2019

THE DEVELOPMENT OF THE SELF-EFFICACY DURING EXPOSURE – CHILD (SEE-C) MEASURE: A PILOT STUDY

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THE DEVELOPMENT OF THE SELF-EFFICACY DURING EXPOSURE – CHILD
(SEE-C) MEASURE: A PILOT STUDY

BY

MARY KATHRYN MELONIO CANCELLIERE

A DISSERTATION SUBMITTED IN PARTIAL FULFILLMENT OF THE
REQUIREMENTS FOR THE DEGREE OF

DOCTOR OF PHILOSOPHY

IN

PSYCHOLOGY

UNIVERSITY OF RHODE ISLAND

2019

DOCTOR OF PHILOSOPHY DISSERTATION
OF
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2019

ABSTRACT

Cognitive-behavioral therapy (CBT) with exposure is an effective treatment for anxiety disorders but involves acute discomfort, rendering treatment engagement a challenge. Willingness to engage in exposure is of interest, because a child has to willingly approach a feared stimulus. This preliminary study investigated child engagement during exposures in CBT for anxiety disorders, with the development, validation, and field testing of a measure of self-efficacy over three time points. The measure, *Self-Efficacy During Exposure-Child* (SEE-C), is a 9-item, self-report measure of self-efficacy during exposure for youth 8-17 years old. A sample of eight reviewers at least 2-years post licensure ($M = 14.06$; $SD = 4.71$) with expertise in CBT for childhood anxiety provided feedback on the SEE-C's face and content validity. Field testing included a sample of 24 child-parent dyads recruited from an anxiety clinic in the Northeast U.S. Child-parent dyads were asked to complete measures of child self-efficacy; child anxiety symptoms; and child school, social, and family functioning. Children were also asked to complete a measure of motivation. Analyses revealed the SEE-C to demonstrate significant increases in child self-efficacy, reductions in child anxiety symptoms, and increases in social and family functioning over treatment. Internal consistency of the SEE-C was acceptable to excellent, and exploratory principle component analysis suggested a three-factor solution, with loadings ranging from 0.5 to 0.9. The SEE-C adds to the literature as the first measure of child self-efficacy designed for use during exposure in CBT for anxiety. Findings provide insight into those factors that contribute to a child's engagement during exposure. Reported effect sizes are promising and warrant greater investigation of the SEE-C's utility.

ACKNOWLEDGEMENTS

I would like to express my sincerest gratitude and appreciation to a wonderful group of people who have supported me throughout this dissertation process. First, I would like to thank my faculty advisor and wonderful clinical mentor, Ellen Flannery-Schroeder. Her guidance and expertise were invaluable throughout this process. I would also like to thank the members of my dissertation committee, Andrea Paiva and Sue Adams, and dissertation chair, Hyunjin Kim, as their thoughtful suggestions greatly added to this research. Additionally, I would like to thank my parents, Sandy Beggs-Melonio and Hank Melonio, and my brother, Matt Melonio, for their time, support, and loving words that helped keep me focused. And finally, I would like to express a heartfelt thank you to my loving husband, Michael, and three wonderful children, Michael, Sophia, and Andrew. It is without you that none of this would have happened. Your unwavering and daily support, endless encouragement, and unconditional love have been my stability as well as my motivation throughout this dissertation process, and graduate degree as a whole. I dedicate my dissertation, and my degree, to my husband and my children.

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CHAPTER 1

INTRODUCTION

Anxiety disorders among children and adolescents require effective interventions due to their often unrelenting symptomatology causing distress and impairment in family, academic, and social functioning, as well as reduced quality of life (Costello, Egger, & Angold, 2005; Ezpeleta, Keeler, Erkanli, Costello, & Angold, 2001; Piacentini, Bergman, Keller, & McCracken, 2003; Valderhaug & Ivarsson, 2005). Cognitive-behavioral therapy (CBT) for anxiety disorders among children and adolescents, particularly those incorporating exposure practice, have been empirically supported and denoted efficacious by a considerable amount of clinical outcome research (e.g., Compton, Peris, Almirall, Birmaher, Sherrill, Kendall, et al., 2014; Higa-McMillan, Francis, Rith-Najarian, & Chorpita, 2015; Kendall, Flannery-Schroeder, Panichelli-Mindel, Southam-Gerow, Henin, & Warman, 1997). CBT with exposure is a variant of CBT that is purported to work via exposure, where *exposure* is defined as “a controlled therapeutic task in which a person confronts an anxiety-provoking stimulus or situation” (Marks, 1973). As such, anxiety and fear reduction occurs through contact with the feared stimulus.

While CBT with exposure is identified as an effective treatment for childhood anxiety disorders, it involves much acute discomfort, thus rendering treatment engagement during exposure with children and adolescents a challenge. A focus on exposure practice during treatment is necessary, however, as it is considered a primary mechanism and an active “ingredient” in anxiety reduction (Peris et al., 2015). As a result, questions about the exposure process have arisen. For example, how does a

child in CBT for anxiety begin to engage in and utilize exposure to “fight” their anxiety? Also, when does the child begin to experience a reduction in anxiety during exposure? Further, does a reduction of a child’s anxiety during exposure within session lead to future reductions of anxiety during exposure across session within the CBT with exposure treatment trajectory?

Social psychology, sports psychology, and behavioral economics each study the performance-enhancing concept of *positive psychological momentum* (PPM). Rooted in attribution theory (the study of the processes by which individuals explain the causes of behavior and events), PPM is defined as the “perception, attitude, belief, or state-of-mind an individual experiences, in which their initial success leads to more successes” (Iso-Ahola & Blanchard, 1986). Positive psychological momentum theory posits that *perceived* positive momentum leads to increased confidence; thus, in turn, leading to more active and better performance (Rosenqvist & Nordström Skans, 2015). In line with this phenomenon, Compte and Postlewaite (2004) suggest that a causal link may exist from past successes to future performance through “confidence,” where *confidence* is defined as one's belief in one's ability to succeed in specific situations or accomplish a task (Iso-Ahola & Dotson, 2014). However, given the definition of confidence, it seems that before an individual can perceive confidence, they have to first perceive self-efficacy. *Self-efficacy* is the belief one has about their ability to perform a certain task (Bandura, 1997 & 1988); thus, one will have confidence when self-efficacy is utilized to competently complete a task multiple times. The concept of PPM may also be used to explain enhanced performance within the context of enhancing a child/adolescent’s *motivation* (the process that initiates, guides, and maintains goal-oriented behaviors). The theory of PPM, if shown to have a causal

relationship with self-efficacy and motivation by which “success leads to success,” could be used to enhance performance not only within sports or entrepreneurial endeavors, but also within the context of enhancing youth motivation and self-efficacy to complete exposure tasks in CBT treatments.

Child Engagement During Exposure in CBT for Childhood Anxiety Disorders

A child’s willingness to engage in and adhere to exposure practice during CBT is of great interest, because exposures cannot be “done” to a child. Rather, a child has to willingly participate in a task that focuses on a feared stimulus in order for the fear to reduce. Engagement (the act of occupying the attention or efforts of a person, and in this case, a child) in exposure is made up of multiple factors. However, to date, there is a significant gap in the literature, as no investigations have been found related to child factors that contribute to engagement during the utilization of exposure. Thus, the study of these factors is needed.

While no studies have examined child engagement during exposure sessions, some research has investigated child engagement more generally during CBT treatment. For example, Morgan and colleagues (2013) explored the relationship between poor treatment adherence and attenuated treatment response in pediatric OCD and found that a child’s willingness to engage in exposure mediated overall treatment outcomes. Morgan and colleagues’ (2013) study supports the need for additional research regarding treatment engagement in exposure, yet, does not examine the child-specific factors that may be identified as necessary for engagement during exposure.

Relatedly, King, Currie, and Petersen (2014) examined factors of child engagement in mental health treatment and assert that it involves a motivational commitment to the intervention process. They suggested that this process includes

behavioral involvement such as child in-session participation, therapist and child collaboration, and the child's self-efficacy to continue in the identified intervention. Thus, a child's in-session motivation to experience and feel distress in the face of a feared stimulus along with their perceived self-efficacy may be two important factors in engagement during exposure.

While there are many factors that make up child and adolescent treatment engagement during exposure in CBT for childhood anxiety, including caregiver (hereinafter referred to as "parent") factors and clinician factors, motivation and perceived self-efficacy are two child factors purported to contribute to engagement within the theory of positive psychological momentum. Yet, there is a real need for the development of assessment tools to measure these constructs. The present study will focus on the latter (i.e., self-efficacy), as a review of the literature demonstrates the absence of such a measure.

Self-efficacy: A Factor to be Explored

Perceived self-efficacy has been studied within the context of fear reduction and phobias (Bandura, 1977, 1978, 1982, 1998) and is posited to improve one's expectation of achievement. Though perceived self-efficacy does not cause the reduction of fear (Tryon, 2005), it may function as an anchor for a child to engage in exposure practice and a platform for a child to engage in additional and more difficult exposure practice between sessions. This is notable, as Bandura (1997) maintained that perceived self-efficacy influences one's motivation to act or to persevere in the face of difficulties.

There are multiple empirical investigations on child and adolescent perceived self-efficacy reported in the literature. For instance, Tonge, King, Klimkeit, Melvin,

Heyne, and Gordon (2005) developed and tested a measure of perceived self-efficacy about coping with depressive symptoms in adolescents and found the measure's psychometric properties to be acceptable. Study results indicated higher pre-treatment self-efficacy scores predicted better outcomes at three and six months post-treatment. Similarly, Bandura and colleagues (1999) determined that perceived self-efficacy influenced childhood depression and contributed to concurrent and subsequent depression. Additionally, Warren and Salazar (2015) observed self-efficacy to be associated with improvements in youth-reported symptoms of emotional distress and behavioral dysfunction in routine mental health services. Self-efficacy has also been found to be predictive of performance on cognitive tasks, such as academic achievement and social adaptation (Magno & Lajom, 2008; Pastorelli, Caprara, Barbaranelli, Rola, Rozsa, & Bandura, 2001). Multiple child and adolescent health studies have also revealed high perceived self-efficacy to be predictive of proper management of chronic conditions, such as weight loss behaviors (Walpole, Dettmer, Morrongiello, McCrindle, & Hamilton, 2011), smoking behaviors (Ford, Oladopo, Sterling, Diamond, Kelder, & McAlister, 2013), chronic pain (Bursch, Tsao, Meldrum, & Zeltzer, 2006), chronic illness (Emerson et al., 2018) and exercise-related behaviors (Pakarinen, Parisod, Smed, & Salantera, 2017). Considering the extant literature on child perceived self-efficacy and child engagement during treatment, self-efficacy is an important factor to be explored in a study of engagement during exposure.

The Current Study

The current study reports the development, psychometric evaluation, and field testing of a measure of child/adolescent perceived self-efficacy to be used during

exposure in CBT for children and adolescents with anxiety disorders. The purpose of the measure is to facilitate the understanding of child/adolescent factors that contribute to treatment engagement during exposure.

The study was conducted in two parts: 1. The development and psychometric evaluation of the measure, including expert review and child response feedback, and 2. Field testing of the measure to examine the relationship of child perceived self-efficacy to other variables during CBT for anxiety among children and adolescents. See Study Flow Chart in Figure 1.

Figure 1. Study Flow Chart

The following hypotheses were tested: Hypothesis 1. Development of the *Self-Efficacy during Exposure – Child version (SEE-C)*. Hypothesis 1a: Expert review will appropriately tailor the SEE-C to the age and population of youth with anxiety disorders on content validity and face validity. Hypothesis 1b: Participant review will guide revisions to the SEE-C's instructions, items, and item responses to assist with validity of the measure. Hypothesis 1c: The internal consistency of the SEE-C will meet or exceed $\alpha = .70$.

Hypothesis 2. Examination of the relationship between the SEE-C and other key variables. Hypothesis 2a: Self-efficacy, as measured by the SEE-C, will be related at pre-treatment (and overtime) to anxiety symptoms, as measured by the Spence Children's Anxiety Scale (SCAS) and anxiety functional impairment, as measured by the Child Sheehan Disability Scale for Anxiety (CSDS). Hypothesis 2b: Self-efficacy, as measured by the SEE-C, will be related overtime to clinical improvement, as measured by the Clinical Global Impression Scale (CGI). Hypothesis 2c: Self-efficacy, as measured by the SEE-C, will be related at pretreatment (and overtime) to state motivation, as measured by the Child Motivation Pediatric Motivation Scale (PMOT).

CHAPTER 2

METHODOLOGY

Participants

Expert review. A sample of eight clinicians at least two-years post licensure with expertise in the cognitive-behavioral treatment of childhood anxiety disorders was identified and recruited for participation in the present study. Expert reviewers (88% Female) endorsed employment throughout the United States from multiple clinical and academic sites: Four were from universities, three were from academic medical centers, and one was from both a medical center and private practice. Experts were at least two years post licensure ($M = 14.06$ years; $SD = 4.71$), with more than 15 years of experience in the cognitive-behavioral treatment of childhood anxiety disorders ($M = 19.38$ years, $SD = 4.24$, range 15-25). Expert reviewers provided advice as to the face and content validity of the SEE-C. Expert reviewer feedback was aggregated and findings integrated (See Table 1 for Iterative Process).

Table 1. Iterative Process of Feedback

Aggregation and Consensus

Quantitatively:

- Items will be summarized descriptively using frequencies, means and standard deviations

Qualitatively:

- Item statements will be aggregated as to theme and consensus (i.e., frequency) will be determined
- Frequency of consensus items will be analyzed as to outline considerations

Outlined considerations

Quantitatively:

- 100% participant agreement on a single item with a $Mean = 7$ or disagreement with a $Mean = 1$ will be an item for editing
- Participant agreement on a single item with a $Mean = 5$ or 6 or disagreement with a $Mean = 2$ or 3 will be an item considered for editing but additional reference to the literature and advisor consultation will determine and justify scale adjustments
- Participant agreement on a single item with a $Mean = 4$ will not be considered for editing

Qualitatively:

- Consensus statements on a single item endorsed by each reviewer ($N = 8$) will be considered an item for editing
 - Consensus statements on a single item endorsed by one to seven reviewers ($N = 1$ to 7) will be considered for editing but additional reference to the literature and advisor consultation will determine and justify scale adjustments
-

Field testing. A sample of 24 child-parent dyads was recruited from the Child Anxiety Program (CAP) at the University of Rhode Island (URI). Children ranged in age from 8 to 15 years ($M = 9.9$, $SD = 1.93$), with almost half the sample identifying as female (46%) and identified as White, non-Hispanic. Children were in the 2nd to the 10th grade, with more than half of the sample in the 3rd through the 6th grades. Additionally, 29% reported having a 504 plan in school. Parent participants identified as biological parents, a mean age of 42.1 ($SD = 5.67$), predominantly female (83%), and identified as White, non-Hispanic. The majority of children had biological parents living together (92%) and an average annual income ranging from \$100,000-\$120,000. More than half of parents reported a college degree or higher (92%). See Table 2 for an outline of demographic information.

Retention rates. Twenty-four parent-child dyads consented to the field testing portion of the study. Out of the 24 dyads, one child decided they no longer wanted to complete study measures during the 1st session; however, the parent continued in the study. At mid- and post-treatment, study retention rates remained the same, with 23 child and 24 parent participants.

Table 2. Sample Characteristics ($N = 24$ Child-Parent Dyads)

Child Gender n (%)	
Female	11 (46)
Male	13 (54)
Child Age M (SD)	9.9 (1.93)
Child Race n (%)	
White	24 (100)
Black/African American	0
Asian	0
American Indian/Alaskan Native	0
Native Hawaiian/Pacific Islander	0
Child Non-Hispanic n (%)	24 (100)
Child Grade n (%)	
2 nd Grade	1 (4)
3 rd Grade	6 (25)
4 th Grade	5 (21)
5 th Grade	2 (8)
6 th Grade	6 (25)
7 th Grade	1 (4)
8 th Grade	1 (4)
10 th Grade	1 (4)
Child 504 Plan (Details unspecified) n (%)	7 (29)
Family Annual Income n (%)	
Under \$20,000	0
\$20,001 - \$40,000	1 (4)
\$40,001 - \$60,000	2 (8)
\$60,001 - \$80,000	0
\$80,001 - \$100,000	1 (4)
\$100,001 - \$120,000	6 (26)
\$120,001 and over	12 (50)
Not endorsed/missing	2 (8)
Child lives with n (%)	
Bio mother and father	22 (92)
Bio mother	2 (8)
Parent in study n (%)	
Female	20 (83)
Male	4 (17)
Parent Age M (SD)	42.1 (5.67)
Parent Relationship to child n (%)	
Biological Parent	24 (100)
Parent Education Level n (%)	
Some college	1 (4)
Associates Degree	1 (4)

Bachelors (BA, BS)	12 (50)
Masters	7 (30)
PhD	2 (8)
MD	1 (4)
Parent Employment Status <i>n</i> (%)	
Full-time	15 (62)
Part-time	4 (17)
Self-Employed	1 (4)
Not Employed	3 (13)
Prefer not to answer	1 (4)
Parent Martial Status <i>n</i> (%)	
Married	22 (92)
Divorced	1 (4)
Did not answer	1 (4)
Parent Anxiety Disorder <i>n</i> (%)	
Yes (past and/or current)	10 (42)
No	14 (58)

All child participants met criteria for at least one anxiety disorder. Eighty-six percent of the children met criteria for more than one disorder (anxiety or another type), ranging from two to five ($M = 2.58$, $SD = 1.06$) comorbid disorders. Primary anxiety diagnoses at pre-treatment included Generalized Anxiety Disorder (34%), Specific Phobia (23%), Separation Anxiety Disorder (14%), and Social Anxiety Disorder (14%). See Table 3 for a complete listing of pre-treatment diagnoses and comorbid conditions counts.

Table 3. Pre-Treatment Type and Frequency of Diagnoses

Diagnosis	Pre-Treatment
Separation Anxiety Disorder	9
Generalized Anxiety Disorder	22
Social Anxiety Disorder	9
Specific Phobia	15
School Refusal	1
Misophonia	1
Obsessive Compulsive Disorder	2
Depressive Disorder	1
Attention Deficit Hyperactivity Disorder	2
Oppositional Defiant Disorder	1
Panic	1
None	0

Frequency of Pre-Treatment Comorbid Diagnoses

Diagnoses Count	Pre-Treatment
0 Diagnoses	0
1 Diagnosis	3
2 Diagnoses	8
3 Diagnoses	9
4 Diagnoses	3
5 Diagnoses	1

The first two participants of the 24 child-parent dyads enrolled were queried after their completion of the SEE-C to glean information for response process validity. Two child participants ($M = 12$ years; Male = 2) were queried about their experience and understanding completing the SEE-C including the scale's directions, questions, and response items. Both child participants identified as White, non-Hispanic. Response process feedback was aggregated and findings integrated.

Inclusion Criteria for the study were the following: 1) primary diagnosis of an anxiety disorder using the Anxiety Disorder Interview Schedule – IV (ADIS-IV; Silverman & Albano, 1996), adapted for DSM 5, 2) Child is between the ages of 8 and 17 years old and has a parent or legal guardian available to participate in treatment, and 3) Child participant and parent are English speaking. Exclusion Criteria included a documented child diagnosis of Psychosis, Autism, or Intellectual Disability and child use of anti-depressant and/or anti-anxiety medications that has not been stable for more than six weeks. Exclusion criteria were designed to be minimal and exclude only those patients for whom CBT is not likely to be beneficial or may be risky.

Measures

Expert reviewer questionnaires were completed and edits to the developed measure were made in prep for field testing. Field testing questionnaires were completed at pre-treatment, mid-treatment (after completing 8 weeks of CBT and prior to initiation of exposure practice), and post-treatment (session 16). All field testing questionnaires were completed during scheduled intake or therapy sessions. See Appendix A for table of administration time points.

Self-Efficacy During Exposure – Child (SEE-C). The SEE-C is a 9-item, child

(ages 8 to 17 years old) self-report measure of perceived state self-efficacy during exposure using a 5-point Likert scale from 1 (“Not sure at all”) to 5 (“Completely sure”). Total scores range from 0 to 45, and higher numbers on total score indicate greater perceived self-efficacy. Three subscales were defined in the construction of this measure: ‘success of handling distress during an exposure’ (items 1, 2, and 3), ‘success of individual exposures themselves’ (items 4, 5, and 6), and ‘success of exposure treatment’ (items 7, 8, and 9). Items were selected following Bandura’s (2006) recommendations for constructing scales of self-efficacy. Specifically, items were identified that had reasonable face validity, were developmentally relevant to the target sample, and had lower demand characteristics. Items were selected to incorporate a range of domains relevant to children with anxiety and to yield a total perceived self-efficacy score and subscales. See Appendix B for the original version of the measure (prior to edits via expert reviewer and participant feedback) and Appendix C for the final edited version.

An identical parent version of the measure was developed, where parents reported their perception of their child’s state self-efficacy during exposure. The parent version was created to corroborate the child version, as a method to assist with the validity of the child measure.

Expert Reviewer Questionnaires

Clinician Demographic Questionnaire (CDQ). The CDQ was completed by expert clinicians (e.g., gender, education, institution). This information was used in preliminary descriptive analyses to describe the expert clinician sample. See Appendix D.

Clinician Feedback Survey (CFS). The CFS was adapted from the Pediatric Motivation Scale Service Provider Survey (Tatla, 2014) and used to obtain feedback from expert clinicians upon review of the SEE-C. Questions on this survey include Likert scale

and open-ended questions related to the measure's face validity, clarity (i.e., conciseness, grammar, readability, layout, reading level, and redundancy of questions) and clinical utility (i.e., ease of administration, time to administer, and challenges in use). To corroborate findings, information was reviewed qualitatively and quantitatively and then aggregated to revise and refine the SEE-C. See Appendix D.

Semi-structured Administration Questionnaire (SSAQ). The SSAQ was adapted from the Administration Questionnaire (Tatla, 2014). This questionnaire was used to query child/adolescent participants about their experience completing the SEE-C. Child/adolescent participants were asked about their understanding of the scale's directions, questions, and response items. They were asked to provide any comments they have in regards to each. To corroborate findings, queried information was summarized and aggregated to revise and refine the SEE-C. See Appendix D.

Field Testing Questionnaires

Caregiver Demographics. This demographics questionnaire was completed by parents at baseline and includes questions regarding family composition, parent information (e.g., age, gender, race, ethnicity, education, income, occupation), and child information (e.g., age, gender, race, ethnicity, education). See Appendix D.

Anxiety Disorder Interview Schedule for Children for DSM-IV (ADIS-IV), adapted for DSM 5 (American Psychiatric Association (APA), 2013). The ADIS-IV (Silverman & Albano, 1996), a structured diagnostic interview for children (ages 7 – 17 years) is based on the Diagnostic Statistical Manual-IV (DMS-IV; American Psychiatric Association (APA), 2000), was adapted to correspond to DSM 5 diagnoses. Parent and children were interviewed separately using the ADIS, and reports were combined to form consensus diagnoses. The ADIS-IV (adapted for DSM-5) was used to determine study

inclusion criteria related to child/adolescent diagnoses. Graduate student clinicians demonstrated a strong interrater reliability on the ADIS, Cohen's kappa $\geq .6$ before participating in the present study (ADIS; DiNardo et al., 1994).

Spence Children's Anxiety Scale (SCAS). The SCAS (Spence, 1997; child and parent versions) is a 38-item measure of a child's anxiety. Scoring includes an overall (total score) of anxiety that is made up of six subscales (separation anxiety, social phobia, obsessive-compulsive disorder, physical injury fears, generalized anxiety, panic/agoraphobia) each tapping a specific aspect of child anxiety utilizing a four-point scale of how often things occur: 0 = *never*, 1 = *sometimes*, 2 = *often*, or 3 = *always*. The greater the score, the more anxiety symptoms present. In this sample, both the child and parent versions of the SCAS demonstrated good reliability ($\alpha = .884$; $\alpha = .853$, respectively).

Child Sheehan Disability Scale for Anxiety (CSDS). The CSDS (Whiteside, 2009) is a 3-item measure assessing impairment in child functioning related to anxiety and has excellent psychometric properties. Increased composite score indicates greater impairment.

Clinical Global Impression (CGI). The CGI (Guy, 1976) is a 2-item, 7-point scale measuring clinician-rated client severity (0 = *Not assessed* to 7 = *Among the most extremely ill patients*) and improvement (0 = *Not assessed* to 7 = *Very much worse*) during treatment. An increase in clinician ratings denotes worsening symptoms for both scales.

Pediatric Motivation Scale (PMOT). The PMOT (Tatla, Jarus, Virji-Babul, & Holsti, 2015) is a 19-item, child self-report measure that examines a child's (8 to 19 years) perceived motivation during therapy. Items are rated on a scale from 0 (*Not true at*

all true) to 5 (*Definitely true*). Average total score indicates child's overall state motivation with higher scores indicating greater state motivation. This measure demonstrated good reliability in this sample ($\alpha = .815$).

Procedure

Internal Review Board (IRB) approval was granted through the University of Rhode Island.

Expert review. Expert reviewers were identified from the extant literature based on their expertise on anxiety disorders in children and adolescents. A list of twenty-one experts was identified and contacted to determine their interest in participating in the study. Confirmation of their areas of expertise and relevant experience was solicited as study inclusionary criteria. After informed consent was obtained, each expert reviewer was asked to complete the *Clinician Demographic Questionnaire* and was provided a summary of findings on the self-efficacy for exposure review of the literature to provide current information justifying the measure development. Then, expert reviewers were provided directions on the administration of the SEE-C and asked to complete the *Clinician Feedback Survey*.

Field testing. Recruitment efforts focused on parents and children seeking treatment at the University of Rhode Island (URI)'s Psychological Consultation Clinic's (PCC) Child Anxiety Program (CAP). In tandem with the CAP clinic procedures, a short phone screen by the PCC coordinator was used to identify potentially eligible participants. The research study was introduced to families at this time and interested parents were provided a short description of the study and an opportunity to ask questions. Consistent with the CAP clinic procedures, eligible families were invited to the clinic for a two-hour visit during which an intake assessment occurred.

Informed parent consent and child assent for the present study was conducted during the intake following the usual treatment consenting procedures for CAP. Families were reminded that study participation was voluntary and could be discontinued at any point during their treatment and the termination of their participation would not affect their treatment status.

Following informed consent/assent, pre-treatment assessments were administered with the parent and child. Families not interested in participating in the study were not penalized and were free to continue with treatment in CAP, provided they met with entry requirements specific to the CAP program. Families who agreed to participate in the present study were provided a complementary treatment manual (value ~\$25) as compensation for their participation. The consent, assessment, and treatment procedures were video recorded (as consistent with CAP procedures) to ensure accuracy of procedures, and videotapes were destroyed in alignment with APA, Health Insurance Portability and Accountability Act (HIPAA), and PCC requirements.

Child participant reviewers. The first two participants of the 24 child-parent dyads recruited were queried about their experience completing the SEE-C using the SSAQ. Participants' response processes was observed and recorded while they complete the SEE-C pre-session. Research staff queried on items from the SEE-C that seemed difficult to answer or appeared confusing to participants. Participants were also asked to explain the rationale for their response selections to further evaluate participants' understanding of the SEE-C items. In order to minimize the effects of social desirability, a study research assistant administered the scale to the child, and the treating therapist was not present. Information gleaned on the SSAQ was reviewed quantitatively and qualitatively and then used to revise and refine the SEE-C.

Treatment. The treatment provided was CBT with exposure per the 16-session Coping Cat treatment protocol (Kendall & Hedtke, 2006) and involved coping skill instruction and practice to reduce anxiety. Length of treatment sessions was 50 minutes. At each session, child and parent participants completed paper and pencil measures about child perceived self-efficacy and motivation. At mid- and post-treatment, participants were again asked to complete the study measures.

CHAPTER 3

RESULTS

Data Analyses

Preliminary statistical analyses. All statistical analyses were conducted using IBM SPSS Statistics version 24 (IBM Corp., 2016). Data were cleaned (frequencies, means, standard deviations and ranges were examined) and scored, and tests of assumption and normality for skewness and kurtosis were completed. Overall, study measures were deemed normally distributed (See Table 4). Descriptive statistics were used to summarize the sample characteristics. Continuous variables were summarized using means and standard deviations. Categorical variables were described with frequencies and percentages. Pre-treatment report of child prescribed anxiety medication ($n = 2$; Zoloft and Lorazepam) versus no medication were examined and showed no significant differences on the SEE-C child version or anxiety symptom measures; as a result, medication usage was not controlled for in the overall study analyses. Consistent with an intent-to-treat approach, all participants were included in the data analyses.

Missing data. Utilizing maximum likelihood, expectation–maximization algorithm (Allison, 2012), missing outcome data on randomly assigned participants were replaced. A nonsignificant Little’s Missing Completely At Random (MCAR) test suggests that the data were missing completely at random (Little, 1988). Maximum likelihood imputation, using the expectation–maximization algorithm, was used to impute the missing data (less than 5%) to improve statistical power with unbiased parameter estimates (Enders, 2001; Scheffer, 2002). Missing data were imputed using the Missing

Values Analysis (normal distribution; 25 iterations) within SPSS 24.0 (IBM, 2016).

Iterative feedback process. Expert review and child participant feedback assisted in the established preliminary psychometrics of the SEE-C via evaluation of the following forms of validity: 1) content validity, as demonstrated by a review of self-efficacy measures in the literature and expert review of the SEE-C; 2) face validity, informed by expert review and field testing; and 3) response processing, determined by child participant feedback during field testing. In addition, reliability was assessed after field testing the SEE-C by examining internal consistency in the evaluation of correlations between different items on the same test.

Expert reviewer and child participant feedback was integrated per outlined considerations (including both quantitative and qualitative methods, which are outlined in Table 1) and literature review. Item responses were summarized descriptively using frequencies, means, and standard deviations and evaluated qualitatively through an examination of themes and their frequency.

Table 4. Pre-Treatment Measures

Pre-treatment Measure	Value Range	Interpretation	Total Score	Sample Range	<i>M</i>	<i>SD</i>	Skewness	Kurtosis
SEE-C Child, <i>n</i> =23	1 to 5	Higher: More self-efficacy	45	21-44	33.26	5.62	-.264	-.186
SEE-C Parent, <i>n</i> =22	1 to 5	Higher: More self-efficacy	45	20-41	28.45	5.31	.317	-.100
PMOT, <i>n</i> =22	0 to 5	Higher: More motivation	95	66-95	81.18	8.91	.068	-.672
Spence Child, <i>n</i> =24	0 to 3	Higher: More symptoms	114	6-62	34.29	14.72	.173	-.686
Spence Parent, <i>n</i> =24	0 to 3	Higher: More symptoms	114	12-54	31.29	12.02	.103	-.937
Sheehan Child School, <i>n</i> =22	0 to 10	Higher: Greater impairment	10	0-10	3.09	3.12	.863	-.290
Sheehan Child Social, <i>n</i> =22	0 to 10	Higher: Greater impairment	10	0-9	3.05	2.84	.679	-.749
Sheehan Child Family, <i>n</i> =22	0 to 10	Higher: Greater impairment	10	0-10	3.36	3.00	.765	-.473
Sheehan Parent School, <i>n</i> =24	0 to 10	Higher: Greater impairment	10	0-10	5.13	2.68	-.175	-.612
Sheehan Parent Social, <i>n</i> =24	0 to 10	Higher: Greater impairment	10	0-9	5.46	2.75	-.827	-.096
Sheehan Parent Family, <i>n</i> =24	0 to 10	Higher: Greater impairment	10	0-9	4.67	3.07	-.127	-1.495
CGI Severity, <i>n</i> =24	0 to 7	Higher: More severe	7	3-4	3.71	0.46	-.979	-1.145
CGI Improvement, <i>n</i> =24	0 to 7	Higher: Less improvement	7	0-4	3.50	1.35	-2.422	4.210

Expert Review

Tailoring the SEE-C per expert review. A sample of eight expert reviewers were recruited to tailor the SEE-C to the age and population of the proposed sample with emphasis on content and face validity. The CFS was used to obtain feedback on the measure's face validity, clarity, and potential clinical utility.

Responses on the CFS were reviewed, summarized, and aggregated for incremental integration of the best representation of the construct of self-efficacy, ease and clarity of reading the instructions for the scale, ease and clarity of reading the scale, layout attractiveness, appropriateness of reading level appropriate for those as young as 8 years old, and ease of completion by children/adolescents. See Table 5 for summary of CFS responses.

The CFS revealed that >50% of the expert reviewers thought the results of the SEE-C would inform their intervention planning and treatment engagement during exposure, the SEE-C items represented self-efficacy, and that youth with anxiety could understand responses. More specifically, 50% “agreed” or “strongly agreed” that items represented self-efficacy; 75% “agree” to “strongly agree” instructions were easy to follow; 62% “agree” to “strongly agree” youth with anxiety could understand responses; 87.5% thought the layout of questions was attractive and appealing; 62.5% “somewhat agree” and 25% “agree” reading level of SEE-C is appropriate for an 8-year old child; 100% “agree” to “strongly agree” a child with anxiety would not object to answering any items on the SEE-C; 50% endorsed “<5 minutes” and the other 50% “5-10 minutes” regarding how long they thought it would take to complete SEE-C; 100% thought “5-10 questions” was a reasonable number of questions to include on the SEE-C. Reviewers indicated the measure results would inform intervention planning and treatment

engagement during exposure with 62.5% responding “yes,” 25% “possibly,” and 12.5% left the question blank. Sixty-two percent believed this scale would be helpful to them as a therapist. Thirty-seven percent believed that it might be useful. See Figure 2 for a summary of expert reviewer feedback.

Table 5. Expert Reviewer Feedback

Question prompt:

Q.) “In your opinion, would this scale be helpful to you as a therapist?”

Responses:

“Yes” = 5 (62.5%); “Maybe” = 3 (37.5%); “No” = 0 (0%)

If you answered “Yes” to Q., explain how this scale could be helpful to you:

Predict Better Treatment Outcomes:

“Good to prompt and guide clinical discussion about areas where there is less self-efficacy and may be able to predict outcome”

“Towards end of treatment, it would give therapist another source of ERP efficacy & possibly predict treatment outcomes and maintenance of treatment gains”

Fill an Important Niche:

“I agree with you, the Child Self-Efficacy is not adequately assessed in CBT and this would fill an important niche. Especially, if it is given as a repeated measure across treatment to assess treatment-related changes in children's confidence. Nice job.”

Self-efficacy may be a Mechanism of Anxiety Reduction:

“If change in self-efficacy cognitions are a mechanism of anxiety reduction, this measure may help test this hypothesis”

Assist with Engagement During Exposure:

“It might be helpful by providing a structured way to assess for the nuances associated with the child's thoughts/beliefs about exposure tasks”

“It would help at beginning of treatment to assess a patient’s expectations about ERP and allow the therapist to provide psychoeducation to enhance acceptability of treatment”

“Specifying child's belief in his/her efficacy can then become a target for intervention (e.g., self-talk)”

“Yes, because you can assess expectations (in items 7-9) & attributions (in items 4-5)”

If you answered “Maybe,” explain how this scale may or may not be helpful to you:

“I am somewhat concerned that many of the items have to do more with outcome expectancy and other constructs that are related to self-efficacy but are not really self-efficacy”

“I just wonder if children can rate their response to exposures in general. They may say they can do some lower-level anxiety exposures but not believe they can do higher-level exposure”

Figure 2. Expert Reviewer Feedback

Thought the SEE-C Child would be helpful to them as a therapist:

62.5% = “yes” and 37.5% = “maybe”

If “Yes,” explain how this scale could be helpful to you:

- Predict better treatment outcomes
- Fill an important niche
- Self-efficacy may be a mechanism of anxiety reduction
- Assist with engagement during exposure

Thought the SEE-C Child would inform intervention planning and treatment engagement during exposure:

Thought the SEE-C Child items represented self-efficacy:

12.5% = “strongly agree,” 37.5% = “agree,” and 25% = “somewhat agree”

SEE-C response processing per child feedback. The SSAQ was used with two child participants to elicit qualitative and quantitative feedback on the comprehension of scale items and the understanding of response format. This information was used to revise and refine the SEE-C. Both child participants described the developing measure as needing more information regarding the definition and examples of exposure. Then, once the SEE-C was revised and the additional information included, child participants reported that the questionnaire was easy to understand and both required minimal assistance to complete the questionnaire. They also indicated that they would willingly complete the SEE-C, the questions were easy to answer, and they liked the formatting of the responses. The SEE-C was edited via a formal iterative process with regard to age-level readability, conciseness, and the need to add a definition and example of exposures.

Field Testing

Sample characteristics. A clinical sample of 24 treatment-seeking parent-child dyads was enrolled into the study. One-way ANOVA's were conducted on the number of pre-treatment comorbid diagnoses (ranging from 1 to 5 diagnoses) by pre-, mid-, and post-treatment on the child's self-report of self-efficacy on the SEE-C. Due to the low frequency of four ($n = 3$) and five ($n = 1$) diagnoses, these two values were collapsed to one value ($n = 4$) for these analyses. Results indicated no difference in self-efficacy at pre- and mid-treatment on the SEE-C child version; however, a significant difference on child self-efficacy was seen at post-treatment by the number of pre-treatment comorbid diagnoses ($F(3,19) = 3.260, p = .044$), where post hoc test revealed a difference approaching significance ($p = .056$) between a comorbidity of two pre-treatment diagnoses ($n = 8$) and four/five diagnoses ($n = 4$). See Table 6 for post-treatment diagnoses frequencies and treatment counts.

Table 6. Post-Treatment Type and Frequency of Diagnoses

Diagnosis	Post-Treatment
Separation Anxiety Disorder	0
Generalized Anxiety Disorder	8
Social Anxiety Disorder	2
Specific Phobia	2
School Refusal	1
Misophonia	0
Obsessive Compulsive Disorder	1
Depressive Disorder	1
Attention Deficit Hyperactivity Disorder	1
Oppositional Defiant Disorder	1
Panic	0
None	12

Frequency of Post-Treatment Comorbid Diagnoses

Diagnoses Count	Post-Treatment
0 Diagnoses	12
1 Diagnosis	10
2 Diagnoses	1
3 Diagnoses	0
4 Diagnoses	1
5 Diagnoses	0

Examination of the SEE-C at Pre-treatment

Bivariate Pearson Correlation Coefficients were run between the pre-treatment measures including the SEE-C, SCAS, CSDS composite scores and demographic variables (child age and gender). Results showed that the SEE-C was significantly related to parent report of child anxiety symptoms as measured by the SCAS ($r = -.417, p = .048$). The parent and child report of anxiety symptoms were also significant and positively correlated to each other ($r = .715, p = .000$). In addition, significant relationships were found between the child report of anxiety symptoms and the child report of functional impairment within the family ($r = .502, p = .017$), the parent report of child functional impairment socially ($r = .625, p = .001$), and the parent report of child functional impairment within the family ($r = .688, p = .000$). The child report of anxiety symptoms was also significantly related to the clinician report of symptom severity on the CGI ($r = .477, p = .018$). See Table 6 for complete list of pre-treatment correlations.

Given the significant pre-treatment relationship between the SEE-C child version and the SCAS parent version, as well as other pre-treatment measures, regression analyses were conducted to examine whether the child symptoms of anxiety, functional impairment, and motivation predicted to child self-efficacy. The first regression model examined whether parent report and child self-report of pre-treatment anxiety symptoms predicted child self-report of self-efficacy. Results approached significance, $R^2 = .232$, $F(2, 22) = 3.019, p = .071$, where only the parent report of child anxiety symptoms was significantly predictive ($\beta = -.646, t = -2.389, p = .027$). Three additional regression analyses examining (1) child self-report of state motivation, (2) child self-report and parent report of child functioning, and (3) clinician report of child symptom severity and

improvement as well as child age and gender as predictors of child self-report of self-efficacy were not significant.

Internal consistency of the SEE-C child version ranged from acceptable to excellent at pre-, mid-, and post-treatment (Cronbach's alphas of .793, .848, and .901, respectively). Similarly, the SEE-C parent version demonstrated good to excellent reliability, with Cronbach's alphas of .874 at pre-treatment, .932 at mid-treatment, and .901 at post-treatment.

Given the good pre-treatment internal consistency of the SEE-C child version as one single dimension, an exploratory principle component analysis (PCA) using Varimax rotation was performed on the 9-item scale to determine the underlying factor structure. A three-factor solution, with loadings ranging from 0.5 to 0.9, emerged from the analysis. Item one did not clearly load on a single factor but overlapped on two (Factor 1, 'belief in success of handling distress during an exposure,' and Factor 3, 'belief in success of exposure treatment'). Items two, three, and four loaded on Factor 1 ('belief in success of handling distress during an exposure'); items five, six, and nine loaded on Factor 2 ('belief in success of individual exposures themselves'); and items seven and eight loaded on Factor 3 ('belief in success of exposure treatment'). Cronbach alphas for each factor showed promising results with acceptable to good internal consistency, as Factor 1 had an $\alpha = .748$, Factor 2 had an $\alpha = .708$, and Factor 3 had an $\alpha = .831$ (item one was eliminated from these analyses due to the overlap between two factors). While three meaningful constructs are suggested, no clear determination of factor loadings can be made, at this point, due to the small sample size.

Examination of the SEE-C at Mid- and Post-Treatment

An exploratory examination at both mid- and post-treatment of the relationship between parent and child report of child anxiety symptoms, functioning, and clinician report of symptom severity and improvement were conducted (See Tables 7 & 8). Specifically, at mid-treatment, clinician report of child symptom severity was negatively correlated to child self-report of self-efficacy ($r = -.603, p = .003$). At post-treatment, child self-report of self-efficacy was inversely related to child self-report of anxiety symptoms ($r = -.611, p = .004$), parent report of child anxiety symptoms ($r = -.545, p = .016$), parent report of child functioning within the family ($r = -.605, p = .006$), and positively correlated to both parent report of child self-efficacy ($r = .484, p = .023$) and clinician report of improved symptoms ($r = .527, p = .012$).

Table 7. Bivariate Correlations Among Study Measures at Pre-Treatment

Measures	1	2	3	4	5	6	7	8	9	10	11	12	13	14
1. SEE-C Child	-													
2. SCAS Child	-.113	-												
3. SCAS Parent	-.417*	.715***	-											
4. PMOT Total	.241	-.185	-.184	-										
5. Sheehan Child School	-.055	-.136	-.428*	.030	-									
6. Sheehan Child Social	-.077	.211	-.048	-.090	.339	-								
7. Sheehan Child Family	-.237	.502*	.152	-.158	.282	.636**	-							
8. Sheehan Parent School	-.138	.180	.150	-.175	.432*	-.092	-.023	-						
9. Sheehan Parent Social	-.004	.625**	.658***	-.086	-.495*	.082	.101	.157	-					
10. Sheehan Parent Family	.024	.688***	.488*	.062	-.225	.142	.461*	-.037	.631**	-				
11. CGI Severity	-.080	.477*	.242	-.245	.181	.434*	.351	.241	.382	.660***	-			
12. CGI Improvement	-.317	.086	-.183	.261	.404	.506	.140	-.126	-.216	.209	.312	-		
13. Child Age	-.235	-.062	-.081	-.366	.006	.114	.299	.061	.114	.149	.214	.416*	-	
14. SEE-C Parent	-.176	.145	-.175	.083	-.161	.178	-.071	-.310	.115	.160	.027	-.058	-.084	-

Note: **Bold** = significantly related; * $p < .05$, ** $p < .01$, *** $p < .001$; Reminder: CGI Improvement scale shows improvement as clinician ratings decrease

Table 8. Bivariate Correlations Among Study Measures at Mid-Treatment

Measures	1	2	3	4	5	6	7	8	9	10	11	12	13	14
1. SEE-C Child	-													
2. SCAS Child	-.294	-												
3. SCAS Parent	-.264	.533*	-											
4. PMOT Total	.100	.165	-.233	-										
5. Sheehan Child School	-.155	.575**	.313	.070	-									
6. Sheehan Child Social	-.333	.285	.121	.009	.529*	-								
7. Sheehan Child Family	-.208	.766***	.152	.179	.644**	.499*	-							
8. Sheehan Parent School	-.018	.183	.535**	-.187	.544**	.402	.088	-						
9. Sheehan Parent Social	-.144	.058	.022*	-.237	.306	.319	.073	.677***	-					
10. Sheehan Parent Family	.045	.398	.585**	.125	.539*	.328	.450*	.645**	.457*	-				
11. CGI Severity	-.603**	.374	.142	-.293	.389	.377	.326	.223	.258	.047	-			
12. CGI Improvement	-.298	.063	.045	-.307	.211	.264	-.010	.261	.000	.004	.399	-		
13. Child Age	-.392	.250	.201	-.047	.390	.316	.312	.271	.368	.116	.254	-.229	-	
14. SEE-C Parent	.294	-.324	-.312	.038	-.396	-.393	-.331	-.317	.115	-.279	-.237	.462*	-.234	-

Note: **Bold** = significantly related; * $p < .05$, ** $p < .01$, *** $p < .001$; Reminder: CGI Improvement scale shows improvement as clinician ratings decrease

Table 9. Bivariate Correlations Among Study Measures at Post-Treatment

Measures	1	2	3	4	5	6	7	8	9	10	11	12	13	14
1. SEE-C Child	-													
2. SCAS Child	-.611**	-												
3. SCAS Parent	-.545*	.678**	-											
4. PMOT Total	.241	-.114	-.233	-										
5. Sheehan Child School	-.324	.567**	.521*	-.190	-									
6. Sheehan Child Social	-.346	.329	.292	.021	.785***	-								
7. Sheehan Child Family	-.341	.471*	.591**	-.212	.716***	.684**	-							
8. Sheehan Parent	-.383	.592**	.604**	.088	.435	.391	.270	-						
School														
9. Sheehan Parent Social	-.323	.541*	.612**	-.154	.679**	.583**	.616**	.615**	-					
10. Sheehan Parent	-.605**	.724***	.627**	-.145	.361	.209	.599**	.425	.603**	-				
Family														
11. CGI Severity	-.165	.411	.516*	-.310	.450*	.300	.661**	.340	.607**	.518*	-			
12. CGI Improvement	-.527*	-.522*	.541*	-.521*	.419	.286	.588**	.356	.668**	.644**	.807***	-		
13. Child Age	-.123	-.098	.243	.257	.130	.353	.257	.298	.026	-.014	.080	.127	-	
14. SEE-C Parent	.484*	-.585**	-.782***	-.082	-.454*	-.341	-.529*	-.712***	-.424	-.506*	-.284	.230	-.351	-

Note: **Bold** = significantly related; * $p < .05$, ** $p < .01$, *** $p < .001$; Reminder: CGI Improvement scale shows improvement as clinician ratings decrease

Due to significant relationships at mid-treatment and at post-treatment between the SEE-C and other constructs, hierarchical multiple regressions were performed to assess whether certain variables predicted to lower child anxiety symptoms at mid-treatment and at post-treatment. Significant results were seen when modeling post-treatment child self-report of self-efficacy on the SEE-C and PMOT (motivation) and predicting to post-treatment child self-report of anxiety symptoms via the SCAS after controlling for pre-treatment child self-report of anxiety symptoms, self-efficacy, and motivation. Results demonstrated that there was a significant effect ($F(5, 13) = 4.348$, $p = .015$, $R^2 = .626$), where, after controlling for pre-treatment variables, at post-treatment higher child-report of self-efficacy predicted to lower anxiety symptoms via child-report ($\beta = -.574$, $p = .013$). Individual predictors were examined and are reported in Table 9.

Evaluation of the SEE-C Overtime

Repeated measures MANOVAs were conducted on all measures and groups of measures with the same construct (i.e., child self-efficacy, child anxiety symptoms, child motivation, and child functioning) across pre-, mid-, and post-treatment. Significant differences were seen overtime on most constructs. Particularly, findings showed that the SEE-C child and parent versions demonstrated significant, large effects from pre-, to mid-, to post-treatment ($F(2, 18) = 7.976$, $p = .000$, $\eta_p^2 = .301$). Bonferroni post hoc tests showed that participants experienced a significant change on the child version, $p = .044$, from pre-treatment to mid-treatment and on the parent version with significant increases from pre- to post-treatment ($p = .017$), mid- to post-treatment ($p = .010$), and pre- to post-treatment ($p = .000$). See Figure 3. The child and parent anxiety symptoms measures (See Figure 4) also showed large effects and

significant differences overtime, $F(2, 17) = 10.845, p = .000, \eta_p^2 = .383$. Post hoc tests revealed that the parent report demonstrated significant decreases in anxiety symptoms over time: pre- to post-treatment ($p = .023$), mid- to post-treatment ($p = .000$), and pre- to post-treatment ($p = .000$).

Additionally, child and parent functional impairment measures as well as the clinician ratings measures also demonstrated significant change across time, with medium to large effect sizes. For instance, parent and child report of child social impairment (See Figure 5) was significant overtime with a medium effect size, $F(1, 17) = 3.146, p = .020, \eta_p^2 = .160$. Post hoc tests showed significant mean difference between pre- to post-treatment, where social function increased overtime ($p = .012$). Similarly, with a medium effect size, parent and child report of child impairment (See Figure 6) within the family was significant overtime ($F(1, 17) = 3.190, p = .019, \eta_p^2 = .162$), with post hoc differences seen from pre- to post-treatment ($p = .008$), showing an increase in child functioning within the family. Finally, a large effect size and significant difference overtime was seen on the clinician rating (See Figure 7) of child symptom severity and improvement ($F(2, 21) = 9.963, p = .000, \eta_p^2 = .317$). Clinician report on child symptom severity demonstrated significant differences (decreases) between pre- to post-treatment ($p = .000$) and mid- to post-treatment ($p = .001$), and on child improvement (increased in improvement) between pre- to post-treatment ($p = .003$) and mid- to post-treatment ($p = .000$). See Table 10 for a complete list of measures, means, standard deviations, and statistical values.

Table 10. Hierarchical Regression Analysis Predicting to Post-Treatment (Tx) Child Self-Reported Anxiety Symptoms

Variable	Model 1			Model 2			Model 3			Model 4			Model 5		
	<i>B</i>	<i>SE</i> <i>B</i>	β	<i>B</i>	<i>SE</i> <i>B</i>	β	<i>B</i>	<i>SE</i> <i>B</i>	β	<i>B</i>	<i>SE</i> <i>B</i>	β	<i>B</i>	<i>SE</i> <i>B</i>	β
Pre-Tx SCAS Child	0.66	0.26	.52*	0.76	0.28	.60*	0.76	0.29	.60*	0.57	0.24	.44*	0.54	.25	.42*
Pre-Tx SEE-C Child				0.66	0.67	.22	0.72	0.71	.24	1.05	0.56	.35	1.00	.58	.33
Pre-Tx PMOT							-0.12	0.40	-.07	0.42	0.35	.23	.39	.37	.22
Post-Tx SEE-C Child										-0.02	0.01	-.680**	-1.50	.51	-.57*
Post-Tx PMOT													-.441	.31	-.28
<i>R</i> ²	.27				.31			.32			.57			.63	
<i>F</i> for change in <i>R</i> ²	6.32*			0.99			0.09			8.08*				2.03	

Note: **Bold** = significantly related; **p*<.05, ***p*<.01, ****p*<.001; SEE-C = Self-Efficacy during Exposure – Child; PMOT = Pediatric Motivation Scale

Table 11. GLM/Repeated Measures MANOVA Examining Pre-, Mid-, and Post- Treatment Variables

		Pre-Treatment	Mid-Treatment	Post-Treatment	F	p	Partial Eta Squared	Observed Power	Differences
	N	Mean (SD)	Mean (SD)	Mean (SD)					
SEE-C Child		33.70(5.23)	36.91(5.34)	36.30(6.33)					1 & 2 = .044
SEE-C Parent	20	28.40(5.34)	31.70(6.40)	35.85(7.10)	7.976***	.000	.301	.997	1 & 2 = .017 1 & 3 = .000 2 & 3 = .010
SCAS Child		36.05(13.23)	32.11(15.25)	28.47(17.18)					
SCAS Parent	19	34.05(11.10)	27.42(12.04)	19.16(9.77)	10.845***	.000	.383	1.000	1 & 2 = .023 1 & 3 = .000 2 & 3 = .000
PMOT Total	22	81.18(8.91)	80.68(10.66)	82.64(11.63)	0.438	.651	.042	.111	
Sheehan Child School		2.56(2.62)	2.06(2.69)	2.44(2.96)					
Sheehan Parent School	18	4.56(2.73)	4.11(2.49)	3.22(2.37)	1.529	.204	.085	.448	
Sheehan Child Social		3.61(2.81)	3.17(2.77)	2.61(2.40)					
Sheehan Parent Social	18	5.83(2.60)	4.39(2.64)	3.39(2.83)	3.146*	.020	.160	.792	1 & 3 = .012
Sheehan Child Family		3.39(3.15)	2.44(2.46)	2.22(2.71)					
Sheehan Parent Family	18	4.72(2.72)	3.67(1.88)	2.50(2.79)	3.190*	.019	.162	.798	1 & 3 = .008
CGI Severity		3.70(0.47)	3.78(0.60)	2.70(0.97)					1 & 3 = .000 2 & 3 = .001
CGI Improvement	23	3.48(1.38)	3.70(0.47)	2.26(0.92)	9.963***	.000	.317	1.000	1 & 3 = .003 2 & 3 = .000

Note: **Bold** = significantly related; *p < .05, **p < .01, ***p < .001; Partial $\eta^2 = 0.01$ 'small' effect size, $\eta^2 = 0.09$ 'medium' effect size, $\eta^2 = 0.25$ 'large' effect size

Figure 3

Figure 4

Figure 5

Figure 6

Figure 7

CHAPTER 4

DISCUSSION

This study fills a gap in the literature with the development, preliminary psychometric evaluation of reliability and validity, and field testing of a questionnaire of child self-efficacy to be used during exposure in CBT for pediatric anxiety disorders. The purpose of developing the SEE-C was to facilitate the understanding of child/adolescent factors that contribute to treatment engagement during exposure. Overall, the SEE-C child version was found to be helpful to therapists, particularly during treatment planning and engagement during exposure. It demonstrated good face and content validity, acceptable to excellent internal consistency/reliability from pre-treatment to post-treatment on the measure as a whole, and a promising three-factor structure that demonstrated acceptable to good internal consistency per factor.

Much of the literature on child anxiety treatment focuses on treatment outcomes of CBT with exposure but not on the effects of child engagement during exposure. Child factors that may influence this engagement, as postulated in the theory of positive psychological momentum, include perceived self-efficacy and motivation. As study findings suggest, self-efficacy and motivation are relevant and important to child engagement during exposure, as they predicted to reduced anxiety symptoms at post-treatment. Additionally, child self-efficacy was significantly related to child anxiety symptoms, child symptom severity, and level of child functioning within the family at pre-, mid- and post-treatment.

Sample Comorbidity

This clinical sample of treatment-seeking parents and youth, while consistent with previous research on many demographic characteristics, demonstrated at pre-treatment that greater than half of the youth met criteria for multiple diagnoses of anxiety disorders as well as other disorders. Specifically, 71% of the sample received at least two or three concurrent diagnoses determined via a semi-structure assessment (ADIS-IV revised for DMS-5 (APA, 2013)). Further, post-treatment outcomes indicated that 50% of children ended treatment with no diagnoses and another 42% met criteria for only one diagnosis (80% of which was a single anxiety disorder diagnosis). These statistics mirror diagnoses rates in other studies focused on CBT for pediatric anxiety disorders (i.e., Cartwright-Hatton et al., 2006).

This study's focus is novel in its examination of self-efficacy as a factor postulated to contribute to engagement during exposure and assist in explaining 'why' children engage in exposure. When considering the comorbid diagnoses, it seems that the compounded symptom presentations would dampen the treatment outcomes seen in this study; however, they did not. Interestingly, among this small clinical sample, child self-efficacy did not differ according to comorbidity (presence/absence) at pre- and mid-treatment. However, significant differences in post-treatment child self-efficacy were found between those children who had two diagnoses versus those with four to five diagnoses in that those with greater comorbidity showed less perceived self-efficacy than those with fewer diagnoses at the end of treatment.

The SEE-C: Psychometric Evaluation

Expert reviewer and youth feedback indicated that the SEE-C child version showed acceptable and appropriate face and content validity. The measure was found to

be adequate in design and content for the age and population under study. The measure also subjectively appeared to measure the construct it was supposed to measure. For example, expert reviewers indicated an interest in the creation of the SEE-C as a tool to address a child's in-session beliefs about self-efficacy during exposure practice. Expert reviews were also positive about the SEE-C's ability to measure one of the child factors, i.e., self-efficacy, that is likely to improve treatment engagement during exposure and resultant treatment outcomes.

Because of the acceptable to excellent internal consistency for the measure as a whole, exploratory PCA with Varimax rotation was utilized and suggested a three-factor structure. These three factors appear relevant to the measure, and the results are promising, as future confirmation of the factor structure (i.e., subscales) may better explain the results of a child's self-efficacy overtime, therefore providing greater information as to a child's engagement during exposure. For instance, in this pilot study, the child-report of self-efficacy demonstrated a significant increase from pre- to mid-treatment; however, it then slightly reduced from mid- to post-treatment (although still significantly increased from pre-treatment). While these results are interesting, the reason for the increase and slight decrease can only be inferred. Where as, if we were able to utilize the measure's subscales, we could better explain a child's perceived self-efficacy overtime via the more concise definition of each subscale, as each of the factors would explain a unique component of the child's self-efficacy.

In addition, there was significant positive association and medium effect size between the SEE-C child version and the SEE-C parent version at post-treatment. While it does not provide evidence of construct validity (the degree to which a measure adequately evaluates the construct it claims to assess), since both measures are newly

created, it does further assist in supporting the face and content validity. This is observed as both the parent and the child responder appeared to understand and be able to report on perceived child self-efficacy during exposure. While there is no simple metric to quantify this measure's construct validity (Westen & Rosenthal, 2003), particularly because this appears to be the first to measure self-efficacy in CBT for pediatric anxiety, correlations between the SEE-C child version and measures of child anxiety symptoms and functioning demonstrate relationships in directions expected in a measure of self-efficacy. For example, there was a negative association and large effect size of reported child anxiety symptoms with child self-reported self-efficacy as well as another negative correlation and large effect size between child functioning and child self-reported self-efficacy.

Engagement During Exposure

In order for CBT with exposure to be effective, exposures must be completed, as exposures are one of the main or “active” ingredients in CBT for pediatric anxiety disorders (Hudson & Kendall, 2002). As such, a focus on the engagement during exposure practice is necessary. Engagement is not always easy, as it involves multiple components including a motivational commitment and behavioral involvement and a child's participation, therapist and child collaboration, and the child's belief of self-efficacy to continue in the agreed-upon and identified intervention (King, et al., 2014). Additionally, and as stated earlier, Positive Psychological Momentum (PPM) is the “perception, attitude, belief, or state-of-mind an individual experiences, in which their initial success leads to more successes” (Iso-Ahola & Blanchard, 1986). So, the hope is that once a child feels self-efficacious in completing a task competently multiple times (such as exposures), he/she will become confident in their abilities. As a result, a child's

in-session self-efficacy and motivation to experience and feel distress in the face of a feared stimulus may be one of the important ingredients in the engagement in exposure practice.

Perceived self-efficacy and motivation. Study findings indicate that child perceived self-efficacy is negatively related to child anxiety symptoms over time (pre-, mid-, and post-treatment), whereby when a child's perceived self-efficacy is low, their anxiety symptoms are high. Furthermore, as treatment progresses, a child's self-efficacy increases and their anxiety symptoms decrease. This is also true in the relationship between child perceived self-efficacy and symptom severity as well as functional impairment (social, school, and family domains). These findings provide evidence into one, seemingly impactful, factor that contributes to a child's engagement during exposure.

This study's goal was to define child factors that contribute to engagement in exposure, including the perceived self-efficacy and motivation a child believes he/she has and uses to incrementally approach a feared situation/event. However, by identifying factors that influence engagement, we also need to consider that these factors under investigation may be stimulated by the anxiety (the "challenge") that maintains the momentum to generate self-efficacy and motivation. Once a "challenge" is conquered, another "cycle" of momentum needs to be generated to deal with the next challenge. Depending on the child, it may take some time to build the stamina needed to wade through potentially multiple challenges presented by anxiety. A focus on additional child factors of engagement during exposure are outside the scope of this current study; however, the consideration of these additional factors is necessary and leads us to the

future directions of this research, as well as highlights the importance of and need to consider parent and therapist factors that may exist.

Limitations

While this study has multiple strengths, it does not go without limitations. Expert reviewers reviewed the measure only once rather than multiple times through an iterative feedback process. While an iterative process would have provided more feedback regarding the edited measure's face validity, a consensus regarding the measure's clinical utility occurred with a singular review. This study was also limited by the child feedback portion of the study, as there was a small sample size of child reviewers ($N=2$) and no variation in gender and age. However, these were the first two recruited child participants into the study and defined by the research proposal to be the child feedback participants. Nonetheless, the child reviewers' feedback was valuable and provided information on the developing measure in a structured interview after the measure was administered, and the children's answers were queried in real-time. This feedback was thorough and qualitatively as well as quantitatively assisted in shaping the measure. Additionally, the homogeneity of the field testing sample makes the SEE-C non-generalizable to populations who are dissimilar. There was no control group for comparison. Future research should include a randomized control clinical trial. Study findings would be stronger if psychiatric diagnoses were assessed at post-treatment and if follow-up assessments were completed. In the present study, post-treatment diagnoses were determined by each treating clinician without the use of a structured diagnostic instrument.

In sum, the present study addresses a gap in the literature by developing a measure that identifies a child's self-reported, perceived ability (i.e., self-efficacy) to

complete exposures during CBT for anxiety disorders. This research contributes to the understanding of child engagement during exposure in CBT for anxiety disorders and, thus, may help to improve treatment outcomes by calling attention to those factors influential in a child's ability to make the most of exposures during CBT treatment. Necessary next steps are to further test and validate the developed measure. Once determined valid and reliable, future research could examine whether a child's perceived in-session self-efficacy during exposure predicts to a child's between-session self-efficacy during exposure, as well as whether self-efficacy predicts a child's motivation to do a greater amount and/or more difficult exposures during CBT for anxiety disorders over time.

Future directions for research include the need for a randomized controlled longitudinal study using the SEE-C, as well as an examination of other child factors likely to influence child engagement during exposure and, ultimately, procure improved treatment outcomes. In addition, a larger sample size would assist in greater measurement testing and the confirmation of psychometric properties such as reliability of domain factor structure, test-retest reliability, and criterion related validity. Similarly, parent and clinician factors that influence engagement during exposure also need to be explored. For instance, parent factors to be examined include parent accommodation, knowledge about exposure and exposure practice, and parent perceived self-efficacy (or belief) about their child's ability to complete exposures. Clinician factors worthy of study include clinicians' beliefs about their client's ability to complete exposure practice, knowledge of and ability to employ motivation enhancement techniques, rapport building skills, and skill and ability to individualize and create appropriate and effective exposures. Additionally, motivation and growth mindset are two areas that are important when

considering child factors that influence engagement during exposure that may, ultimately, contribute to better treatment outcomes. For example, motivation is important for ongoing behavior change during psychotherapy and has been documented to improve efficacy in treatment of anxiety disorders, obsessive-compulsive disorders, depression, and substance use (e.g., Cox, Blount, Bair, & Hosier, 2000; DiClemente, 1999; Lombardi, Button, & Westra, 2014; Ponzini, Van Kirk, Schreck, Nota, Elias, 2019).

The area of growth mindset is equally important to consider as a child factor influencing engagement during exposure. Growth mindset is based on the belief that basic trait qualities are things you can cultivate and grow through your efforts because they are malleable - not *fixed* (Dweck, 2008). Utilizing this mindset, one can conceivably challenge themselves to try something new and learn from it, just by sticking with it, even when it is difficult (as in the case of exposure practice during the treatment for anxiety disorders; Dweck, 2016). Research on growth mindset and anxiety has been demonstrated and shows promising results (e.g., Schleider & Weisz, 2018). As such, more research is needed to continue to explore this factor.

To conclude, CBT with exposure for childhood anxiety disorders is demonstrated effective in reducing child anxiety over time; however, it is not 100% effective. As such, research needs to identify the factors impacting child engagement during exposure to assist in the creation of additional clinical tools and, ultimately, better treatment outcomes.

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Appendix A. Outline of Assessments and Schedule of Administration

Assessment	Length	Expert (E) /Child (C) /Parent (P) /Therapist (TH)	Pre-treatment	End of Each Treatment Session	Week 8	Post-treatment
Expert Reviewer:						
Expert Demographics Sheet	10 mins	E	x			
Expert Survey (adapted from the Pediatric Motivation Scale Service Provider Survey; Tatla, 2014)	20 mins	E	x			
Field Testing: Child-Parent Dyads						
Anxiety Disorder Interview Schedule IV – Child Version (ADIS-IV-C; Silverman & Albano, 1996)	1.5 hours	C / P	x			
Parent Demographics Sheet	10 mins	P	x			
Spence Children's Anxiety Scale (SCAS; Spence, 1997)	10 mins	C / P	x		x	x
Sheehan Disability Scale for Anxiety (SDSA; Whiteside, 2009)	10 mins	C / P	x		x	x
Pediatric Motivation Scale (PMOT; Tatla, Jarus, Virji-Babul, & Holsti, 2015)	5 mins	C	x	x		x
Self-Efficacy During Exposure – Child (SEE-C)	5 mins	C / P	x	x		x
Clinical Global Impression (CGI; Guy, 1976)	3 mins	TH		x		
First two (2) child/adolescent participants:						
Semi-structured Administration Questionnaire (SSAQ; adapted from the Administration Questionnaire; Tatla, 2014)	10 mins	C		x (after 1 st treatment session only)		

Appendix B. Original version of the SEE-C Child

Self-Efficacy during Exposure – Child version (SEE-C)

Each question will ask you to tell how “*sure you are*” that you can do a certain thing during your exposure, and to provide an answer that best matches your feeling. Remember, an exposure is an agreed upon task or situation that allows you to practice facing your fears.

Practice items: If you were asked to do each of these things, how sure are you that you could:

a) *Jump into a cold pool of water...*

<i>Not sure at all</i>	<i>A tiny bit sure</i>	<i>Somewhat sure</i>	<i>Mostly Sure</i>	<i>Completely sure</i>
0	1	2	3	4

b) *Eat a dessert of your choice...*

<i>Not sure at all</i>	<i>A tiny bit sure</i>	<i>Somewhat sure</i>	<i>Mostly Sure</i>	<i>Completely sure</i>
0	1	2	3	4

How sure are you that you can do each of the following things *during an exposure*?

1. Stay in a scary or uncomfortable **situation**...

<i>Not sure at all</i>	<i>A tiny bit sure</i>	<i>Somewhat sure</i>	<i>Mostly Sure</i>	<i>Completely sure</i>
0	1	2	3	4

2. Sit with a scared or uncomfortable **feeling/emotion**...

<i>Not sure at all</i>	<i>A tiny bit sure</i>	<i>Somewhat sure</i>	<i>Mostly Sure</i>	<i>Completely sure</i>
0	1	2	3	4

3. Sit with a scary or uncomfortable **thought**...

<i>Not sure at all</i>	<i>A tiny bit sure</i>	<i>Somewhat sure</i>	<i>Mostly Sure</i>	<i>Completely sure</i>
0	1	2	3	4

How sure are you that each of the following things will happen *during an exposure*?

4. Your fear will go down, all on its own...

<i>Not sure at all</i>	<i>A tiny bit sure</i>	<i>Somewhat sure</i>	<i>Mostly Sure</i>	<i>Completely sure</i>
0	1	2	3	4

5. You will be able to bring your fear down on your own...

<i>Not sure at all</i>	<i>A tiny bit sure</i>	<i>Somewhat sure</i>	<i>Mostly Sure</i>	<i>Completely sure</i>
0	1	2	3	4

6. You will learn whether the thing you fear happens as you thought it would...

<i>Not sure at all</i>	<i>A tiny bit sure</i>	<i>Somewhat sure</i>	<i>Mostly Sure</i>	<i>Completely sure</i>
0	1	2	3	4

How sure are you that each of the following things will happen in the future, *after you work hard on many exposures?*

7. Exposures will help me be less afraid...

<i>Not sure at all</i>	<i>A tiny bit sure</i>	<i>Somewhat sure</i>	<i>Mostly Sure</i>	<i>Completely sure</i>
0	1	2	3	4

8. Exposures will help keep my fears from getting in the way of the things I want to do...

<i>Not sure at all</i>	<i>A tiny bit sure</i>	<i>Somewhat sure</i>	<i>Mostly Sure</i>	<i>Completely sure</i>
0	1	2	3	4

9. Exposures will help me be stay less afraid after treatment is complete...

<i>Not sure at all</i>	<i>A tiny bit sure</i>	<i>Somewhat sure</i>	<i>Mostly Sure</i>	<i>Completely sure</i>
0	1	2	3	4

page 2 of 2

SEE-C (Child version)

For Therapist Only: In the blank below, please list one situation/object that the child has identified as scary or worrisome at a feelings thermometer rating of 4-6. Read the text in italics aloud to the child. The child will then complete the remaining sections on his/her own.

Today, I'm going to ask you some questions about things people do, and I'd like to know how "sure you are" that you can do them.

For example: How sure are you that you could:

a) *Jump into a cold pool of water...*

Not sure at all

A tiny bit sure

Somewhat sure

Mostly Sure

Completely sure

b) *Eat your favorite dessert...*

Not sure at all

A tiny bit sure

Somewhat sure

Mostly Sure

Completely sure

*OK, great! Now, I want to ask you how sure you are about doing some things during a practice task. A **practice task** is an activity a person does to be less afraid of something – like to be less afraid of a dog or bees or of the dark. When people are afraid of something, they often try to stay away from it. Practice tasks slowly introduce a person to what they are afraid so they get used to it.*

For example, a practice task for a person who is afraid of spiders might be:

- *thinking about (or imagines) a picture of a spider*

OR

- *looking at a picture of a spider in a book*

OR

- *looking at a spider on the wall*

*So remember, a **practice task** is an activity that slowly introduces a person to a situation/object that they are afraid of.*

You said earlier that you were afraid of _____ (with a feelings thermometer rating of 4-6). Imagine, for these next questions, that you are being asked to do a practice task that involves this scary situation/object.

Please **circle ONE answer** that matches your feeling. There are no right or wrong answers to these questions. We just want to know how sure you feel today.

1. How sure are you that you can stay in a stressful/scary **situation** during the practice task?

Not sure at all A tiny bit sure Somewhat sure Mostly Sure Completely sure

2. How sure are you that you can stay in a stressful/scary **feeling** (example: feeling scared, stressed, worried) during the practice task?

Not sure at all A tiny bit sure Somewhat sure Mostly Sure Completely sure

3. How sure are you that you can stay in a stressful/scary **thought** (example: thinking about something that is scary or stressful) during the practice task?

Not sure at all A tiny bit sure Somewhat sure Mostly Sure Completely sure

4. How sure are you that **your fear will go down all by itself** during the practice task?

Not sure at all A tiny bit sure Somewhat sure Mostly Sure Completely sure

5. How sure are you that **you will be able to lower your fear by yourself** during the practice task?

Not sure at all A tiny bit sure Somewhat sure Mostly Sure Completely sure

6. Over time, how sure are you that **you will not be as scared of the situation/object** during the practice task?

Not sure at all A tiny bit sure Somewhat sure Mostly Sure Completely sure

7. How sure are you that practice tasks **will help you be less afraid** after you have been doing practice tasks for a while?

Not sure at all A tiny bit sure Somewhat sure Mostly Sure Completely sure

8. How sure are you that practice tasks **will help keep your fears from getting in the way of the things you want to do** after you have been practicing for a while?

Not sure at all A tiny bit sure Somewhat sure Mostly Sure Completely sure

9. How sure are you that after you practice for a while with some help, practice tasks **will help you stay less afraid**

Not sure at all A tiny bit sure Somewhat sure Mostly Sure Completely sure

Appendix D. Adapted and Created Study Measures

Clinician Demographics Questionnaire

Today's Date _____

1. Please indicate the number of years you have been working as a licensed psychologist in RI or MA with children and adolescents.

2. Please indicate the number of years you have been working specifically in the field of anxiety and OCD with children and adolescents.

3. Please indicate the number of years you have been utilizing cognitive behavioral therapy with exposure for anxiety and OCD treatment with children and adolescents.

4. What type of institution/agency/organization are you employed?

Clinician Feedback Survey

You have been invited to participate in this study because you have expertise in the field of anxiety disorders and obsessive-compulsive disorder (OCD). As a professional in the area, you have knowledge about the acute discomfort children and adolescents with anxiety disorders and OCD often experience during exposure practice in cognitive behavioral therapy with exposure or exposure with response prevention. **Your expertise is valuable to us.**

Based on your opinion, please answer to the best of your ability the following questions about the *Self-efficacy for Exposure – Child version* (SEE-C). For each statement below, please indicate whether you strongly agree, agree, somewhat agree, are neutral, somewhat disagree, disagree, or strongly disagree.

1. The items on this scale appear to represent self-efficacy.

- 7. Strongly Agree
- 6. Agree
- 5. Somewhat Agree
- 4. Neutral
- 3. Somewhat Disagree
- 2. Disagree
- 1. Strongly Disagree

2. The instructions on the Self-efficacy for Exposure – Child version are easy to follow.

- 7. Strongly Agree
- 6. Agree
- 5. Somewhat Agree
- 4. Neutral
- 3. Somewhat Disagree
- 2. Disagree
- 1. Strongly Disagree

3. The questions on the Self-efficacy for Exposure – Child version are clear and easy to follow.

- 7. Strongly Agree
- 6. Agree
- 5. Somewhat Agree
- 4. Neutral
- 3. Somewhat Disagree
- 2. Disagree
- 1. Strongly Disagree

4. Children and adolescents with anxiety disorders and/or obsessive-compulsive disorder will be able to understand and select an appropriate response (with minimal to moderate assistance) using the response scale on a cue card.

- 7. Strongly Agree
- 6. Agree
- 5. Somewhat Agree
- 4. Neutral
- 3. Somewhat Disagree
- 2. Disagree
- 1. Strongly Disagree

5. The layout of the questions on the Self-efficacy for Exposure – Child version are attractive.

- 7. Strongly Agree
- 6. Agree
- 5. Somewhat Agree
- 4. Neutral
- 3. Somewhat Disagree
- 2. Disagree
- 1. Strongly Disagree

6. The Self-efficacy for Exposure – Child version is at a reading level appropriate for an 8-year old child.

- 7. Strongly Agree
- 6. Agree
- 5. Somewhat Agree
- 4. Neutral
- 3. Somewhat Disagree
- 2. Disagree
- 1. Strongly Disagree

7. A child with anxiety disorders and/or obsessive-compulsive disorder would not object to answering any items on the Self-efficacy for Exposure – Child version.

- 7. Strongly Agree
- 6. Agree
- 5. Somewhat Agree
- 4. Neutral
- 3. Somewhat Disagree
- 2. Disagree
- 1. Strongly Disagree

8. In your opinion, has any major topic related to self-efficacy during exposure been omitted?

9. How long do you think it will take a child to complete the Self-efficacy for Exposure – Child version?

1. < 5 minutes
2. 5-10 minutes
3. 11-15 minutes
4. 16-20 minutes
5. 21-25 minutes
6. 26-30 minutes
7. > 30 minutes

10. During treatment, what is a reasonable length of time that you could spend completing this scale with a child?

1. < 5 minutes
2. 5-10 minutes
3. 11-15 minutes
4. 16-20 minutes
5. 21-25 minutes
6. 26-30 minutes
7. > 30 minutes

11. Based on your experience with children and adolescents with anxiety disorders and/or obsessive-compulsive disorder, what is a reasonable number of questions to include on the Self-efficacy for Exposure – Child version?

1. < 5 questions
2. 5-10 questions
3. 11-15 questions
4. 16-20 questions
5. 21-25 questions
6. 26-30 questions
7. > 30 questions

12. In your opinion, would this scale be helpful to you as a therapist?

0. No
1. Yes
2. Maybe

13. If you answered yes to question 12, please explain how this scale could be helpful to you.

14. If you answered no to question 12, please explain why this scale would not be helpful to you.

15. Are there any items on this scale that appear redundant or unnecessarily repeated?

16. Were any of the questions unclear or ambiguous? If so, would you say which one(s) and why?

17. Are there any other obstacles or challenges you see in patients reporting their self-efficacy on the Self-efficacy for Exposure – Child version?

18. Would you add any other questions?

19. Do you think scale results can inform intervention planning or treatment engagement during exposure?

20. Do you have any other comments you wish to share?

Thank you very much for your valuable feedback and suggestions!

Semi-structured Administration Questionnaire

1. Was the child able to understand the instructions of the Self-Efficacy During Exposure – Child version?

0 No
1 Yes

Comments:

2. Was the child able to understand the questions on the Self-Efficacy During Exposure – Child version?

0 No
1 Yes

Comments:

3. Was the child able to understand the responses on the Self-Efficacy During Exposure – Child version?

0 No
1 Yes

Comments:

4. How much assistance did the child require?

1. Minimal 2. Moderate 3. Maximum

Comment:

5. Did the child object to answering any of the questions?

0 No
1 Yes

Comments:

How long did it take to complete the Self-Efficacy During Exposure – Child version?

Where any of the questions difficult or hard to answer?

0 No

1 Yes

If yes, which ones and why?

Would you add any other questions to the Self-Efficacy During Exposure – Child version?

0 No

1 Yes

If yes, which ones and why?

Any other comments?

Caregiver Demographics Sheet

Today's Date: _____

Participant Name: _____

Caregiver's name: _____

Address: _____

Child's Age: ____ (yrs) ____ (mos)

Child's Sex: ☐ Male (0) ☐ Female (1)

Child's Ethnic Category: ☐ Hispanic or Latino (1) ☐ Not Hispanic or Latino (2)

Child's Racial Category: ☐ Caucasian (1) ☐ African-American (2) ☐

Asian/Pacific Islander (3) ☐ Native American (4) ☐ Multi-racial (5)

☐ Other (6), specify: _____

Biological Parents:

Mother: Age: _____

Check highest level of education obtained:

____ did not graduate from high school (1) ____ college graduate (4)

____ high school graduate (2) ____ advanced college degree (5)

____ some college (3)

Occupation: _____

Father: Age: _____

Check highest level of education obtained:

____ did not graduate from high school (1) ____ college graduate (4)

____ high school graduate (2) ____ advanced college degree (5)

____ some college (3)

Occupation: _____

Child's biological parents are:

____ married and living together (1)

____ unmarried and living together (2)

____ unmarried, not living together (3)

____ divorced (4)

____ separated (5)

____ mother deceased (6)

____ father deceased (7)

____ both parents deceased (8)

____ unknown (9)

The child lives with: ☐ Biological mother and father (1)

☐ Single Parent: Please note: ☐ Mother (2) or ☐ Father (3)

- ☐ ☐ Mother and step-father (4)
☐ ☐ Father and step-mother (5)
☐ ☐ Equal time with separated/divorced parents (6)
☐ ☐ Adoptive parents (6)
☐ ☐ Other

(0): _____

Approximate Household Yearly Income:

- ☐ \$20,000 or less (1) ☐ \$20,001 - \$40,000 (2) ☐ \$40,001 - \$60,000 (3)
☐ \$60,001 - \$80,000 (4) ☐ \$80,001 - \$100,000 (5) ☐ \$100,000+ (6)

Child's siblings (list ages):

	age	age
Full brothers:		
Full sisters:		
Half-brothers:		
Half sisters:		
Step brothers		
Step sisters		

Current School: ☐ Public (1) ☐ ☐ Private (2) ☐ ☐ Home Studies (3) ☐ ☐ Not in School (4) ☐ ☐ Other (5)

Grade: _____

Has child ever attended resource, remedial, or special classes in the past? ☐ ☐ ☐ No (0)
☐ ☐ ☐ Yes (1)

If yes, describe: _____

Has child ever repeated a grade? ☐ ☐ ☐ No (0) ☐ Yes (1) If yes, describe: -

Current School Performance: ☐ Failing (1) ☐ Below Average (2) ☐ Average (3)
☐ Above Average (4)

Psychiatric History:

Has your child ever been hospitalized because of a behavioral, emotional, or psychiatric problem?

☐ ☐ ☐ ☐ ☐ No (0) ☐ ☐ Yes (1) If yes, Child's age: _____

Reason: _____

Medical History:

Has your child suffered from any of the following medical problems?

☐ head injuries (concussions, loss of consciousness) ☐ allergic reactions to medications
☐ seizures ☐ other allergies
☐ recurrent headaches ☐ hospitalization for medical illness
☐ bone fractures ☐ hearing impairment
☐ asthma ☐ surgery
☐ other medical problems (describe)

If yes to any of the above, please provide details:

Medication History:

Please provide information about all medications that your child is currently taking:

Name of medication	Date started (mo/yr)	Current Dose

Please provide information about medications that your child has taken for psychiatric problems in the past:

Past Medications	Date started (mo/yr)	Date stopped (mo/yr)	Final Dose

Have any other family members had psychiatric / emotional problems? ☐☐ No
☐☐ Yes

If yes, please list relationship to child and problem experienced below:

Relative	OCD Other	Tics/ Tourette's	Anxiety	Depression	Drugs/ Alcohol	Schizophrenia
Mother – biological □ _____	☐	☐	☐	☐	☐	☐
Father - biological □ _____	☐	☐	☐	☐	☐	☐
Sister: Age _____ □ _____	☐	☐	☐	☐	☐	☐
Sister: Age _____ □ _____	☐	☐	☐	☐	☐	☐
Brother: Age _____ □ _____	☐	☐	☐	☐	☐	☐
Brother: Age _____ □ _____	☐	☐	☐	☐	☐	☐
Pat. Grandmother	☐	☐	☐	☐	☐	☐

	☐ _____ ☐ _____
Pat. Grandfather	☐ ☐ ☐ ☐ ☐ ☐ ☐ _____
Mat. Grandmother	☐ ☐ ☐ ☐ ☐ ☐ ☐ _____
Mat. Grandfather	☐ ☐ ☐ ☐ ☐ ☐ ☐ _____
Other Relative: _____	☐ ☐ ☐ ☐ ☐ ☐ ☐ _____

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