed from a seated position, and the movements' complexity can be individualized or modified based on patient needs. The adaptability of the motions may increase the inclusivity of this intervention, making mindful movement accessible for individuals otherwise unable to participate.**

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While this pilot study laid the groundwork for the acceptability and feasibility of this intervention, future studies should continue to examine the potential benefits of Taekwondo and mindfulness for diverse patients. Engagement in a Taekwondo and mindfulness intervention may lead to greater improvements in mindfulness compared to seated practices alone, especially in patient populations for whom traditional mindfulness practices may be challenging. For instance, mindfulness and martial arts movement interventions have yielded benefits for adolescents with attentional difficulties (e.g., Milligan et al., 2016). Taekwondo, and martial arts in general, may serve as superior catalysts for engagement with Participate and One-Mindfully skills compared to traditional silent, seated mindfulness practices observed in DBT given that feelings of effectiveness can be witnessed in the completion of a movement-based routine. Likewise, movement-based interventions give clinicians better insight into a patient's therapeutic willingness than silent meditation since progress and participation can be tracked.

Several limitations warrant consideration. The sample size was relatively small, reducing statistical power. Moreover, most of the study participants were White and biologically male, limiting generalizability to a more racially, ethnically, and gender-diverse sample of individuals. Because data were collected for quality assurance purposes, limited demographic information was available. It is unclear whether factors such as participants' treatment or diagnostic histories influenced findings. Relatedly, mood was assessed using a rating scale designed specifically for this study. This rating scale was implemented to reduce participant burden and increase accessibility in a diverse patient population where psychosocial impairments may be present. However, the absence of a validated measure of affective states is a limitation of the present study, and future studies should aim to replicate these findings using a validated mood or affect scale.

Additionally, participants provided feedback on the entire group, and available qualitative data was limited. As such, we cannot determine whether the effects on mood were attributable to Taekwondo, mindfulness, or a combination of these factors. Similarly, we did not utilize a control group in the present study. Future studies should consider comparing a Taekwondo and mindfulness group, a mindfulness skills instruction group excluding the Taekwondo component, and a control group, to gauge the additive value of Taekwondo practice. Finally, the single-session format may have blunted the impact of Taekwondo on mood states. The differences in relaxation and happiness may have reached significance with increased intervention duration (Milligan et al., 2016) and repeated engagement in Taekwondo and mindfulness. Prior studies found signifi-

cant changes in reported affect after the 13th week of a 20-week-long intervention, suggesting more prolonged engagement in mindfulness-based Taekwondo could have lent a greater impact on patients' self-reported affect (Milligan et al., 2016). Future studies should explore whether continued participation in Taekwondo and mindfulness leads to sustained or enhanced improvements over time.

### Conclusions

Overall, promising preliminary results demonstrate the acceptability and feasibility of a group-based Taekwondo and mindfulness intervention for adults in an inpatient psychiatric setting. Findings suggest that this intervention is a feasible solution for increasing the implementation of physical activity interventions in psychiatric inpatient units, especially in settings with limited space and resources. Additionally, preliminary evidence demonstrated significant decreases in state anxiety and moderate, though nonsignificant, increases in state relaxation and happiness, suggesting that group participation may lead to reductions in distress for patients during their hospital stay. Ultimately, additional research is warranted to further explore the potential of Taekwondo and mindfulness interventions in psychiatric samples and confirm the generalizability of these findings.

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Vassar yearbook.  
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from the family of  
Mary Cover Jones

## A Centennial of Behavior Therapy: The Clinical Psychological Science of Mary Cover Jones, Ph.D.

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Behavioral and  
Cognitive Therapies.

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THE ASSOCIATION for Behavioral and Cognitive Therapies has as a central part of its core vision, “... the understanding and treatment of behavioral, emotional, and health problems through science.” The emphasis on experimental science to understand and address psychopathology has existed ever since the formation of this organization in 1966, originally named the Association for Advancement of Behavior Therapy (Schare, 2016). By the mid-1960’s, the term behavior therapy was the conventional term for the research and data-driven approach used in the development of modern therapies. Behavior therapists were seen as unconventional, while the Freudians ruled the world of treatment. Behavior therapists were proud to use the term and were clinical psychological scientists well before that term existed. However, how many of you actually knew that the first behavior therapy was accomplished 100 years ago?

The seemingly straightforward question of “Who was the first behavior therapist?” might involve a series of guesses, most of which would be somewhat informed. Many of you might justifiably argue that Joseph Wolpe’s (1958) *Psychotherapy by Reciprocal Inhibition* (commonly known as systematic desensitization) was the first behavior therapy text. You would be correct that his approach was the first comprehensive model with strong theoretical underpinnings, a structured assessment procedure, clear therapeutic procedures, and many data trials to assure efficacy, which helped propel the field of behavior therapy in the latter half of the 20th century. Others might argue that the question is not about comprehensiveness but earliest, and Wolpe wasn’t the first! They might point to earlier examples of conditioning-based treatment models such as Andrew Salter’s (1949) *Conditioned Reflex Therapy* or the even earlier work of Knight Dunlap’s (1932) *Habits: Their Making and Unmaking*. These answers would both be acceptable as they are theory-driven, conditioning-based approaches to treatment; however, they were not the first either.

As documented through two published articles 100 years ago, it is indisputable that Dr. Mary Cover Jones (1924a, 1924b) was definitely the first psychological researcher to use theory-driven, systematic experimentation and conditioning procedures to treat children with fear, and to do so successfully. This seminal work has been cited by such theorists and experimentalists throughout the decades as Tolman (1932), Guthrie (1935), Masserman (1943), and, most important, by Wolpe. First, Wolpe acknowledged Jones in the foreword of the 1958 book, then later in much greater detail in his *The Practice of Behavior Therapy* (1969), with Jones highlighted in the origin of behavior therapy section. Later, it was Wolpe who introduced Dr. Jones at a 1974 Temple University Conference as the “Mother



Mary in 1925. With permission from the family of Mary Cover Jones



Mary with beads in NYC. With permission from the family of Mary Cover Jones



Mary with rabbits. With permission from the family of Mary Cover Jones

of Behavior Therapy” (although Krasner, 1988, writing for the *Behavior Analyst*, might have added “behavior modification,” an allied term preferred by the Skinnerian readers of that journal). Both of the 1924 Jones articles are reproduced in this issue of *the Behavior Therapist*. It is critical to keep in mind that Dr. Mary Cover Jones had a long and distinguished academic research career, as noted by many writers (e.g., Krasner, 1988; Pimentel, 2024), with well over 100 publications, grants, and awards. Before introducing both articles, a brief background explains how this work came about practically.

Mary Cover Jones had attended a lecture of Watson’s in 1919 at Columbia University while on a weekend trip from Vassar College (Jones, 1974; 1975). Later, in approximately 1922, as an enrolled graduate student in the Columbia psychology program, she was able to meet Watson through his wife, Rosalie Rayner Watson, a friend from her Vassar days and wanted him to mentor her on research regarding children and emotions. However, she never wanted to induce fears in children (Jones, 1974) but rather relieve them. The Watsons had, from 1920 on, been through a very difficult period during which Watson experienced a sensationalized divorce and then immediately married Rosalie upon its finalization. He was then asked to resign from his professorship at Johns Hopkins University, and, despite his prominence in the field of psychology, was unable to get hired at any other university (Watson, 1936, and further explicated Cohen, 1979). Watson was offered an advertising job in New York City but desperately wanted to continue with psychological observations of children’s behavior. He accepted the position and the Watsons moved to New York. Watson was determined to stay connected to psychology and his work on understanding children. In time he was able to obtain a research grant to support some of this work, with the money designated for an educational research fund at Teacher’s College of Columbia University. This funded the position Jones held as a research associate and allowed her to do this pioneering work under his tutelage. However, during this same time period, Watson’s responsibilities in his advertising job had increased, resulting in less available time for the research he so wanted to do.

### **Jones (1924a) – A Laboratory Study of Fear: The Case of Peter**

Of the two papers reprinted in this issue of *tBT*, Jones’s “Case of Peter” is likely the better known as a complete, behavioral case history of a child’s therapy for a fear. The paper’s popularity is relatively simple to explain as it is a single-subject design written with discreet, observable data, along with qualitative explanations of certain aspects of charted behavior changes. In fact, this case is proof of the concept that “deconditioning” was a possible response to the acquisition of “conditioned emotional reactions” as described by Watson and Rayner (1920) with Little Albert.

In reflecting on how this work was accomplished 50 years later, Jones (1975) states,

Watson paid us [her husband Harold, also a Columbia psychology graduate student] a professional visit on many Saturday afternoons throughout the conduct of the therapeutic experiments with Peter. The experiments occurred in a natural setting, since Peter lived in the institution where the study was carried on, as did I, with my husband and daughter...the patient, meticulous, painstaking procedures used in the experiments with Peter reflected the methodological style of John B. Watson, who faithfully followed Peter’s progress, reverses, and final freedom from his fear.



*Mary with snake. With permission from the family of Mary Cover Jones*



*Middle years portrait With permission from the family of Mary Cover Jones*



*Mary at table where she often worked (California). With permission from the family of Mary Cover Jones*

It is extremely noteworthy that although Watson was fascinated with the new work, it was Jones who worked directly with the child, ran the trials, kept the data, analyzed the findings and subsequently wrote up the work. All of this was accomplished under the watchful eye of her mentor. As she acknowledged in Jones (1974),

Watson was admirable in his willingness to criticize himself. He was also generous in giving credit to others far beyond the professional requirements. He would not co-author my papers because, as he said, his name was well known, and I still had my reputation to make. He wanted me to have all the recognition. In his book *Behaviorism* (1924), he wrote: "While I spent considerable time as consultant and helped plan the work, Mrs. Mary Cover Jones conducted all of the experiments and wrote up all of the results."

As written, the research began with a baseline testing procedure which identified the worst fear, that of a rabbit, and preceded to cure Peter initially by placing the rabbit progressively closer to him along a predetermined series of short trials on a twice daily basis. Other factors, such as illness, other children, and novel stimuli, intervened with both negative and positive influences and outcomes. A change in procedure, suggested by Watson and Rayner (1920), was used partway in. In the "method of direct conditioning" something pleasant, such as food Peter likes, was given while the rabbit was slowly, over trials, moved progressively closer to and eventually placed with him successfully. Overall, the fear was overcome and speculation on familial influences ensued.

### **Jones (1924b) – The Elimination of Children's Fears**

As a reader of these two articles (and a self-anointed historian), I fully understand the appeal of the Case of Peter as it points to an example of a successful therapeutic procedure. However, what is lost to the reader is a real sense of the full magnitude of the work Jones was involved in prior to her own dissertation work. Ironically, she had submitted the work found in these papers on children's fear to the Columbia faculty, asking to consider it for her dissertation project. However, they did not think the size of the sampling was sufficient to fulfill her dissertation requirements and she subsequently moved on to systematic observations of infants' behaviors for her academic requirement (Jones, 1926, 1975).

Jones's early research on children's fears is extensive and involved many children and many differing procedures. One might even argue that there was a bit of a systematic trial-and-error approach to the treatments tried within this article. However, it is perhaps one of the most prescient articles ever written demonstrating the future field of behavior therapy. Variants of some of her experiments are now known procedures which are considered mainstream even today.

Within the "Elimination of Children's Fears" paper we are introduced to a methodological powerhouse. Upwards of 70 children, between the ages of 3 months to 7 years old, were "maintained in an institution for the temporary care of children" (Jones, 1924b) with children coming and going for a variety of domestic issues. For research purposes this was somewhat problematic as it was not the more controlled environment Watson previously had at the Phipps Clinic of Johns Hopkins (Cohen, 1979). The children were mostly of typical or superior intelligence and their parents were not living in poverty, as this was a private-pay child care facility. However, Jones had no control over a child's daily schedule or whether or not they discontinued participation in the research program. In this article, we get a fuller sense of how Peter fit into the larger process of this landmark research.

Many children went through screenings as Peter did and those identified with fears

were subjected to the various treatments to help them overcome their anxiety. In the paper there are seven “Methods” or procedures tried, often depicted with short case vignettes. I will briefly summarize these in the order they appear: (1) the Method of Elimination Through Disuse, during which the child simply did not confront a feared stimulus for a period of time and the fear was hypothesized to disappear; (2) the Method of Verbal Appeal, during which pleasant talk about the feared stimulus was attempted to verbally connect (recondition) the child with pleasant feelings and experiences; (3) the Method of Negative Adaptation “based upon the theory that familiarity breeds indifference,” during which the feared stimulus was repetitively presented; (4) the Method of Repression, which was basically social ridicule or embarrassment with peers. This was never tried as a treatment method but rather was observed naturally occurring among the children as situations presented; (5) the Method of Distraction, where a child was actively distracted from attending to the feared stimulus by the presence of a toy or activity; (6) the Method of Direct Conditioning, as in the case of Peter, something pleasant was paired to counter the fear of a stimulus which is moved progressively closer; and finally (7) the Method of Social Imitation, during which a child observed others playing with or attending to a feared stimulus.

Spoiler alert: I now will address the findings of this paper. I somewhat disagree with Dr. Jones’s conclusions. While recognizing that this paper is written 100 years later and strongly acknowledging that the participants of her research and the testing environment were inconsistent and thus not ideal, the methods as described may not have had sufficient consistency in these preliminary tests. Additionally, she did not give herself enough credit.

I wholeheartedly agree that the methods of Disuse, or avoidance, Verbal Appeal, simple sweet talk, and Repression, ridicule and embarrassment (which could likely lead to increased social harm, aversion, and avoidance) are failures as she described them. Distraction, for which Jones reports “a soothed fear,” suggests that it may have similar benefits that align with the successful Direct Conditioning. A distraction may be attention getting or interesting as an alternative stimulus and thus allow a feared stimulus to be more present, even physically closer, in the child’s world. Direct Conditioning is seen as a direct precursor to Wolpe’s systematic desensitization, especially with the counter-conditioning of sympathetic and parasympathetic responses via anxiety imagery versus muscular relaxation.

Negative Adaptation, which Jones reported as successful, is the antithesis to the Disuse model of avoidance. However, she was concerned that the child had no “re-educative” experience with Negative Adaptation and acted somewhat neutral to the feared stimulus (a rat) but was not carried to the point of a positive reaction. Jones admitted that he had “a socially satisfactory reaction,” meaning he behaved without any particular emotional reaction. What Jones demonstrated is clearly the basis of exposure therapy and the central learning principles of habituation, extinction, and inhibitory learning—depending upon your theoretical leanings (Craske et al., 2008; Schare & Iitzkowitz, 2017). Patients need to get over disruptive phobic avoidances but do not have to love dogs, bridges, or airplanes in order to go to the dog owner’s house, take road trips along the coast, or vacation in exotic places. Socially appropriate behaviors without avoidances work well and are successful treatment goals. Social Imitation predicts the important theory of social learning and its concepts of modeling, wonderfully articulated by Bandura and Walters (1977). In summary, I suggest that four of the seven methods employed by Jones were of value, whereas she only concluded two had merit.

In this article, Dr. Mary Cover Jones demonstrates the fuller nature of the work she

did, with both its thoughtfulness and thoroughness. At the outset of this article, the vision of our organization, of a clinical psychological science, is in her work of a century past and is shared in ours today. She was an amazing researcher, a prognosticator of Behavior Therapy, and truly our “mom,” whose dedication and efforts still speaks clearly to us today!

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"A laboratory study of fear: The case of Peter," by M. C. Jones, 1924, *Pedagogical Seminary*, Volume 31, p. 308-315. In the public domain.

## *A Laboratory Study of Fear: The Case of Peter*

Mary Cover Jones

As part of a genetic study of emotions[1], a number of children were observed in order to determine the most effective methods of removing fear responses.

The case of Peter illustrates how a fear may be removed under laboratory conditions. His case was selected from a number of others for the following reasons:

1. Progress in combating the fear reactions was so marked that many of the details of the process could be observed easily.
2. It was possible to continue the study over a period of more than three months.
3. The notes of a running diary show the characteristics of a healthy, normal, interesting child, well adjusted, except for his exaggerated fear reactions. A few descriptive notes show something of his personality:

Remarkably active, easily interested, capable of prolonged endeavor . . . A favorite with the children as well as with the nurses and matrons . . . Peter has a healthy passion for possessions. Everything that he lays his hands on is his. As this is frequently disputed by some other child, there are occasional violent scenes of protest. These disturbances are not more frequent than might be expected in a three-year-old, in view of the fact that he is continually forced to adjust to a large group of children, nor are they more marked in Peter's case than in others of his age. Peter's I.Q. at the age of 2 years and 10 months was 102 on the Kuhlmann Revision of the Binet. At the same time he passed 5 of the 3 year tests on the Stanford Revision. In initiative and constructive ability, however, he is superior to his companions of the same mental age.

4. The case is a sequel to one recently contributed by Dr. Watson and furnished supplementary material of interest in a genetic study of emotions. Dr. Watson's case illustrated how a fear could be produced experimentally under laboratory conditions[2]. A brief review follows: Albert, eleven months [p. 309] of age, was an infant with a phlegmatic disposition, afraid of nothing "under the sun" except a loud sound made by striking a steel bar. This made him cry. By striking the bar at the same time that Albert touched a white rat, the fear was transferred to the white rat. After seven combined stimulations, rat and sound, Albert not only became greatly disturbed at the sight of a rat, but this fear had spread to include a white rabbit, cotton wool, a fur coat, and the experimenter's hair. It did not transfer to his wooden blocks and other objects very dissimilar to the rat.

In referring to this case, Dr. Watson says, "We have shown experimentally that when you condition a child to show fear of an animal, this fear transfers or spreads in such a way that without separate conditioning he becomes afraid of many animals. If you take any one of these objects producing fear and uncondition, will fear of the other objects in the series disappear at the same time? That

is, will the unconditioning spread without further training to other stimuli?"

Dr. Watson intended to continue the study of Albert in an attempt to answer this question, but Albert was removed from the hospital and the series of observations was discontinued.

About three years later this case, which seemed almost to be Albert grown a bit older, was discovered in our laboratory.

Peter was 2 years and 10 months old when we began to study him. He was afraid of a white rat, and this fear extended to a rabbit, a fur coat, a feather, cotton wool, etc., but not to wooden blocks and similar toys. An abridgment of the first laboratory notes on Peter reads as follows:

Peter was put in a crib in a play room and immediately became absorbed in his toys. A white rat was introduced into the crib from behind. (The experimenter was behind a screen). At sight of the rat, Peter screamed and fell flat on his back in a paroxysm of fear. The stimulus was removed, and Peter was taken out of the crib and put into a chair. Barbara was brought to the crib and the white rat introduced as before. She exhibited no fear but picked the rat up in her hand. Peter sat quietly watching Barbara and the rat. A string of beads belonging to Peter had been left in the crib. Whenever the rat touched a part of the string he would say "my beads" in a complaining voice, although he made no objections when Barbara touched them. Invited to get down from the chair, he shook his head, fear not yet subsided. Twenty-five minutes elapsed before he was ready to play about freely.

The next day his reactions to the following situations and objects were noted: [p. 310]

Play room and crib . . . . .	Selected toys, got into crib without protest
White ball rolled in . . . . .	Picked it up and held it
Fur rug hung over crib . . . . .	Cried until it was removed
Fur coat hung over crib . . . . .	Cried until it was removed
Cotton . . . . .	Whimpered, withdrew, cried
Hat with feathers . . . . .	Cried
Blue woolly sweater . . . . .	Looked, turned away, no fear
White toy rabbit of rough cloth . . . . .	No interest, no fear
Wooden doll . . . . .	No interest, no fear

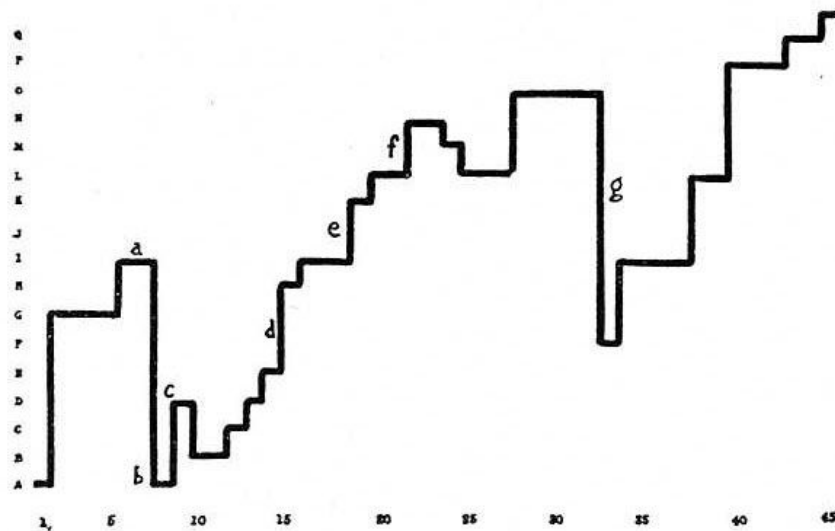
This case made it possible for the experiment to continue where Dr. Watson had left off. The first problem was that of "unconditioning" a fear response to an animal, and the second, that of determining whether unconditioning to one stimulus spreads without further training to other stimuli.

From the test situations which were used to reveal fears, it was found that Peter showed even more marked fear responses to the rabbit than to the rat. It was decided to use the rabbit for unconditioning and to proceed as follows: Each day Peter and three other children were brought to the laboratory for a play period. The other children were selected carefully because of their entirely fearless attitude toward the rabbit and because of their satisfactory adjustments in general. The rabbit was always present during a part of the play period. From time to time Peter was brought in alone so that his reactions could be observed and progress noted.

From reading over the notes for each session it was apparent that there had been improvement by more or less regular steps from almost complete terror at

sight of the rabbit to a completely positive response with no signs of disturbance. New situations requiring closer contact with the rabbit had been gradually introduced and the degree to which these situations were avoided, tolerated, or welcomed, at each experimental session, gave the measure of improvement. Analysis of the notes on Peter's reactions indicated the following progressive steps in his degrees of toleration:

- A. Rabbit anywhere in the room in a cage causes fear reactions.
- B. " 12 feet away in cage tolerated.
- C. " 4 " " " " "
- D. " 3 " " " " "
- E. " close " " "
- F. " free in room tolerated.
- G. " touched when experimenter holds it.
- H. " touched when free in room.
- I. " defied by spitting at it, throwing things at it, imitating it. [p. 311]
- J. Rabbit allowed on tray of high chair.
- K. Squats in defenseless position beside rabbit.
- L. Helps experimenter to carry rabbit to its cage.
- M. Holds rabbit on lap.
- N. Stays alone in room with rabbit.
- O. Allows rabbit in play pen with him.
- P. Fondles rabbit affectionately.
- Q. Lets rabbit nibble his fingers.



These "degrees of toleration" merely represented the stages in which improvement occurred. They did not give any indications of the intervals between steps, nor of the plateaus, relapses, and sudden gains which were actually evident. To show these features a curve was drawn by using the seventeen steps given above as the Y axis of a chart and the experimental sessions as the X axis. The units are not equal on either axis, as the "degrees of toleration" have merely been set down as they appeared from consideration of the laboratory notes with no attempt to evaluate the steps. Likewise the experimental sessions were not equi-distant in time. Peter was seen twice daily for a period and thence only

once a day. At one point illness and quarantine interrupted the experiments for two months. There is no indication of these irregularities on the chart. For example, along the X axis, 1 represents the date December 4th when the observation began. 11 and 12 represent the dates March 10 A.M. and P.M. (from December 17 to March 7, Peter was not available for study).

[p. 312]

The question arose as to whether or not the points on the Y axis which indicated progress to the experimenter represented real advance and not merely idiosyncratic reactions of the subject. The "tolerance series" as indicated by the experimenter was presented in random order to six graduate students and instructors in psychology to be arranged so as to indicate increase in tolerance, in their judgment. An average correlation of .70 with the experimenter's arrangement was found for the six ratings. This indicates that the experimenter was justified from an a priori point of view in designating the steps to be progressive stages.

The first seven periods show how Peter progressed from a great fear of the rabbit to a tranquil indifference and even a voluntary pat on the rabbit's back when others were setting the example. The notes for the seventh period (see a on chart) read:

Laurel, Mary, Arthur, Peter playing together in the laboratory. Experimenter put rabbit down on floor. Arthur said, "Peter doesn't cry when he sees the rabbit come out." Peter, "No." He was a little concerned as to whether or not the rabbit would eat his kiddie car. Laurel and Mary stroked the rabbit and chattered away excitedly. Peter walked over, touched the rabbit on the back, exulting, "I touched him on the end."

At this period Peter was taken to the hospital with scarlet fever. He did not return for two months.

By referring to the chart at (b), it will be noted that the line shows a decided drop to the early level of fear reaction when he returned. This was easily explained by the nurse who brought Peter from the hospital. As they were entering a taxi at the door of the hospital, a large dog, running past, jumped at them. Both Peter and the nurse were very much frightened, Peter so much that he lay in the taxi pale and quiet, and the nurse debated whether or not to return him to the hospital. This seemed reason enough for his precipitate descent back to the original fear level. Being threatened by a large dog when ill, and in a strange place and being with an adult who also showed fear, was a terrifying situation against which our training could not have fortified him.

At this point (b) we began another method of treatment, that of "direct conditioning." Peter was seated in a high chair and given food which he liked. The experimenter brought the rabbit in a wire cage as close as she could without arousing a response which would interfere with the eating. [p. 313]

Through the presence of the pleasant stimulus (food) whenever the rabbit was shown, the fear was eliminated gradually in favor of a positive response. Occasionally also, other children were brought in to help with the "unconditioning." These facts are of interest in following the charted progress. The first decided rise at (c) was due to the presence of another child who influenced Peter's reaction. The notes for this day read:

Lawrence and Peter sitting near together in their high chairs eating candy. Rabbit in cage put down 12 feet away. Peter began to cry. Lawrence said, "Oh, rabbit." Clambered down, ran over and looked in the cage at him. Peter followed close and watched.

The next two decided rises at (d) and (e) occurred on the day when a student assistant, Dr. S., was present. Peter was very fond of Dr. S. whom he insisted was his "papa." Although Dr. S. did not directly influence Peter by any overt suggestions, it may be that having him there contributed to Peter's general feeling of well being and thus indirectly affected his reactions. The fourth rise on the chart at (f) was, like the first, due to the influence of another child. Notes for the 21st session read:

Peter with candy in high chair. Experimenter brought rabbit and sat down in front of the tray with it. Peter cried out, "I don't want him," and withdrew. Rabbit was given to another child sitting near to hold. His holding the rabbit served as a powerful suggestion; Peter wanted the rabbit on his lap, and held it for an instant.

The decided drop at (g) was caused by a slight scratch when Peter was helping to carry the rabbit to his cage. The rapid ascent following shows how quickly he regained lost ground.

In one of our last sessions, Peter showed no fear although another child was present who showed marked disturbance at sight of the rabbit.

An attempt was made from time to time to see what verbal organization accompanied this process of "unconditioning." Upon Peter's return from the hospital, the following conversation took place:

E.: (experimenter) What do you do upstairs, Peter? (The laboratory was upstairs).

P.: I see my brother. Take me up to see my brother.

E.: What else will you see?

P.: Blocks. [p. 314]

Peter's reference to blocks indicated a definite memory as he played with blocks only in the laboratory. No further response of any significance could be elicited. In the laboratory two days later (he had seen the rabbit once in the meantime), he said suddenly, "Beads can't bite me, beads can only look at me." Toward the end of the training an occasional "I like the rabbit," was all the language he had to parallel the changed emotional organization.

Early in the experiment an attempt was made to get some measure of the visceral changes accompanying Peter's fear reactions. On one occasion Dr. S. determined Peter's blood pressure outside the laboratory and again later, in the laboratory while he was in a state of much anxiety caused by the rabbit's being held close to him by the experimenter. The diastolic blood pressure changed from 65 to 80 on this occasion. Peter was taken to the infirmary the next day for the routine physical examination and developed there a suspicion of medical instruments which made it inadvisable to proceed with this phase of the work.

Peter has gone home to a difficult environment but the experimenter is still in touch with him. He showed in the last interview, as on the later portions of the chart, a genuine fondness for the rabbit. What has happened to the fear of the other objects? The fear of the cotton, the fur coat, feathers, was entirely absent at our last interview. He looked at them, handled them, and immediately turned to something which interested him more. The reaction to the rats, and the fur rug with the stuffed head was greatly modified and improved. While he did not show the fondness for these that was apparent with the rabbit, he had made a fair adjustment. For example, Peter would pick up the tin box containing frogs or rats and carry it around the room. When requested, he picked up

the fur rug and carried it to the experimenter.

What would Peter do if confronted by a strange animal? At the last interview the experimenter presented a mouse and a tangled mass of angleworms. At first sight, Peter showed slight distress reactions and moved away, but before the period was over he was carrying the worms about and watching the mouse with undisturbed interest. By "unconditioning" Peter to the rabbit, he has apparently been helped to overcome many superfluous fears, some completely, some to a less degree. His tolerance of strange animals and unfamiliar situations has apparently increased. [p. 315]

The study is still incomplete. Peter's fear of the animals which were shown him was probably not a directly conditioned fear. It is unlikely that he had ever had any experience with white rats, for example. Where the fear originated and with what stimulus, is not known. Nor is it known what Peter would do if he were again confronted with the original fear situation. All of the fears which were "unconditioned" were transferred fears, and it has not yet been learned whether or not the primary fear can be eliminated by training the transfers.

Another matter which must be left to speculation is the future welfare of the subject. His "home" consists of one furnished room which is occupied by his mother and father, a brother of nine years and himself. Since the death of an older sister, he is the recipient of most of the unwise affection of his parents. His brother appears to bear him a grudge because of this favoritism, as might be expected. Peter hears continually, "Ben is so bad and so dumb, but Peter is so good and so smart!" His mother is a highly emotional individual who can not get through an interview, however brief, without a display of tears. She is totally incapable of providing a home on the \$25 a week which her husband steadily earns. In an attempt to control Peter she resorts to frequent fear suggestions. "Come in Peter, some one wants to steal you." To her erratic resorts to discipline, Peter reacts with temper tantrums. He was denied a summer in the country because his father "forgets he's tired when he has Peter around." Surely a discouraging outlook for Peter.

But the recent development of psychological studies of young children and the growing tendency to carry the knowledge gained in the psychological laboratories into the home and school induce us to predict a more wholesome treatment of a future generation of Peters. ◇

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#### Footnotes

[1] The research was conducted with the advice of Dr. John B. Watson, by means of a subvention granted by the Laura Spelman Rockefeller Memorial to the Institute of Educational Research of Teachers' College.

[2] Watson, J. B., and R. R. Studies in Infant Psychology, *Scientific Monthly*, December 1921.

"The elimination of children's fears," by M. C. Jones, 1924, *Journal of Experimental Psychology*, Volume 7(Issue 5), p. 382-390. Copyright 1924 by American Psychological Association. In the public domain.

## ***The Elimination of Children's Fears***

Mary Cover Jones

THE INVESTIGATION of children's fears leads directly to a number of important problems in the genetic study of emotion. At the Johns Hopkins laboratory Dr. John B. Watson has analyzed the process by which fears are acquired in infancy, and has shown that the conditioned reflex formula may apply to the transfer of emotional reactions from original stimuli to various substitute fearobjects in the child's environment. This process has been further demonstrated by the author in the case of children from one to four years of age. A study of how children's fears may be reduced or eradicated would seem to be the next point for an experimental attack. Such a study should include an attempt to evaluate, objectively, the various possible methods which laboratory experience has suggested.

The present research, an approach to this problem, was conducted with the advice of Dr. Watson, by means of a subvention granted by the Laura Spelman Rockefeller Memorial to the Institute of Educational Research of Teachers College.

The subjects, 70 children from 3 months to 7 years of age, were maintained in an institution for the temporary care of children. Admission to this institution depended as a rule upon conditions which made it difficult or impossible to keep the children at home: A case of illness in the family, the separation of father and mother, or an occupation which kept the mother away from home for a part of the day. As there was a charge for weekly care, those homes which were in actual poverty were not represented; the economic and social status of the parents, as well as the results of our intelligence tests (Kuhlmann and Terman) would indicate that this group of children was normal, and superior to the average for orphan asylums and similar institutions. As the danger of contagion is great in a group so constantly changing, a very thorough medical examination eliminated all those with symptoms of infection, and even those decidedly below normal in nutrition or general development. Our laboratory could not determine the admission and discharge of children, nor interfere in the prescribed routine of eating, sleeping and play. It was possible however for the experimenter to live in the building with the children in order to become acquainted with them in their usual environment, to observe them continuously for days at a time, and to take them daily, or oftener if desirable, to the laboratory where observations could be made under specifically controlled conditions.

In our selection of children from this group, we attempted to find those who would show a marked degree of fear under conditions normally evoking positive (pleasant) or mildly negative (unpleasant) responses. A wide range of situations was presented in a fairly standardized way to all of the children—such as being left alone, being in a dark room, being with other children who showed fear, the sudden presentation of a snake, a white rat, a rabbit, a frog, false faces, loud sounds, etc. This procedure served to expose fear trends if they were already present; it was not

designed as a conditioning process, but merely as a method of revealing prior conditionings. In the majority of the children tested, our standard situations failed to arouse observable negative responses.

When specific fears were demonstrated, our next step was to attempt their removal. By what devices could we eliminate these harmful reactions, which in many cases were subject to diffusion, and were interfering with the formation of useful attitudes and necessary habits? Our method or combination of methods depended upon the type of case presented and the manner in which treatment was received, as well as upon such external circumstances as quarantines, and the length of time the child was likely to remain in the institution.

### **The Method of Elimination Through Disuse**

A common assumption with regard to children's fears is that they will die out if left alone, i.e., if the child is carefully shielded from stimuli which would tend to re-arouse the fear. "Elimination through disuse" is the name given to this process. The following cases from our records provide suggestive material:

*Case i.*—Rose D. Age 21 months. General situation: Sitting in play-pen with other children, none of whom showed specific fears. A rabbit was introduced from behind a screen.

Jan. 19. At sight of the rabbit, Rose burst into tears, her crying lessened when the experimenter picked up the rabbit, but again increased when the rabbit was put back on the floor. At the removal of the rabbit she quieted down, accepted a cracker, and presently returned to her blocks.

Feb. 5. After 2 weeks the situation was repeated. She cried and trembled upon seeing the rabbit. E. (the experimenter) sat on the floor between Rose and the rabbit; she continued to cry for several minutes. E. tried to divert her attention with the peg-board; she finally stopped crying, but continued to watch the rabbit and would not attempt to play.

*Case 8.*—Bobby G. Age 30 months.

Dec. 6. Bobby showed a slight fear response when a rat was presented in a box. He looked at it from a distance of several feet, drew back and cried. A 3-day period of training followed bringing Bobby to the point where he tolerated a rat in the open pen in which he was playing, and even touched it without overt fear indications. No further stimulation with the rat occurred until

Jan. 30. After nearly two months of no experience with the specific stimulus, Bobby was again brought into the laboratory. While he was playing in the pen, E. appeared, with a rat held in her hand. Bobby jumped up, ran outside the pen, and cried. The rat having been returned to its box, Bobby ran to E., held her hand, and showed marked disturbance.

*Case 33.*—Eleanor J. Age 21 months.

Jan. 17.—While playing in the pen, a frog was introduced from behind her. She watched, came nearer, and finally touched it. The frog jumped. She withdrew and when later presented with the frog, shook her head and pushed the experimenter's hand away violently.

March 26. After two months of no further experience with animals, Eleanor was taken to the laboratory and offered the frog. When the frog hopped she drew back, ran from the pen and cried.

These and similar cases show that an interval of "disuse," extending over a

period of weeks or months, may not result in eliminating a fear response, and that when other conditions are approximately constant there may be no diminution in the degree of fear manifested. From our experience, it would appear to be an unsafe method to attempt the cure of a fear trend by ignoring it.

### **The Method of Verbal Appeal**

As most of our subjects were under four years of age, the possibilities of verbal analysis and control were very limited. We attempted to find how much we could accomplish toward breaking down a negative reaction by merely talking about the fear-object, endeavoring to keep it in the child's attention, and connecting it verbally with pleasant experiences. This method showed no applicability except in the case of one subject, Jean E., a girl in her fifth year. At the initial presentation of the rabbit a marked fear response was registered. This was followed by ten minutes of daily conversation about the rabbit; to hold her interest the experimenter introduced such devices as the picture book of Peter Rabbit, toy rabbits, and rabbits drawn or modeled from plasticene. Brief stories were used, and there was always a reference to the "real" rabbit as well. On such occasions she would say, "Where is your rabbit?" or "Show me your rabbit," or once "I touched your rabbit, and stroked it, and it never cried." (This latter was pure make-believe, and an interesting example of projection.) However, when the rabbit was actually presented again, at the end of a week, her reaction was practically the same as at the first encounter. She jumped up from her play and retreated; when coaxed, she reluctantly touched the rabbit while the experimenter held it; when the animal was put down on the floor she sobbed "Put it away," "Take it," and ran about the room frightened and distracted. She had learned to speak freely of rabbits, but this altered verbalization apparently was not accompanied by any change in her response to the rabbit itself. The experiment was interrupted after another three days of the same procedure, at the end of which time Jean left the institution with her initial fear patterns intact, so far as we could tell. It seems likely that many hours of training in the toleration of symbols may have little or no modifying effect on a mass reaction to the primary stimulus.

### **The Method of Negative Adaptation**

This method is based on the theory that familiarity breeds indifference: If the stimulation is repeated often enough, monotonously, the subject finally becomes used to it and tempers his response accordingly.

*Case 17.—Godfried W. Age 3 years.*

A white rat was introduced from behind a screen. Godfried sat quietly for a few minutes, watching the rat with close attention. He then began to cry, made avertive movements with his hands and feet, and finally withdrew as far as possible from the animal. At the next presentation of the rat, Godfried did not cry; he advanced cautiously, making quick startled withdrawals whenever the animal moved.

A few days later when the same situation was presented, Godfried smiled and said, "Put it down on the floor." After three hours the rat was again brought in and allowed to run free in the pen. It scurried about and occasionally came very near him, but Godfried made no attempt to withdraw even when the animal advanced and touched him.

In this case, with practically no re-educative measures except repeated stimu-

lation, Godfried conquered his specific fear. The experiment was not carried to the point where he showed a distinct positive reaction to rats, but he had developed a socially satisfactory attitude. As a strictly non-verbal approach, the method of negative adaptation is undoubtedly useful with infants and animals. In actual practice, however, we find very few fears in children of the pre-language period, and with the older children it is inefficient to eliminate the degree of control, however slight, which language may afford.

Furthermore, with all but a few of our fear-objects the aim was not indifference, which negative adaptation implies, but something farther along the scale toward an acceptance reaction.

From our experience in general, it would appear that the repeated presentation of a feared object, with no auxiliary attempt to eliminate the fear, is more likely to produce a summation effect than an adaptation. With Godfried (the case just quoted) the loss of his resistance was possibly due to the fact that he had been afraid the animal would bite him. This fear, unrealized, was gradually overcome.

### **The Method of Repression**

In the home, as well as in the school and playground, social repression is perhaps the simplest and most common method of dealing with fear symptoms . . . a method, which, we may commonly note, often fails to remove the roots of the fear. As there are already too many examples of the maladaptive results of repression, we shall not attempt to add to their number. In our laboratory we used no repressive punishment, but within a group of children the familiar situations of ridicule, social teasing and scolding frequently appeared. Because of shame, a child might try to contain his fears without overt expression, but after a certain point had been reached, the reaction appeared notwithstanding.

*Case 41.*—Arthur G. Age 4 years

Arthur was shown the frogs in an aquarium, no other children being present. He cried, said "they bite," and ran out of the play-pen. Later, however, he was brought into the room with four other boys; he swaggered up to the aquarium, pressing ahead of the others who were with him. When one of his companions picked up a frog and turned to him with it, he screamed and fled; at this he was chased and made fun of, but with naturally no lessening of the fear on this particular occasion.

Three boys standing around the aquarium each cried, "Give me one," holding out their hands for a frog. But when the frog was offered they all precipitously withdrew. When two girls (4 years old) sang out to Sidney (age 3), "Sidney is afraid, Sidney is afraid," Sidney nodded his head in assent . . . illustrating what often happens in the use of social ridicule: The emotion is re-suggested and entrenched, rather than stamped out.

### **The Method of Distraction**

A convenient method, used frequently and with fair results, involves offering the subject a substitute activity. In order to capture a safety pin from the baby's hand and still preserve peace, its attention may be distracted with another toy, while you steal away the pin. Such a device, known to every mother, may be applied to the problem of eliminating fear responses. Arthur, whose fear of frogs had received some attention from us, wished to play with a set of crayons kept in the laboratory. We placed the crayons close to a frog on the table. Arthur stepped forward cau-

tiously; keeping his gaze on the frog, he grabbed paper and crayons and showed alacrity in darting out of the danger zone. The experience, however, seemed to reassure him. "I ran over there and got it," he told us. "He didn't bite me. Tomorrow I'll put it in a little box and bring it home." At one stage of his fear of the rabbit, Sidney would whine whenever the rabbit was brought near, but he could readily be diverted by conversation about the rabbit's name, or some innocuous detail. For verbal distraction the constant presence of a grown-up is of course necessary; this introduces factors which are not always advantageous (such as reliance upon adult protection). Essentially, distraction soothes a fear response by inducing the child temporarily to forget the fear-object. (Substitution of an alternate stimulus-response system.) This may fail to result in any permanent reduction of the fear trend. Where the situation is properly managed, however, distraction passes over into a method which we have found distinctly useful, and which will now be described.

### **The Method of Direct Conditioning**

It is probable that each of our methods involves conditioning in one form or another. Under this heading, however, we include all specific attempts to associate with the fear-object a definite stimulus, capable of arousing a positive (pleasant) reaction. The hunger motive appears to be the most effective for use in this connection. During a period of craving for food, the child is placed in a high chair and given something to eat. The fear-object is brought in, starting a negative response. It is then moved away gradually until it is at a sufficient distance not to interfere with the child's eating. The relative strength of the fear impulse and the hunger impulse may be gauged by the distance to which it is necessary to remove the fear-object. While the child is eating, the object is slowly brought nearer to the table, then placed upon the table, and finally as the tolerance increases it is brought close enough to be touched. Since we could not interfere with the regular schedule of meals, we chose the time of the mid-morning lunch for the experiment. This usually assured some degree of interest in the food, and corresponding success in our treatment. The effectiveness of this method increases greatly as the hunger grows, at least up to a certain point. The case of Peter illustrates our procedure; one of our most serious problem cases, he was treated by the method daily or twice daily for a period of two months. The laboratory notes for the first and the last days of the training period show an improvement which we were able to attribute specifically to the training measures used.

*Case 30.*—Peter. Age 2 years, 10 months.

March 10, 10:15 A.M. Peter sitting in high chair, eating candy. Experimenter entered room with a rabbit in an open meshed wire cage. The rabbit was placed on the table 4 feet from Peter who immediately began to cry, insisting that the rabbit be taken away. Continued crying until the rabbit was put down 20 feet away. He then started again on the candy, but continued to fuss, "I want you to put Bunny outside." After three minutes he once more burst into tears; the rabbit was removed.

April 29, 9:55 A.M. Peter standing in high chair, looking out of the window. He inquired, "Where is the rabbit?" The rabbit was put down on the chair at Peter's feet. Peter patted him, tried to pick him up, but finding the rabbit too heavy asked the experimenter to help in lifting him to the window sill, where he played with him for several minutes. This method obviously requires delicate handling. Two response systems are being dealt with: Food leading to a positive reaction, and fear-

object leading to a negative reaction. The desired conditioning should result in transforming the fear-object into a source of positive response (substitute stimulus). But a careless manipulator could readily produce the reverse result, attaching a fear reaction to the sight of food.

### The Method of Social Imitation

We have used this method extensively, as it was one of the first to show signs of yielding results.

*Case 8.*—Bobby G. Age 30 months.

Bobby was playing in the pen with Mary and Laurel. The rabbit was introduced in a basket. Bobby cried, "No, no," and motioned for the experimenter to remove it. The two girls, however, ran up readily enough, looked in at the rabbit and talked excitedly. Bobby became promptly interested, said, "What? Me see," and ran forward, his curiosity and assertiveness in the social situation overmastering other impulses.

*Case 54.*—Vincent W. Age 21 months.

Jan. 19. Vincent showed no fear of the rabbit, even when it was pushed against his hands or face. His only response was to laugh and reach for the rabbit's fur. On the same day he was taken into the pen with Rosey, who cried at the sight of the rabbit. Vincent immediately developed a fear response; in the ordinary playroom situation he would pay no attention to her crying, but in connection with the rabbit, her distress had a marked suggestion value. Fear transferred in this way persisted for over two weeks.

Feb. 6. Eli and Herbert were in the play-pen with the rabbit. When Vincent was brought in, he remained cautiously standing at some distance. Eli led Vincent over to the rabbit, and induced him to touch the animal. Vincent laughed.

The second case illustrated a fear socially induced (this is perhaps the most common source of maladjustive fear trends) and the later removal of the fear by social suggestion. Many of the fears we studied pointed to an origin in a specific traumatic experience; it would probably have been a valuable aid in our procedure, had we been able to trace the developmental history of each of these fears. It was usually impossible to do this, however, in view of the institutional life of our subjects, and the fact that parents, even when they could be reached and consulted, were as a rule ignorant of their children's emotional mishaps.

### Summary

In our study of methods for removing fear responses, we found unqualified success with only two. By the method of direct conditioning we associated the fear-object with a craving-object, and replaced the fear by a positive response. By the method of social imitation we allowed the subject to share, under controlled conditions, the social activity of a group of children especially chosen with a view to prestige effect. Verbal appeal, elimination through disuse, negative adaptation, "repression," and "distraction" were methods which proved sometimes effective but were not to be relied upon unless used in combination with other methods. It should be remarked that apart from laboratory analysis we have rarely used any of the above procedures in pure form. Our aim has been to cure the fear, by the group of devices most appropriate at any given stage of treatment. ◇

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Samuel F. Acuff and Lauren Oddo

"Are You Sure You Want to Be Well? On Healing and the Practice of Joy": Reflections on Dr. Wilson Kwamogí Okello's Invited Address | 44  
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## Why Foresight?

**Mary Jane Eimer**, *ABCT's Executive Director*



MARCH marked my 45th anniversary working for ABCT. Much has changed during my tenure here as your Executive Director. When I started we were known as the Association for Advancement of Behavior Therapy. Leadership considered themselves “rebels” as they forged a new body of thought in psychology based in science. Members early in ABCT's development worked against the misconceptions that behavior therapy was akin to brain washing and that treatment was similar to following a cookbook recipe. As the science evolved, so did the Association. We changed our name to the Association for Behavioral and Cognitive Therapies in 2005 to reflect the changes in the field. As you can imagine, many supported the change and some did not, resigning their membership. The beauty (and challenge) of managing a membership association is that values and expectations change to reflect the times we live in.

So what is foresight and why am I writing about it? I have thought about this organization daily for a good long time. I think about where we are headed as an organization. Who will our members be in 10 years time? What impact does health insurance have on people's decision to become a Ph.D. clinical psychologist, Psy.D., social worker, nurse, psychiatrist, physician's assistant? What disciplines are we overlooking? Will our core values of science, quality, diversity, mentorship, and accountability continue to be a driving force for our leadership in their vision going forward? Where will treatment take place? How do we educate the public to choose a CBT-trained therapist when seeking treatment for themselves, a family member, or friend? How do we remain relevant to our members? How do we keep senior members involved? How do we respond to the ever-changing needs of our students? The list goes on.

Cognitive Behavior Therapy is researched and practiced globally. We are a part of the World Confederation of Cognitive and Behavioral Therapies. Our member, Lata McGinn, currently serves as their president and has her eye on WCCBT being a visible leader in appropriate committees of the World Health Organization and the United Nations. This vision will continue to promote understanding and acceptance of CBT. ABCT will be hosting the next World Congress over the dates of June 24–28, 2026, in San Francisco, CA. Shortly you will begin seeing a Call for Papers and other information on this Congress. ABCT has long been supportive of our international members and their organizations. Back in the late 70's, Terry Wilson, a Past President of AABT/ABCT began inviting international members to our annual convention and holding a meeting to get updates and forge collaborations for research. This tradition continues to this day. We all should celebrate ABCT's support of our international organizations.

Thinking about the issues I have raised above is the basis for strategic discussions by our Board of Directors. The Board engages in a strategic intent retreat once every three years that gives the Board and our Coordinators time to consider the future and what needs to be done to prepare for the necessary changes. Sometimes we hire an outside facilitator. Other times the sitting president runs the retreat. Sometimes we use an environmental scan to get the participants to think more globally and outside the box. The scan also shows where we have work to do regarding perceptions to reinforce and misperceptions we need to address and/or correct.

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## **The beauty (and challenge) of managing a membership association is that values and expectations change to reflect the times we live in.**

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We don't limit ourselves to the retreat. Issues pop up each year which the Board and staff address together and our priorities change as needed. Over the past several years, we have begun to hold Town Hall meetings to update and seek input from you as we explore our options and provide useful information on which the Board can use to base their decisions for the benefit of our constituents. We continue to use surveys as well. Last year President Ehrenreich-May held office hours where members could address their concerns directly to her. Current President Pimentel has started office hours with the leaders of our Special Interest Groups. She is getting good feedback that she is sharing with the Board and staff. Some ideas are easy fixes. Other ideas are complicated and require staff time and direct dollars. All are doable and will require more staff.

When I think about the future of ABCT and the expectations of our membership, it is a positive outlook. Lots of work to be done, but doable. Positive results happen when the leadership and staff work in partnership. Although our Board is small, with 7 members, our governance is large, with over 25 committees, subcommittees as part of our committees, 3 editors for our publications, a web editor, and usually a task force or two. Let us not overlook 40+ active Special Interest Groups. That is a lot to coordinate for a central office staff of 10.

Each committee, editor, and task force is assigned a staff liaison. This fosters a partnership where ideas can be explored, programs can be developed with staff knowledgeable in our database, budget process, and timing issues. Staff members are experts in specific areas of association management and others receive training for their specific responsibilities. Stephen Crane, Director of Conventions and Meeting Services, became a Digital Event Strategist as he had to learn how to present a virtual convention; many staff members attend Cadmium's biannual training for our submission review process, development of the convention itinerary planner, and mobile app. Many staff take online courses to improve their skill sets and professional development.

As your Executive Director, I became a Certified Association Executive from the American Society of Association Executives (ASAE). Certification requires me to renew once every 3 years by documenting I have attended professional development programs, taken an ethics course, given a presentation, or written an article. I've been a CAE since 1987 and my next renewal is due at the end of 2026. Each year, a number of us attend the Annual Meeting of ASAE and attend courses in our respective areas (communications, marketing, membership, continuing education, convention, human resources, financial management, publications, strategic planning, governance, etc.). In short, managing a nonprofit organization is a profession with lots of research, data, and resources available to those in the field.

Each year, or every other year, I invite the President and President-Elect to join me at the ASAE CEO (chief elected and chief executive officers) Symposium. President Pimentel and I just returned from a symposium last month. The session offers insights on how an ideal Board is run, the purpose of strategic conversations, governance, and

the distinction of roles between the Board and Executive Director. We were reminded that the Board has one employee, the Executive Director, who is responsible for running the central office and observing the association's policies and procedures. We are in compliance with best practices of reviewing our bylaws annually, completing an annual audit of financials in observing both NY state and federal laws so we can maintain our tax-exempt status. It is also an excellent opportunity to network and have discussions on some challenges we face.

ABCT is still recovering from the impact of COVID and the pandemic. Members are pulled in many directions and there is more dependence on staff to get things done. Expectations seem to be higher too. It is a welcome relief that our Annual Convention can once again be "live." We had an excellent turnout at our Seattle Convention. Things are looking good for Philadelphia in terms of ticketed submissions and the traditional call for papers, which is a good indicator that we will have a well-attended convention.

Back to foresight. As I contemplate ABCT's future, I recognize it is time for a new perspective. I informed the Board that I would not be renewing my contract this year in November. Definitely a bittersweet decision but one where I have applied my knowledge of foresight. There are many avenues to pursue, and my leaving gives the Board more latitude in the skill sets required by my successor. Given my institutional knowledge and years of experience, it is no surprise that I will do everything I can to train my successor and ensure a smooth transition. My last day will be June 28.

Thank you to the many leaders and members, past and current, whom I have had the good fortune to learn from, work with, and provide guidance to over the years. I am very aware of the good fortune I had to find my calling so early in life. I am proud of the many accomplishments and contributions I have been able to make to the association with the partnerships made. Working on the details of my next chapter—consultant, world traveler, connoisseur of fine wines?—I do know that ABCT is a unique organization that I am proud to have served. ■

## Let's Talk About ABCT's Clinical Directory: Feedback from the Recent Member Survey

**Amanda McGovern**, *on behalf of the entire Clinical Directory and Referral Issues Committee*

We are so appreciative of members' participation in the survey regarding ABCT's clinical directory. We received 131 responses and valuable feedback about how to enhance our clinical directory. Here are the results:

- Sixty-eight percent of members stated that they used the clinical directory for referrals.
- Providers' profiles were often incomplete and outdated.
- Providers needed updates on their availability for new patients and their specialties.
- Improve the user interface by making locations easier to navigate, enhancing uniformity in profiles, and increasing prominence on the main page of ABCT's website.
- Improve search engine optimization for potential consumers
- Increase awareness of the value of directory to our own members.
- Increase participation
- include more providers with non-Ph.D. credentials, in rural areas, and under supervision.
- Increase promotion of the clinical directory through marketing, being able to link from members' personal websites to the directory, and reminding members of its existence and utility.

The Clinical Directory and Referral Issues Committee is so grateful for this feedback and will next develop a plan to improve accessibility, awareness, functionality, and usefulness of the clinical directory. Stay tuned! ■

**SPOTLIGHT ON A RESEARCHER**

PRESENTED BY ABCT'S  
RESEARCH FACILITATION COMMITTEE

**Recognizing Excellence in**

1. Early Career Research
2. Mid-Career Research
3. Health Disparities Research

Winners will be featured on ABCT's website, social media, & at the Convention Award Ceremony

**Nominate yourself or someone else!**

Fine Print: See nomination form at the QR code for eligibility criteria

## *Call for Applications* **FELLOWS** — Class of 2024 —

ABCT Fellow Status is awarded to full members who are recognized by a group of their peers for distinguished, outstanding, and sustained accomplishments that are above and beyond the expectations of their existing professional role. Because members' career paths come with unique opportunities, the committee is sensitive to the environment in which the applicant has functioned, and we weigh the contributions against the scope of the applicant's current or primary career.

### **Multiple Routes to ABCT Fellow Status**

ABCT offers 6 areas of consideration for Fellowship status, with only one area necessary for selection: (a) clinical practice; (b) education and training; (c) advocacy/policy/public education; (d) dissemination/implementation; (e) research; and (f) diversity, equity, and inclusion. Applicants for fellowship will be asked to endorse the area(s) in which they wish to be considered. These areas can be overlapping, but also have unique features. Endorsement of multiple areas does not increase the likelihood of selection as a Fellow, and focusing on one area of outstanding and sustained effort is an effective strategy for the required self-statement and emphases by letter writers. What guides the committee's decision making is determining if an applicant has made outstanding, sustained contributions that go beyond their work role expectations.

### **Who is Eligible to Apply for Fellow Status?**

(a) Full membership in ABCT for at least 10 years (not necessarily continuous); (b) Terminal graduate degree (doctorate or masters according to discipline) relevant to behavioral and cognitive therapies or related area(s); and (c) at least 15 years of professional experience following graduation. Two letters of reference are required; one should be from an existing ABCT Fellow. If the latter requirement is a barrier to applying, please contact the Chair of the Fellows committee at [fellows@abct.org](mailto:fellows@abct.org), who will then assist in determining how best to handle this request. The Committee encourages qualified and diverse applicants to apply.

Potential Fellow applicants, as well as their letter writers, must describe the applicant's specific contributions that are outstanding and sustained. To aid in writing these letters, the Fellows committee prepared Guidelines for Applicants and Letter Writers for how to write fellow status contributions:

<https://www.abct.org/Members/?m=mMembers&fa=Fellow>. While these guidelines provide examples of what the Fellows committee considers outstanding, sustained contributions, they are far from exhaustive.

### **Deadline for Fellow Status Applications: July 1, 2024**

This is the deadline for both applicants and letter writers to submit their materials. Applicants will be notified of the decision on their application by mid-October 2024. For more information, visit the Fellowship application page:

<https://www.abct.org/membership/fellow-members/>

#### **ABCT Fellows Committee**

*Antonette Zeiss, Ph.D., Chair; Christopher Martell, Ph.D., ABPP, Vice Chair; Brian Chu, Ph.D.; Deborah Dobson, Ph.D.; Debra Hope, Ph.D.; Simon Rego, Ph.D.; Gail Steketee, Ph.D.*

## The Hogrefe Best Assessment Practices in Clinical Psychology series: A Call for Book Proposals

### CO-EDITORS:

Dean McKay, Ph.D., ABPP,  
Fordham University  
Amitai Abramovitch, Ph.D.,  
Texas State University

Picture this: You have scheduled an initial intake evaluation with a client. The referring professional is a general practice physician. They inform you that the prospective client reports a wide range of symptoms that sound like potential anxiety . . . or possibly post-traumatic symptoms . . . or potentially substance use . . . and also some potential disturbances in eating. Now, faced with this daunting and diverse range of potential symptoms, you need to find the right assessment tools to determine what the next steps in treatment may entail. However, the options are pretty vast, and surely clinicians do not have time to scour literature reviews to determine best methods for quickly identifying the most current state-of-the-art valid assessment tools. Your online search shows a maddening array of recommended assessment tools; now you feel further from a solution than when you began.

Most clinical graduate programs in mental health treatment begin training in assessment. One of the fundamental skills at the heart of education in assessment is appraising suitable methods and assessment tools and integrating these into practice, for comprehensive clinical or neuropsychological assessment, conceptualization of treatment plans, and for ongoing assessment of treatment progress. In light of the centrality of assessment skills in professional practice, the need for reliable sources that ensure currency with the latest assessment tools is essential throughout one's professional career.

While our training prepares us to be generalists, most practitioners and researchers specialize in assessment and treatment of a few conditions, but for clinicians who are in general treatment settings, the need to have a wide range of specialized assessment tools and guides on hand can be overwhelming. Each subdiscipline has models of assessment guides that range from brief and cursory to extremely dense reference-size guides.

In recognition of the need for practitioners to have a full range of easily accessible and clear guides for assessing the wide gamut of clinical conditions, the Association for Behavioral and Cognitive Therapies and Hogrefe Publishing Group formed a partnership and contracted us to edit a series of brief guides on a wide range of assessment topics. In keeping with the mission of ABCT, these assessment guides are intended to bring clinicians the latest evidence-based methods for evaluating symptoms, syndromes, and relevant psychopathological states, in a succinct and accessible manner. In addition to these user features, the series recognizes that busy professionals have specific needs to enhance the scientific foundations of their practice. Thus, the texts in this series will emphasize ease of use, suitable comprehensiveness for everyday practice, and at a manageable cost.

"We plan to publish a running index of assessments covered and the books in which they can be found on both ABCT's and Hogrefe's websites, to make those maddening searches so much easier."

We are seeking book proposals for the series. These are "mini books," intended as quick guides for clinicians, and therefore the scope is less involved than a full-length handbook. We are interested in a full range of topics, and welcome any submissions. We are particularly interested in proposals for volumes covering the following topics:

- Anxiety
- Obsessive-compulsive and related problems
- Childhood and adult attention-deficit/hyperactivity
- Body image and related concerns
- Self-harm and suicidal behaviors
- Chronic pain in youth
- Ecological Momentary Assessment
- Assessments for underrepresented populations in single disorders or across related areas

Information regarding the series and proposal submission guidelines can be found at <https://www.hogrefe.com/us/bapcp>. Authors receive competitive royalties on sales of books. We are also happy to discuss more specific questions. Interested authors can contact us at [mckay@fordham.edu](mailto:mckay@fordham.edu) and [abramovitch@txstate.edu](mailto:abramovitch@txstate.edu).

## < Podcast



### Sanity x ABCT

A collaborative podcast series with Dr. Jason Duncan and ABCT

[> episode website](#)

**Harms in Therapy** | *with Drs. Ilana Seager van Dyk & Alexandria Miller*

**CPT for PTSD** | *with Dr. Patricia A. Resick* (Episodes 1 & 2)

**Starting a Telehealth Practice: What You Need to Know** *with Dr. Mary K. Alvord*

**Parent Child Interaction Therapy** | *with Drs. Kate Gibson & Corey Lieneman* (Episode 1)

**Parent Child Interaction Therapy for Older Children** *with Drs. Kate Gibson & Corey Lieneman* (Episode 2)

**Nonprofit Mental Health Research Careers** | *with Dr. Shannon Blakey* (Episode 1 & 2)

**Sleep Health** | *with Dr. Allison Harvey* (Episodes 1 & 2)

**OCD Assessment and Treatment** | *with Dr. Jonathan Abramowitz* (Episode 1, 2, & 3)

**What to Do About Worry** | *with Dr. Robert Leahy* (Episodes 1 & 2)

**Psychedelic Assisted Therapy** | *with Drs. Jason Luoma & Brian Pilecki* (Episode 1 & 2)

**The State of ABCT** | *with Drs. Jill Ehrenreich-May & Sandra Pimentel* (1 Episode)

# Webinars

<https://elearning.abct.org>

*ABCT is sponsored by APA, NBCC, CAMFT, & the New York State Education Department to offer CE*

## upcoming

**Carolyn Black Becker | Are You Overlooking Eating Disorders in Your Clients? Moving Beyond the Eating Disorder Stereotype to Reduce Diagnostic Error, Improve Ethical Practice, and Enhance Care** **April 19** > REGISTER

## recorded

**Dr. Golda Ginsburg | School-Based Interventions for Students with Anxiety**

**Alec L. Miller | DBT for Suicidal Adolescents: With an Emphasis on Mindfulness and Validation**

**Dr. Robert Leahy | Emotional Schema Therapy: Helping Clients Cope with Difficult Emotions**

**Jeffrey Lackner | Cognitive Behavior Therapy for Irritable Bowel Syndrome: The Fundamentals of an Evidence-based Transdiagnostic Approach**

**Emily Becker-Haimes | Practice-Based Guidance: Should I Recommend Telehealth, Hybrid, or In-Person Sessions for Youth with Anxiety or OCD?**

**Jae Puckett | Resilience and Coping in Transgender and Gender Diverse Clients**

**Michel Dugas | Intolerance of Uncertainty in GAD: Facing the Unknown to Promote New Learning**

**Dr. Scott Waltman | WCCBT SPONSORED Webinar: How to Think Like Socrates: From Socratic Questioning to Stoicism to Modern CBT**

**Dr. Samantha Lookatch | Treating Opioid Use Disorders: The Role of the Therapist**

*Visit ABCT's eLearning web pages for many more recorded, CE and non-CE, webinars, including 2023 convention recordings (Mini Workshops and Clinical Grand Rounds).*

<https://elearning.abct.org/>

## The Dissemination, Implementation, and Community Engagement Committee (DICEC) Is Seeking New Members

Below is a description of the committee:

DICEC is responsible for coordinating the issues and activities relevant to the dissemination and implementation component of the ABCT Mission and Strategic Intent. Responsibilities of the committee are broadly defined as promoting activities that (1) foster an inclusive environment for partners from diverse communities, industries, and professional backgrounds to collaborate in the service of ABCT's mission, and (2) foster members' collective expertise in dissemination and implementation, scaling, technology, global health, public health, or other topics relevant to the social impact of cognitive behavioral science. These activities include coordinating and executing ABCT's Champions Program to recognize community partners who further ABCT's mission. In addition to developing standalone initiatives or activities, this committee will necessarily interact in an advisory capacity with the Board of Directors, Special Interest Groups, and many of the committees responsible for ABCT functions, including awards and recognition, convention (e.g., program, local arrangements), continuing education, and membership.

This committee is an especially good fit for early career or full members of ABCT who are involved in research or practice focused on dissemination, implementation, and community engagement related to improving the quality of mental health care and the use of evidence based practices in real world settings. We strongly encourage applications from those members involved in activities that promote the accessibility of science to those outside academia as well as the equitable and meaningful inclusion of people from diverse and historically marginalized communities in scientific and practice contexts.

If you interested in serving, please send an email to Erum Nadeem (erum.nadeem@rutgers.edu) and Mary Jane Eimer (mjeimer@abct.org) with your CV and a sentence or two as to why you'd like to join this committee and why it is a good fit for you.

*ABCT Virtual Summit* | June 7, 2024

Save  
the  
date!

### Translating Neuroscience Into CBT Practice: Current Opportunities and Future Directions

Join us for a day of conversation between basic neuroscientists, clinical scientists, and clinicians on how to best use insights from neuroscience in practicing CBT in the real world. We will discuss:

- What our brains and bodies say about how CBT works
- Clinical applications of neuroscience methods
- Addressing obstacles to translation

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