Effectiveness of Cognitive Behavior Therapy for Children with Anxiety Disorders

Lutfun Nahar

Registration No. 057/2015-16

Department of Clinical Psychology

University of Dhaka

August, 2019

Effectiveness of Cognitive Behavior Therapy for Children with Anxiety Disorders

By

Lutfun Nahar

Department of Clinical Psychology

University of Dhaka

August, 2019

A Dissertation submitted to the Department of Clinical Psychology, University of Dhaka, in part of fulfillment of the requirements for the Degree of Master of Philosophy in Clinical Psychology

Dedication

I dedicate this dissertation to my parents and husband since without them making this would not been possible.

Approval Sheet

This is to certify that I have read the thesis entitled "Effectiveness of Cognitive Behavior Therapy for Children with Anxiety Disorders" submitted by Lutfun Nahar, in partial fulfillment of the requirements for the degree of Master of Philosophy in Clinical Psychology. She carried out this research under my supervision and guidance.

Dated, Dhaka
August, 2019

Dr. Farah Deeba
Associate Professor
Department of Clinical Psychology
University of Dhaka

Acknowledgements

The journey to achieve the M.Phil.in Clinical Psychology Program is covered with the assistance and efforts of those who worked devotedly as I needed for walking through the whole process. Without the support of these individuals it would have never been possible to fulfill the accomplishment.

At first I would like to express my gratitude to my respected supervisor Dr. Farah Deeba, Associate Professor, Department of Clinical Psychology, University of Dhaka. Her guidance and feedbacks were invaluable to me. The time, energy and devotion that she offered for my research work will never be forgotten. Her encouragement led me to heights I never thought I could attain, and for that I am forever grateful.

A special extension of my gratefulness goes to Prof. Ron Rapee, ARC Australian Laureate Fellow and Distinguished Professor, Department of Psychology & Centre for Emotional Health (CEH), Macquarie University, Sydney, Australia. He helped me a lot in getting access to the "Cool Kids Anxiety Program" and getting permission to use the "Cool Kids Manual" as an intervention tool for the study. He permitted me to use one of his scale as one of the measurement tools in my current research. He also gave his precious time for synthesis process after back translation.

I would like to convey my special thankfulness to Prof. Susan H Spence, Professor Emeritus, School of Applied Psychology and Australian Institute of Suicide Research and Prevention, Griffith University,Australia. She permitted me to use one of her developed scale as measurement tool in my study.

I would like to express my special gratitude to Prof. Mohammad Sayadul Islam Mullick,

Professor, Bangabandhu Sheikh Mujib Medical University, Dhaka. He permitted me to use one of his adapted scale as measurement tool in my study.

I would like to express my special thanks to Cecilia A. Essau, Professor of Developmental Psychopathology & Director, Centre for Applied Research and Assessment in Child and Adolescent Wellbeing (CARACAW) & Research Degrees Convenor (Psychology) & International Champion (Psychology), Department of Psychology, Roehampton University, Whitelands College, Holybourne Avenue, London. She warmly accepted my request for helping me in thesis write-up process and sent some of her published research papers for providing the information that I needed.

I would also like to express my heartiest thanks to Dr. Navid Farhan, MBBS, FCPS Final, Medical officer, National Institute of Mental Health, Sher-e-Bangla Nagar, Dhaka. He dedicatedly worked for the diagnosis work of the study.

I would like to give my sincere gratitude to my respected teacher Kamal Uddin Ahmed Chowdhury, Associate Professor, Department of Clinical Psychology, University of Dhaka for his constant support and feedbacks. He gave me his precious time for Back Translation of my measurement tool.

I would also like to express my humblethanks to my respected teacher Dr. Mahmudur Rahman, Professor, Department of Clinical Psychology, University of Dhaka for his support to my research. His signed as in witness in the license agreement paper on behalf of Dhaka University for sending the manual of “Cool Kids Anxiety Program” for using it in my research as an intervention tool.

I would also like to give thanks to Dr. Kamruzzaman Mozumder, Chairperson and Associate Professor , Department of Clinical Psychology, University of Dhaka for his logistic

support.

I am grateful to my honorable teacher JobedaKhatun, Associate Professor, Department of Clinical Psychology, University of Dhaka, Sabiha Jahan, Clinical Psychologist, Nasirullah Psychotherapy Unit& Ismat Jahan, Clinical Psychologist, National Trauma Counseling Center (NTCC)for extending their hands by acting as judges in the translation process of a measurement tool of this study.

I would like to specially mention about Nazma Khatun, Chairman & Associate Professor, Shahanur Hossain, Assisstant Professor; Department of Clinical Psychology, University of Dhaka for giving me their precious suggestions about my research.

Finally I would like to thank Jesan Ara, Assisstant Professor, Department of Psychology, University of Rajshahi for her guidance and support. She also acted as a judge in the measurement process of one of my measurement tools. 1 amreally lucky to have such supportive hand like her through-out the whole way of my research work.

Dated, Dhaka

August,2019 Lutfun Nahar

Abstract

The objective of the study was to evaluate the effectiveness of cognitive behavior therapy (CBT) for the children suffering from anxiety disorders. For conducting the study 109 children and adolescents aging 7-17 with primary diagnosis of anxiety disorders from five government and non-government institutions were randomly allocated to CBT based treatment group (TG) or a wait-list group (WLG). CBT based Cool Kids Anxiety Program was used for intervention purpose. Assessment data during pre-intervention, post-intervention (2 and ½ months from pre-intervention) and follow-up(1 month from post-intervention) were collected from both of the groups. It was found that the symptoms and co-morbid other internalizing (depression, cognitive bias) and externalizing problems (negative behavior) decreased significantly in the CBT group or TG after the intervention according to both child and parent report when there was no significant change in symptoms in the wait-list group. The study contributes to the evidence base for using CBT as an effective intervention process in treating the anxiety disorders of the young population of our country.

Contents

Contents **Page no.**

List of Tables

List of Figures

List of Appendices

Chapter-1

Introduction

Mental health problems are very common in children. One in five children suffers from a mental health problem and 80% of chronic mental disorders begin in childhood (Merikangas et.al.,2010). It has also been found that untreated mental health problems of childhood are highly relatedin developing different mental health problems in later life. Low and middle income countries have higher burden of mental disorders than economically developed countries (Bass et.al.,2012; Hock et.al.,2012). The national survey conducted between 2003 and 2005 illustrated the high (16.1%) burden of mental disorders in Bangladesh (Islam & Biswas, 2015). Overall prevalence of child and adolescent psychiatric disorders varied from 11% to 22.9% among young people (Hossain, Ahmed, Chowdhury, & Niessen, 2014; Mullick & Goodman, 2000; Mullick &Goodman, 2005) that constitute around 5 million children and adolescents of the countryhave psychiatric disorders (Mullick &Goodman, 2005).

A considerable amount of internalizing (e.g., anxiety, depression, somatic complaints etc) and externalizing (e.g., aggression, delinquency, etc) behavior problems of childhood have been seen to persist into adulthood if remain untreated (Narusyte, Ropponen, Alexanderson, & Svedberg, 2017; Hofstra, van der Ende & Verhulst, 2002; Rutter,1995).Association has been found between mental health problems in childhood and work disability in adulthood (Kim-Cohen et.al., 2003; Copeland et.al., 2009). Again, untreated childhood internalizing behavioral problems were suggested to have homotypic continuity (i.e., predicts the same disorder over time), whereas externalizing behavior problems demonstrated heterotypic (i.e., predicts another disorder over time) prediction of psychopathology in adulthood (Hofstra et.al., 2002; Kim-Cohen et.al. 2003; Copeland et.al, 2009).Statistics shows that 50% of all psychiatric illness occurs before the age of 14 and 75 percent by the age of 24 (Kessler, Berglund, Demler, Jin, & Walters, 2005). So,to ensure healthy development of a fully functional individual to his/her adulthood, it

is very important to identify and treat the mental health problems early in childhood.

Among various types of internalizing disorders, anxiety disorders are the most common forms of psychiatric problems in children and adolescents (Arendt,Thastum,&Hougaard, 2016; Child Mind Institute, 2015; Pine & Klein, 2008; Ford, Goodman & Meitzer, 2003). During last decade, the health care providers have recognized an increase of anxiety in young people (Belfer, 2008; WHO, 2001)and in a recent study a 17% increase in anxiety disorders diagnoses has been identified (Bitsko et.al., 2018). It has also been found that anxiety disorders co- occur frequently with numerous other psychiatric disorders (Essau, Conradt, Ollendick, & Tech, 2012) and can become chronic with a negative outcome if it begins early in life keeping untreated (Keller et al., 1992; Ollendick & King, 1994). So, for identifying the disorders in an early stage of life it is very necessary to understand the nature and management of the problems properly.

Anxiety disorders are a group of mental disorders characterized by significant feelings of excessive fear, anxiety and related behaviors, whereas fear is the emotional response to real or perceived imminent threat and anxiety is anticipation of future threat (American Psychiatric Association, 2013). Sometimes these fears or stressors prove too much to handle for a child, and the normal comforts that adults can provide don't quite seem to be enough. In these cases, a child may have a diagnosable anxiety disorder (Smith, 2019).

The anxiety disorders differ from one another in the types of objects or situations that induce fear, anxiety, or avoidance behavior, and the associated cognitive ideation. If the persistence of stress-induced anxiety or fear last for 6 months or more, then it can be considered as one of the anxiety disorders. Although the criterion for duration is intended as a general guide, there are allowance for some degree of flexibility and sometimes it is shorter duration in children (as in separation anxiety disorder and selective mutism; APA, 2013).

According to DSM-5 there are different types of anxiety disorders that are common in children too (APA, 2013). These are separation anxiety disorder, selective mutism, specific phobia, social anxiety disorder (social phobia), panic disorder, panic attacks, agoraphobia, generalized anxiety disorder, substance/medication-induced anxiety disorder. But a number of key changes are now found in the DSM-5 from DSM-4 in anxiety disorders (Roberts and Louie, 2014).Some DSM-4 disorders have been removed from and some others are added to the anxiety disorders' diagnostic class in DSM-5. For instance obsessive–compulsive disorder (OCD), post-traumatic stress disorder (PTSD) and acute stress disorder have been moved into separate diagnostic classes when separation anxiety disorder and selective mutism have been moved into the DSM-5 anxiety disorders class (formerly under the chapter on, 'disorders usually first diagnosed in infancy, childhood or adolescence) (Murphy & Hallahan, 2016). Though OCD PTSD have components of anxiety in them, these will also be considered as anxiety disorders in the present study. The definition and some relevant information about these disorders are given below.

Separation anxiety disorder is characterized by excessive fear or anxiety concerning separation from home or attachment figures. Children with this disorder may be unable to stay or go in a room by themselves and may display "clinging" behavior, staying close to or "shadowing" the parent around the house, or requiring someone to be with them when going to another room in the house. They have persistent reluctance or refusal to go to sleep without being near a major attachment figure or to sleep away from home. When separated from major attachment figures, children with separation anxiety disorder may exhibit social withdrawal, apathy, sadness, or difficulty concentrating on work or play.

Selective mutism is characterized by consistent failure to speak in specific social situations in which there is an expectation for speaking (e.g., at school) despite speaking in other situations. When encountering other individuals in social interactions, children with selective mutism do not initiate speech or reciprocally respond when spoken to by others. They will speak in their home in the presence of immediate family members but often not even in front of close friends or second-degree relatives, such as grandparents or cousins. This disorder may include excessive shyness, fear of social embarrassment, social isolation and withdrawal (Carbon et al. 2010; Cohan et al.2008), clinging, compulsive traits, negativism, temper tantrums, or mild oppositional behavior (Cohan et al. 2008). Although children with this disorder generally have normal language skills, there may occasionally be an associated communication disorder, although no particular association with a specific communication disorder has been identified (Manassis et al. 2007).

Specific Phobia is characterized by marked fear or anxiety about a specific object or situation which is termed as *phobic stimulus* (e.g., flying, heights, animals, receiving an injection, seeing blood). Animal (e.g., spiders, insects, dogs), natural environment (e.g., heights, storms, water), blood- injection injury (e.g., needles, invasive medical procedures), situation (e.g., airplanes, elevators, enclosed places), or others (e.g., situations that may lead to choking or vomiting: in children, e.g., loud sounds or costumed characters) are considered as phobic stimulus. In children, the fear or anxiety of the phobic stimulus may be expressed by crying, tantrums, freezing, or clinging (DSM-V).

Social Anxiety Disorder previously known as **Social Phobia** is characterized by marked, or intense, fear or anxiety of social situations in which the individual may be scrutinized by others. In children the fear or anxiety occurs in peer settings and not just during interactions with

adults. The individual fears that he or she will be negatively evaluated. Children may express the fear or anxiety by crying, tantrums, freezing, clinging, or shrinking in social situations. He or she will often avoid the feared social situations. Avoidance can be extensive (e.g., not going to parties, refusing school) or subtle (e.g., over preparing the text of a speech, diverting attention to others, limiting eye contact).

Panic Disorder is characterized by recurrent unexpected panic attacks. A panic attack is an abrupt surge of intense fear or intense discomfort that reaches a peak within minutes, and during which time different physical (e.g. palpitations, pounding heart, or accelerated heart rate; sweating; trembling or shaking; sensations of shortness of breath or smothering; feelings of choking; chest pain or discomfort; nausea or abdominal distress; feeling dizzy, unsteady, light-headed, or fain) and cognitive symptoms (e.g. depersonalization, fear of losing control or "going crazy." fear of dying) occur. In addition to worry about panic attacks and their consequences, many individuals with panic disorder report constant or intermittent feelings of anxiety that are more broadly related to health and mental health concerns.

Agoraphobia is characterized by marked, or intense, fear or anxiety triggered by the real or anticipated exposure to a wide range of situations. The symptoms can occur in different type of situations like using public transportation, such as automobiles, buses, trains, ships, or planes; being in open spaces, such as parking lots, marketplaces, or bridges; being in enclosed spaces, such as shops, theaters, or cinemas; standing in line or being in a crowd; or being outside of the home alone (Wittchen et al. 2010). When experiencing fear and anxiety, individuals frequently believe that escape from such situations might be difficult (e.g., "can't get out of here") or that help might be unavailable (e.g., "there is nobody to help me") when panic-like symptoms or other incapacitating or embarrassing symptoms occur (5th ed.; DSM-5).

Generalized Anxiety Disorder (GAD) is characterized by excessive anxiety and worry (apprehensive expectation) about a number of events or activities. Children with generalized anxiety disorder tend to worry excessively about their competence or the quality of their performance. During the course of the disorder, the focus of worry may shift from one concern to another. One of the distinguishing features of GAD from non-pathological anxiety is that the worries associated with GAD are excessive and typically interfere significantly with psychosocial functioning, whereas the worries of everyday life are not excessive and are perceived as more manageable and may be put off when more pressing matters arise (DSM-V). Different types of somatic symptoms like sweating, nausea, diarrhea, accelerated heart rate, shortness of breath, dizziness, irritable bowel syndrome, headaches etc are found for the excessive stress experienced in this disorder (5th ed.; *DSM-5*).

Obsessive-compulsive disorder (OCD) is a mental disorder in which children have unwanted and repeated thoughts, feelings, ideas, sensations (obsessions), and behaviors that drive them to do something over and over (compulsions) (APA, 2013).

Posttraumatic stress disorder (PTSD) is a psychiatric disorder that can occur in children who have experienced or witnessed a traumatic event such as a natural disaster, a serious accident, a terrorist act, war/combat, rape or other violent personal assault. People with PTSD have intense, disturbing thoughts and feelings related to their experience that last long after the traumatic event has ended (APA, 2013).

Prevalence studies on childhood mental disorders show that anxiety disorders are affecting around 10% of children and adolescents (Mcloone, Hudson, & Rapee, 2006; Frod et.al., 2003). A recent meta-analysis found the mean estimate of prevalence for any anxiety disorder to be 12.3% in children (age 6–12) and 11.0% in adolescents (age 13–18) (Costello, Egger,

Copeland, Erkanli & Angold, 2011; Kessler et. al., 2005). According to the summarized epidemiological studies on children and adolescents by Grills-Taquechel and Ollendick (2013) it was found that the prevalence for any anxiety disorder ranged from 8% to 19%, whereas the 3-month prevalence ranged from 2% to 9%. It was also found that As many as one child in any regular school class is likely to suffer from an anxiety disorder (Cartwright-Hatton, McNi- col, & Doubleday, 2006). In another study Kessler et al. (2012) found that 24.9% adolescents of 13–17 years old suffered from at least one anxiety disorder during the past 12 months. Teens and their parents are now recognizing that anxiety disorders can be serious and they are beginning to advocate for treatment at a level that far surpasses care-seeking a generation ago. Anxiety is considered to be the number one cause for concern at college counseling services (LeViness, Bershad, & Gorman, 2017).

Although there is a high perevelance rate of anxiety disorders among young population, according to multiple experts who treat children with it suggest that the disorders are still woefully underdiagnosed (Weir, 2017). Golda Ginsburg, PhD, a psychologist and professor at the University of Connecticut Health said that The majority of children with anxiety never receive treatment. One reason for that might be that anxiety symptoms are so variable. Kids with generalized anxiety often feel overwhelmed with worry, and some have physical symptoms such as headaches or stomachaches. Others have intense anxiety that prevent them from doing things like going to birthday parties or participating in extracurricular activities. Some have specific phobias—fear of the dark or of dogs, for instance—while still others experience obsessive--compulsive disorder (Weir, 2017).Often parents, teachers and even some health-care professionals don't realize the severity of a child's anxiety or recognize that it should be treated, says psychologist Wendy Silverman, PhD, director of the Yale Child Study Center Program for

Anxiety Disorders at Yale School of Medicine.

Anxiety disorders has many short term (Kendall et al. 2004;Costello et. al., 2003; Connolly et al., 2007) and long term consequences. They not only cause distress, but is also related to higher rates of negative impact on academic, depression, attention and concentration difficulties, poor self-esteem, physical problems and increased difficulty developing peer relationships andsocial performance (Kendall et al. 2004; Costello, Mustillo, Erkanli, Keeler, &Angold, 2003; Ialongo, Edelsohn, Werthamer- Larsson, Crockett, &Kellam, 1996; Strauss, Frame, & Forehand, 1987). According to Bennett et al. (2013) anxiety disorders are associated with debilitating consequences like poor school performance, disrupted relationships with peers and adults, and diminished participation in the normal activities of childhood and adolescence (Connolly et al., 2007).In addition, anxiety disorders are often fairly chronic and anxiety that begins before age 18 often persists into adulthood (Pine et al., 1998; Woodward et al., 2001; Kim-Cohen et al., 2003; Kessler et al., 2005). And if the disorder remain untreated, they predict future psychopathology in adolescence and early adulthood (Pine, Cohen, Gurley, Brook, & Ma, 1998) and are associated with depression, suicidal ideation, suicide attempts, and alcohol or substance abuse (Gould et al., 1998; Low, Lee, Johnson, Williams, & Harris, 2008). It can also cause a lifetime of diminished life quality characterized by failed adult relationships, decrements in role functioning, poor labor market participation, loss of worker productivity and reduced income, increased need for social welfare assistance and decreased social role functioning, poor physical functioning. (Bennett et. at., 2013; Comer et al., 2011, Mendlowicz & Stein, 2000; Kessler & Frank, 1997). According to Comer et al. (2011) anxiety disorders may increase the risk of developing or maintaining some general medical disorders in vulnerable individuals. It was found that compared to respondents without anxiety disorders, higher proportions of

respondents diagnosed with each of the 12-month DSM-IV anxiety disorders reported being diagnosed with hypertension, angina pectoris, tachycardia, stomach ulcer, gastritis, and arthritis. It was also found that gastric secretions associated with chronic worry in GAD may promote peptic ulceration (Goodwin & Stein, 2002). Unfortunately it is seen that that86% of those with anxiety disorders either do not seek treatment, or use treatments (National Institute of Mental Health: Mental Health facts and statistics, 2013) and 60% of all individuals with an anxiety disorder seek help with a mean delay of 8 years(Christiana, Gilman, Guardino, Mickelson, Morselli, Olfson & Kessler, 2000; Simon & Bögels, 2009).

As the symptoms of anxiety disorders begin to develop from early childhood (5th ed.; *DSM-5*) it is very important to develop and evaluate effective treatment alternatives for children suffering from these disorders. (Thulin, Svirsky, Serlachius, Andersson, & Öst, 2014). Psychological interventions for children adolescents face special challenges often due to the nature of problems shown in anxiety disorders and in youth these problems are often over-looked (e.g. aggression, shyness) (Chavira, Stein, Bailey, & Stein, 2004; Mehta & Sagar, 2015). As a result a great number of children and adolescents carry their anxiety disorder on into adulthood (Keller et al., 1992), where it has been found to be a precursor of comorbid depression (Roza, Hofstra, van der Ende, & Verhulst, 2003), substance abuse (Bennett et. al., 2013; Manassis et. al.,2004; Costello et al., 2003), and other anxiety disorders (Kim-Cohen et al., 2003; Pine, Cohen, Gurley, Brook, & Ma, 1998). So, early identification and intervention of childhood anxiety disorders is important.

It has been found that child and adolescent mental health services are limited throughout the globe. A Recent data from the WHO Mental Health Atlas (2005) showed that the need for child and adolescent mental health services are not fully met anywhere in the world. The

situation is comparatively worse in developing countries, including Bangladesh, and a significant gap has been noticed between the need and service provision (Jesmin, Muhammad, Rahman, & Muntasir, 2016).

Bangladesh is a developing country with the total population of about 150 million and the 5–14 years age group constitutes 26% of the population (Bangladesh Bureau of Statistics, 2010). The reports of current global epidemiological data have constantly indicated that up to 20% of children and adolescents suffer from a disabling mental illness, and 50% of all adult mental disorders have their onset in adolescence (Belfer, 2008). According to data from the Institute of Mental Health and Research obtained in 1990 it was found that childhood mental disorders in the outpatient department (OPD) were 9% (Mullick, Khanom & Islam, 1995). The first child and adolescent mental health screening study in Bangladesh reported a predictive prevalence of mental health problems of 17.9% using the self-reported Strengths and Difficulties Questionnaire. Of this, emotional disorder was 10.5%, any conduct disorder (CD) was 5.6%, and any hyperkinesis was 3.1% (Mullick & Goodman, 2001). large-scale community survey showed that the psychiatric morbidity among 5 to 17 year old children was 18% (Rabbani et al., 2009). Consistent with the previous studies a recent study has also found that the overall proportion of psychiatric disorders among children and adolescents attending pediatric outpatient department (OPD) is 18% among which behavioral disorders were 9% of the overall disorders and emotional disorders were 15%. The study also showed that the overall proportion of emotional disorder was the highest (15%) among all psychiatric disorders. Specially anxiety disorders alone cover a large area in this proportion such as, Separation anxiety disorder (1.7%), Phobic anxiety disorders (1.7%), Social anxiety disorder (1.3%), Panic attack (0.8%), Generalized anxiety disorder (0.4%), Obsessive compulsive disorder (2.5%). Again it is well reported that anxiety

disorders are highly co-morbid with other emotional disorders. Recently in a national daily newspaper it was reported that about 69 lakh people suffer from anxiety disorders in Bangladesh and the ranking of the disorder is the highest among the WHO's South East Asia Region in our country(The Daily Star, February 27, 2017). In Global health statistics of Health Grove (2013) it was also showed that anxiety disorders in Bangladesh has increased by 11.5% since 1990. Considering these facts it is very important to immediately address the childhood anxiety disorders in Bangladeshi children.

Though the mentioned prevalence rate studies suggest that anxiety disorders are very common in the children and adolescents of our country, no study on the prevalence rate of anxiety disorders among the school going Bangladeshi children has yet been done. But from a study among school going adolescents in an urban area of South India it was found that about 54.7% participants had one or the other type of anxiety and 60% of the participants having depression had one or other type of anxiety (Jayashree, Mithra, Nair, Unnikrishnan, & Pai, 2018). In another review study conducted on Iranian children and adolescents it was found that all anxiety disorders were mostly investigated with the prevalence rates ranging from 6.8% to 85% in different cities of Iran (Zarafshan, Mohammadi & Salmanian, 2015). In this situation it is very necessary to take necessary steps for assessing the rate of anxiety disorders in the children and adolescents of our country and preventing the problem. But in the context of Bangladesh, children and adolescents and their care-takers hesitate to seek help from mental health professionals; rather they prefer pediatric medical settings for treatment and support (Jesmin, Muhammad, Rahman, & Muntasir, 2016). Moreover in emotional disorders specially in anxiety disorders children may express their psychological distress through somatize symptoms like irritability, restlessness, aggressiveness, isolation, carelessness with personal hygiene and

self-care, hypersensitivity with social withdrawal etc (DSM-5). Other studies also support that child psychiatric disorders often present in the context of somatic symptoms and are more common in children with chronic and acute pediatric disorders (Jezzard,1995; Gledhill et al., 2000; Judge et al., 2002). So, proper awareness and intervention should be initiated in the context of Bangladesh in this regard.

Psychological interventions for treating anxiety disorders in children and adolescents are of three types, therapeutic, preventive or focused on enhancing specific skills (Kendall 2006). Different types of psychological interventions are considered either well established or probably efficacious by several researchers. These include psychodynamic approach, behaviour modification, multi systemic therapy, functional family therapy, graduated exposure, modelling, cognitive behaviour therapy (CBT) for a variety of problems and parent management training (Ollendick & King 2004). More recently, in addition to CBT, dialectic behaviour therapy and interpersonal therapy have also been reported to show promising outcome (Ollendick & King 2004; Report of the Children's Evidence Based Practices Expert Panel 2005).

Among different types of treatment approaches Cognitive Behavior therapy (CBT) is one the most effective evidence-based psychological interventions to overcome anxiety (Bennett et al., 2013; Kendall & Hedtke, 2006; Rapee & Abbott, & Lyneham, 2006; Waters, Ford, Wharton, & Cobham, 2009). Cognitive behavioral therapies are a group of therapies that include both cognitive and behavioral interventions and it is a time-oriented and problem-focused psychological therapy (Mehta & Sagar, 2015). In the past two decades an increasing number of studies have been done on CBT for youths with anxiety disorders. Previous summaries of outcome evaluations of cognitive-behavioral therapy (CBT) for anxious youth have concluded that the treatment is "Probably Efficacious" (APA Task Force on the Promotion and

Dissemination of Psychological Procedures, 1995; Ollendick & King, 2012; Silverman, Pina, & Viswesvaran, 2008). In a systematic review of 10 RCTs of CBT for anxious children it was also found that 56% no longer fulfilled the criteria for a diagnosis after treatment, a figure that increased to 63% at 6- to 12-month follow- up (Cartwright-Hatton, Roberts, Chitsabe- san, Fothergill, & Harrington, 2004). Two recent meta-analyses have identified 48 (Reynolds et al., 2012) and 41 (James et al., 2013) randomized controlled trials of CBT for youth anxiety and concluded that CBT is an efficacious intervention for youth anxiety disorders.

Generally CBT for anxious youth is typically comprised of (a) psychoeducation, (b) skill training, including the development of affect recognition, cognitive restructuring, relaxation, and problem solving, and (c) exposure to feared stimuli (Mehta & Sagar, 2015). Different CBT based intervention manuals are available for the psychological intervention of anxiety in children and adolescents. These are Cool Kids (7–17 years) program (Rapee, Wignall, Hudson, & Schniering, 2000; Rapee, Lyneham, Schniering, Wuthrich, Abbott, Hudson, & Wignall, 2006); Coping Cat (7–13 years) program (Kendall & Hedtke, 2006b); Modular cognitive-behavioral therapy for childhood anxiety disorders (Chorpita, 2007); Child anxiety disorders: A family-based treatment manual for practitioners (Wood & McLeod, 2008); From Timid to Tiger: A treatment manual for parenting the anxious child (Cartwright-Hatton, Laskey, Rust, & McNally, 2010).

Among the CBT based psychological intervention manuals, Cool Kids isof the most effective and evidence based psychological treatment program that has been developed for helping the children and adolescents suffering from anxiety disorders. It teaches children and their parents how to better manage the child's anxiety (Rapee, 2018). It was developed at the Centre for Emotional Health, at Macquarie University, Australia(Arendt, Thastum, & Hougaard, 2016). The latest version of Cool Kids ‘The Cool Kids Anxiety Program, 2nd Edition’ was

published from Centre for Emotional Health, Macquarie University, Sydney, Australia in 2018 (Rapee, 2018). The program is aimed at neurotypical young people who are primarily experiencing difficulties with anxiety and involves a single, consistent series of skills that young people can use to reduce their anxiety (Rapee, Lyneham , Hudson et al., 2018). The program has been used in different countries and it's materials are available in several languages like English, Chinese, Danish, Finnish, Icelandic, Italian, Korean, Norwegian, Spanish, Swedish and Turkish (Rapee, 2018).

The "Cool Kids" is a CBT based anxiety management program and its target population is young people of 7-17 years. It is fully supported by manuals, and has slightly different versions for children and teenagers. The Cool Kids Anxiety Program (2nd Edition) has three separate workbooks and a therapist manual. The workbooks are "Cool Kids: Childwork" designed for children of around 7 to 12 years of age; "Chilled" for adolescents of approximately 13 to 17 years of age and "Cool kids and Chilled parent workbook" for parents of anxious children and adolescents. The two versions "Cool kids" and "Chilled" differ mainly in the examples used to illustrate skills as the two versions are focused on two different age groups. And the "Cool kids and Chilled parent workbook" focuses on parents role in treatment; for children, parents are encouraged to actively help their child through the program, while for adolescents, parents take more of a supportive rather than active role. Though the anxiety management skills and basic principles are the same irrespective of the setting or format in the workbooks of child, adolescents and parents, the therapist manual allows a therapist to choose the most suitable option for their client.

According to Rapee, Lyneham , Hudson et. al. (2018) the Cool Kids anxiety program can be delivered in community, clinical and school settings. It can also be delivered in individual

format (one family) or in group format. Usually the program is delivered in approximately 10, face-to-face sessions across for approximately 12 weeks. But depending on practical constraints (such as school interruptions) and individual progress, some flexibility is permitted in delivering the sessions. Cognitive Behavior therapy based Cool Kids Anxiety Program contains the components of psychoeducation, cognitive restructuring, gradual exposure, response prevention, parent management, and skills training in areas such as assertiveness, problem solving, and relaxation throughout the sessions for addressing the key factors responsible for maintaining problematic anxiety suggested by research findings.

The Cool Kids Anxiety Program is supported and empirically validated by a number of scientific research. In a careful, randomized, controlled trials it was found that young people treated with Cool Kids have significantly better outcomes than children who receive no treatment (waitlist) in both clinic and school settings (Mifsud & Rapee, 2006; Rapee et al., 2006; 2017) and in another study the result was also compared against children receiving placebo treatment (equivalent therapist time, support, and education, but without the specific skills training) where the same result was found (Hudson et al., 2009). It was shown that the full Cool Kids treatment is better than self-help or low intensity treatment (Rapee et al., 2006), but the low-intensity treatment was still found to result in significant reductions in anxiety and life interference (Lyneham & Rapee, 2006). According Rapee et al. (2017) the reductions in anxiety symptom and diagnostic change after applying “Cool Kids” have been shown to last for about at least one year later. Effective results for the anxiety management program have also been found by researchers outside of Australia (Arendt et al., 2015;Chavira et al., 2014; Kapçı et al 2012). Overall, it was shown that following face-to-face treatment with Cool Kids, around 60% of young people will be free of their main presenting anxiety disorder at the end of treatment and

this figure increases to around 75% one year later. After 12 months, around 50% of young people receiving Cool Kids will be free of all mental disorders (Rapee et al., 2017).

In our present study we are going see the effectiveness of Cognitive Behavior Therapy (CBT) based Cool Kids program on the young population of Bangladesh. In a systematic review of mental disorders in Bangladesh it was suggested that data on mental disorders among Bangladeshi children are quite insufficient (Hossain, Ahmed, Chowdhury, & Niessen, 2014). At the same time there is a vast gap between actual need and available services required because only a handful of child mental health professionals with specialized training are working with the problem which is very insufficient comparing to the total population (Mullick & Goodman, 2005). Moreover, although most of the psychotropic medications are available in Bangladesh, yet psychotherapy is hardly available for most of the general population of the country (Hossain et al., 2014). In this situation introducing an internally recognized psychological intervention process for youth anxiety disorders for Bangladeshi children is very important and time effective. Besides, there are CBT practitioners in our country who can use such type of intervention process more effectively and serve the young population of our culture in a more effective way.

After the establishment of Department of Clinical Psychology, University of Dhaka in 1997, rigorous training on CBT has been provided to students of the departmental students. They are producing qualified CBT practitioners who are providing CBT based psychological interventions for mental disorders in different hospitals and institutions of Bangladesh. But there is no published research on the effectiveness of CBT for children with anxiety disorders of Bangladesh. At the same time there is no available structured CBT based intervention manual for treating the anxiety disorders in children and adolescents of Bangladesh. For this, we are going to use the CBT based “Cool Kids Anxiety Program” (2nd edition) in our study.

Objectives

Considering the importance of developing positive perspectives of self, others, and the future to reduce the experience of anxiety disorders with co-morbid internalizing or externalizing problems in children and the promising potential of the CBT based intervention for treating such type of disorders in young population, we decided to examine the efficacy of a CBT based intervention for Bangladeshi children and adolescents. The present study involved two primary objectives: 1) to explore the efficacy of CBT for children with anxiety disorders and 2) to replicate the efficacy of the CBT based intervention manual (Cool Kids) for children with anxiety disorders of our country. The study was conducted by comparing the intervention (CBT) group and wait-list (WL) group which allowed an experimental comparison between the two groups.

Chapter-2

Methodology

Participants:

The participants of the study were109 children and adolescents aging 7 to 17 (Mean age=11.54 years; *SD*=2.73) who met criteria of any anxiety disorders (i.e., separation anxiety, social anxiety disorder, generalized anxiety disorder, specific phobia, panic disorder, obsessive-compulsive disorder or OCD and post traumatic stress disorder or PTSD)as per. The participants were assessed for a primary diagnosis of anxiety disorders by the psychiatrists. Those who were having mild to moderate level of anxiety were included for the present study so that no participant was taking any psychiatric medication during the study time. The level of anxiety was measured by the referring psychiatrist on a 0-10 points subjective rating scale, where 0=lowest, 10=highest level of anxiety. Children with severe learning difficulties, intellectual disability, medication for a psychological disorder, those attending any psychotherapy services, high symptom severity levels (severity rating of 5 or higher, as measured by the referring psychiatrist), if comorbid with of other primary emotional or behavioral disorders, primary diagnosis of Attention Deficit Hyperactivity Disorder(ADHD, combined or hyperactive types), conduct disorder, oppositional defiant disorder. Participants of having prior experience of taking psychotherapy within the last 6 months were also excluded from the study because of its possible influence on the present study findings. At the same time if the therapist observed that the participant needed immediate psychiatric medication for an increased severity level of the disorder during any point of the data collection procedure then the participant would be immediately referred to the psychiatrist and he/she would be excluded from the study.

Sampling procedure:

To meet the purpose of the study randomized control trial (RCT) based experimental design was used. The following formula was used to determine sample size-

$$\mathbf{n = \frac{2\sigma^2 (z_\alpha + z_\beta)^2}{(\mu_1 + \mu_2)^2}}$$

Here, μ1=expected control group mean; μ2 = expected experimental group mean; σ= Standard Deviation (SD) of control group or pooled SD of two groups ; z_α = z- value of standard normal distribution (SND) at a given level of significance (e.g. 1.96, at 95% confidence interval); z_β= z- value of SND at a given power (e.g. 1.28, at 90% power). Using the formula the calculated sample size was found as 107. Depending on the availability of sample (±5) was added to the calculated sample size. After calculation the range of sample size was 102 to 112 (107±5).

The participants were assigned to two groups following the methods of other randomized control trials with cool-kids(Rapee, Abbott, & Lyneham, 2006; Spence, Caroline & Toussaint, 2000). Simple randomization procedure was followed. As the total number of participants was (N=107±5) a total number of 112 envelops were taken and for randomly allocating (N=n1+n2) or (112= 56+56) participants to two treatment conditions (CBT based Treatment Group, TG and Wait-List Group, WLG). Each of the 56 or n1 envelops contained an identifier for TG and the other 56 or n2 envelops contained an identifier for WLG. Then all the envelops were shuffled and the order of the shuffled envelopes determined the allocation of participants to the two groups(Schulz & Grimes, 2002). All the participants were collected from Dhaka City.

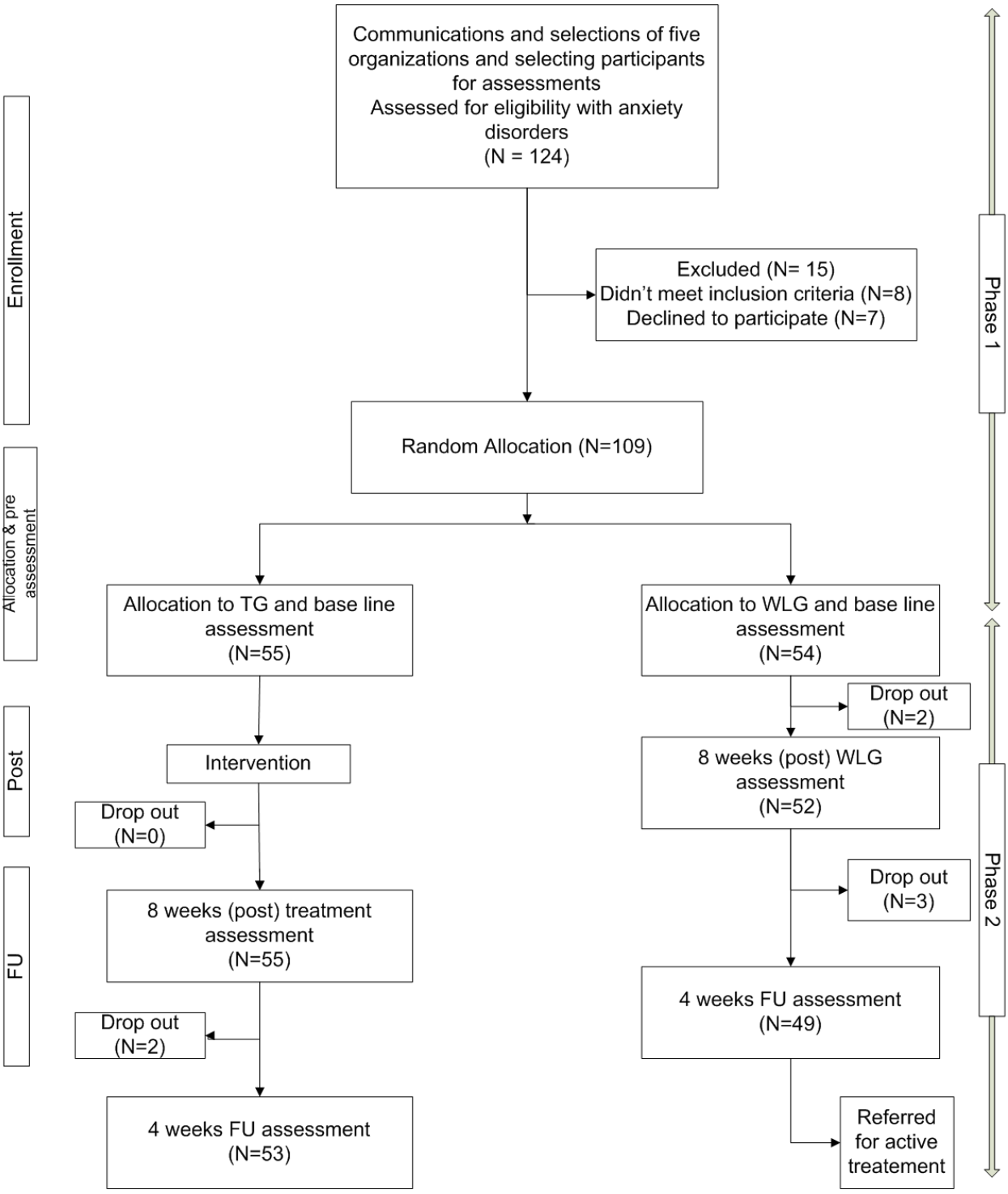

Figure 1. Consort flow-chart for participants of the study.

To collect the sample nine Government and Non-Government organizations (hospitals, educational institutions and NGOs having mental health professional) were approached for

permission of conducting the research activities and referral of participants (See permission letter format in appendix-3) . Among them five organizations permitted for data collection and agreed to work collaboratively (approved permission letters are attached in appendix-7). Awareness programs were conducted for making the populations aware of child mental health and childhood anxiety disorders (See the poster for awareness program in apprndix-16). A total of 124 participants were referred from those organizations for eligibility testing (see, Figure 1). Among them eight participants were excluded for not meeting the inclusion criteria of the study. Another seven participants were excluded as they declined to participate after learning about the whole procedure of the study. At last, there were 109 participants (demographic characteristics of the participants are shown in Table-1) left who met all the inclusion criteria of the study and agreed to go through the study procedure. Finally those participants were randomly allocated to two groups (TG and WLG) (see, Figure 1) following the simple random sampling technique mentioned earlier.

A total of 7 participants (6.42%) failed to return follow-up data or post-assessment data. Among these participants, 5 (9.26%) were from WL group, and 14 (15.6%) were from TG. Only 2 (3.64%) participants didn't return the follow-up data in TG.After the eligibility testing 15 (5.64%) of families declined to enter into interventions and only about 3% withdrew once the treatment had actually begun where there were no dropout before the post-treatment assessment in the CBT based TG (see flow chart in Figure 1).

Therapists

Five therapists were females, including three school psychologists (four of them were master's degree holder whose designation were Assistant Clinical Psychologist and one of them was an M.Phil Degree holder that is, a Clinical Psychologist). All of the therapists had

professional training on CBT and were professional CBT practitioner. Therapists ranged in experience from 3 to 11 years. Of the four therapists none of them reported any prior experience on Cool-Kids manual (Rapee,Lyneham, Schniering, et al.2006). The therapists were randomly assigned to the participants of the TG . The therapists also received a) a study orientation and b)training on Cool Kids manual.

Measures:

Children and one of their biological parents were administered with the assessment tools at 3-time points in the TG and WLG (see, Figure 1). There was a 8-week interval between the baseline and post assessment and 4-week interval between the post and follow-up assessment. Children completed three self-report measures (cognition, anxiety and depression symptoms) and parents reported on children's anxiety, depression and their behavioral strength and difficulty. A personal information questionnaire was also administered for collecting the demographic data which was completed by the parent. The measurement tools are described below.

Demographic and personal information questionnaire was used to collect demographic data of participants that included the participants' age, gender, educational status, parental educational qualifications, parental occupation, family type, number of siblings, number of family members, religion and monthly family income. For collecting information on participant's diagnostic characteristics questionnaire on duration of anxiety, history of consumption of medication or other services for mental health problems, primary and co-morbid diagnosis were also taken (see, Appendix-8).

Child-report measures

Spence Children's Anxiety Scale-20(SCAS-20); (Deeba &Rapee, 2014): It is a simple, brief self-report questionnaire to assess symptoms of anxiety (see, Appendix-9). The SCAS-20 is

a short form of the more commonly used 38-item SCAS (Spence, 1998). Items are rated on a 4-point Likert-type scale as 0 (never), 1 (sometimes), 2 (often) and 3 (always) and summed to obtain a total score where higher scores indicate higher levels of anxiety. Items for the short version were selected from factor analyses of the full version of SCAS (Spence, 1998; Spence, Barrett & Turner, 2003). Although the psychometric properties of the short version have not yet been published, an unpublished evaluation of the SCAS-20 demonstrated strong internal consistency of .89 (Coysh, 2011). The psychometric properties of the SCAS-20 among a group of Bangladeshi children and adolescents showed good internal consistency (Cronbach's alpha .84) and satisfactory construct validity for the scale (Deeba, Rapee& Prvan, 2014, unpublished data). For the present study the Cronbach's alpha was .92.

Short Moods and Feelings Questionnaire(SMFQ);(Deeba &Rapee, 2014): It wasdeveloped to identify DSM-IV-based signs and symptoms of depressive disorders in children and adolescents aged 6–17 years (see, Appendix-11). The scale consists of 13 items and eachitem is scored on a 3-point Likert-type response scale 0 (Never); 1 (Sometimes true) and 2 (Always true). The total score is the sum of all items providing possible scores ranging from 0 to 26 with higher scores reflecting lower mood and risk of clinical level depression. The SMFQ has been shown to comprise a single factor and has good criterion-related validity and discriminant validity to identify clinical levels of depression in children and adolescents (Angold et al., 1995; Thapar& McGuffin, 1998). Cronbach's alpha for the SMFQ has been reported ranging from .87 to .90 (Angold et al., 1995). For the Bangladeshi children and adolescents, Cronbach's alpha was strong at .80 (Deeba, Rapee& Prvan, 2014, unpublished data). For the present study the Cronbach's alpha was .90.

Children's Automatic Thoughts Scale(CATS);(Schniering&Rapee, 2002): It was completed children to measure their negative thoughts and beliefs (see, Appendix-13). The scale consists of 40 items and eachitem is scored on a 5-point Likert-type response scale 0 (Not at all); 1 (Sometimes); 2 (Fairly often); 3 (Often); 4 (All the time). This measure has a total of 40 items with a range from 0 to 160. The measure contains four subscales: social threat (α= .85), physical threat (α= .92), failure and loss (α=.92), and hostility (α= .85). The measure also has good retest reliability over 3 months (.68 –.77), and the various subscales each discriminate between relevant forms of child psychopathology (Schniering & Rapee, 2002). For the present study, total scores were used to provide a measure of general negative thinking and the cronbach alpha of the scale was 0.97.

After receiving permission from the original authors of the English version of the Children's Automatic Thoughts Scale(CATS), it was translated according to accepted guidelines for the translation of instruments (Widenfelt, Treffers, Beurs, Siebelink, &Koudijs, 2005). Translation was done by the investigators of the study and then another professional Clinical Psychologist (who did not see the original English versions of the scales) translated them back to English. Differences in the original and back translated versions were checked by the original author of the scale. Identified differences were discussed and resolved by the researchers. Then the final Bangali form of the scale was prepared. For the present study the Cronbach's alpha of the scale was .90.

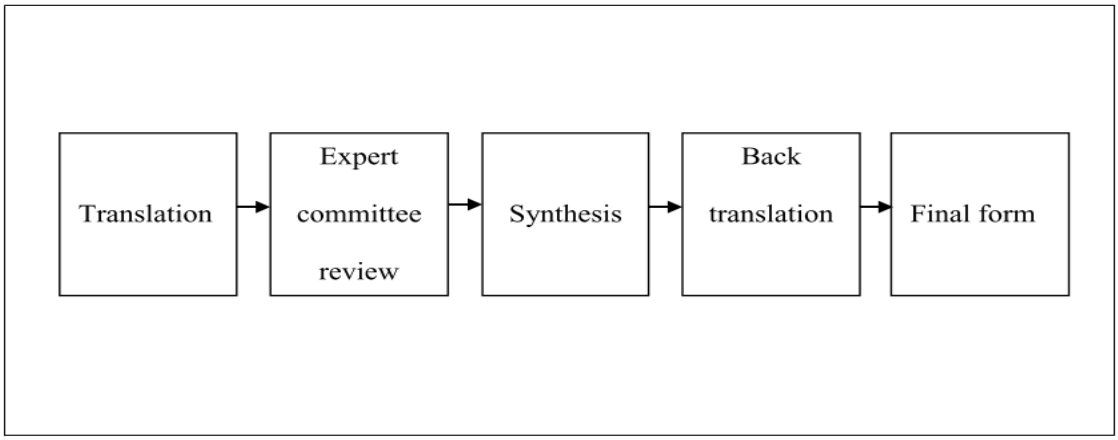

Figure 2. Procedure of CATS scale adaptation

Parent-report measures

Spence Children's Anxiety Scale- parent version (SCAS-p)**;**(Nauta et al.,2004): To measure symptoms of anxiety in children as observed by the caregivers, the 38-item SCAS-p was used (see, Appendix-10). Items are rated on a 4-point Likert-type scale ranging from 0 (never) to 3 (always) and higher scores reflect stronger symptoms of anxiety. The parent version of the SCAS-p shows satisfactory to good psychometric properties with high internal consistency (.89) and satisfactory convergent and discriminant validity (Nauta et al., 2004). In a study with Bangladeshi traumatized children theCronbach's alpha was .87 for the caregivers during using the scale (Deeba & Rapee, 2015).For the present study the Cronbach alpha of the scale was 0.96

. **Short Moods and Feelings Questionnaire-parent version** (SMFQ-p);(Deeba &Rapee, 2014): The SMFQp comprises13 items to assess depression in children as reported by caregivers (see, Appendix-12). Items are rated on a 3-point scale, with higher scores indicating more symptomatology. The unifactorial measure has high internal consistency (Cronbach's alpha=.87) and test retest reliability with satisfactory construct validity (Rhew et al., 2010). In a study with Bangladeshi traumatized children the Cronbach's alpha for the caregiver was .70 (Deeba & Rapee, 2015). For the present study the Cronbach's alpha of the scale was 0.90.

Strengths and Difficulties Questionnaire (SDQ);(Mullick& Goodman, 2000): The SDQ (Goodman, 1997; Goodman et.al.,1998; Goodman, 1999; Goodman et.al. 2000) is a brief behavioral screening questionnaire that asks about 25 attributes, some positive and some negative (see, Appendix-14).Items are rated on a 3-point Likert-type scale as 0 (not true), 1 (somewhat true) and 2 (certainly true) and summed to obtain a total score where higher scores indicate higher levels of behavioral problems. The items, which were selected on the basis of contemporary diagnostic criteria as well as factor analyzes, are divided between five scales of five items each, generating scores for emotional symptoms, con- duct problems, hyperactivity, peer problems, and pro-social behaviors. All items contributing to the first four subscales are summed to generate a Total Difficulties Score. The same questionnaire can be completed in about 5 minutes by parents or teachers of children aged 4–17. There is also a self-report version (Goodman et.al., 1998) for those aged 11 and above. An extended version assesses the impact of any psychiatric symptoms in terms of resultant distress, social impairment, or burden for others (Goodman, 1995). Different versions of the SDQ were translated into Bangla and validated by Mullick and Goodman (2000). In the present study, only parent version of Bangla SDQ was administered for all subjects. The Cronbach alpha of the scale was found 0.85 for the current study.

Intervention tool :

For providing intervention to the treatment group CBT based Cool Kids manual for anxiety disorder of children and adolescents were used. In the present study the “Cool Kids Child Only session plan” was used (see, Figure-3). The session plan is designed for individual or group implementation in schools, residential, or other settings where regular parent involvement is not possible. It is also appropriate for older teens who are developmentally ready to have minimal

SESSION	CHILD	PARENT
1	– Welcome – Psychoeducation – Goals – Worry Scale – Linking Thoughts & Feelings – Home Practice Task: Linking Thoughts & Feelings + Rewards Menu	– Welcome – Psychoeducation – Rewarding – Realistic Thinking – Stepladders – Home Practice: Fears & Worries List
2	– Home Practice Task Review – Two Types of Thoughts – Realistic Thinking – Home Practice Task: Realistic Thinking	
3	– Home Practice Task Review – Adding Evidence to Realistic Thinking – Intro to Stepladders – Home Practice Task: Realistic Thinking	– Progress Review – Stepladder design – Parenting Traps& Strategies – Home Practice: Parent Action Plan
4	– Home Practice Task Review – Creating Stepladders – Stepladder 1 design – Home Practice Task: Fighting Fear by Facing Fear	
5	– Home Practice Task Review – Creative Stepladders – Stepladder 2 design – Small Step First – Home Practice Task: Fighting Fear by Facing Fear	– Individual Parent Consultation
6	– Home Practice Task Review – In your mind Realistic Thinking – In Session Exposure – Home Practice Task: Fighting Fear by Facing Fear	
7	– Home Practice Task Review – In Session Exposure – Additional Skill – Revise Stepladders – Home Practice Task: Fighting Fear by Facing Fear	– Individual Parent Consultation
8	– Home Practice Task Review – Troubleshooting – In Session Exposure – Additional Skill – Home Practice Task: Fighting Fear by Facing Fear	
9	– Home Practice Task Review – Help Others – In Session Exposure – Additional Skill – Home Practice Task: Fighting Fear by Facing Fear	
10	– Home Practice Task Review – Goal Achievement – Future fears and worries – Facing a big challenge	

*Figure 3.*Cool Kids school/child only (individual/group) session plan

parent involvement in therapy.

Cool Kids Child Only is implemented during ten, approximately 1-hour child sessions. Ideally, this is supplemented by 2 parent information sessions (1-2 hours each) in the first weeks of the program and 2 individual consultations (approximately 30 minutes per family) with parents mid-way through the program. The child sessions were conducted on a weekly basis for sessions 1 through 8,followed by a two-week break prior to session 9 and another break of at least two weeks before session 10. The parent information sessions should correspond with sessions 1 and 3, with the individual parent consultations occurring at approximately sessions 5 and 7. The full session plan is mentioned in Figure-2.

For getting permission of using the “Cool Kids” manual as intervention tool in the study, a sequence of activities had been done by the researcher. At first contact was made with one of the authors of the manual. According to his consent, communication was made with Cool kids committee of Access Macquarie Limited, Macquarie University, Australia for getting permission to use the “Cool Kids” material in the present study. After that the committee discussed about the request and decided to give permission to use the manual in our present study. At the same time the committee also took decision that the materials that were going to be used in the study would be translated in Bengali language before using the manual in Bangladeshi context and the translated version would be handover to the Access Macquarie Limited, Macquarie University, Australia after the research activity has been done. But for conducting the translation activities an authorized translator was required as the researcher did not had any international authorization for translation activity. Though the supervisor of the study has a NATI membership from Macquarie University in 2016 and agreed to work collaboratively with the researcher for translation of the “Cool Kids” manual, the committee agreed to send the full material to

researcher for using the Cool Kids Material for translation and using it in a Bangladeshi research. According to the decision a licence agreement paper (see, Appendix-15) was send for translation of the material from Access Macquarie Limited and the agreement was made between Access Macquarie Limited and Department of Clinical Psychology, University of Dhaka. A witness and an authorized officer signed the agreement paper from both of the institutions. Professor Dr. MahmudurRahman and Associate Professor Dr. Farah Deeba (supervisor of the study) of Department of Clinical Psychology, University of Dhaka signed as a witness and authorized officer respectively on behalf of Department of Clinical Psychology, University of Dhaka. After completing the agreement activity the full "Cool Kids" material was send to the researcher from Access Macquarie Limited, Macquarie University, Australia. Then the translation work of the manual started and the Bengali version of the manual was prepared for using the manual as an intervention tool in the present study. At the same time the researcher was provided with an ID and password for getting access to the "Cool Kids Anxiety Program - e-Training" form Access Macquarie Limited. With the ID and password the researcher could get access to the online course of Cool Kids Anxiety Program by visiting the address https://m.openmq.com.au/. As the researcher didn't had any prior experience of using the Cool Kids Anxiety Program, the online course helped to get proper training of the material.

Procedure:

The procedure of the study was divided into two phases, phase1 and phase2 (see, Figure-1). In phase1 preparatory work for data collection and in phase 2 intervention related activities and main data collection were conducted. Under phase1 at first ethical permission was taken for conducting the study. The procedure followed in the study was approved by the ethical review committee of Department of Clinical Psychology, University of Dhaka (project number of

MP180202)(see, Appendix-1) and the ethical review committee of the Faculty of Biological Science, University of Dhaka (the reference no. of**48/Biol.Scs./2017-2018)**(see, Appendix-2).

After completing the translation work and online training of the materials and Cool Kids Anxiety program,the therapists who worked as assistants in the study, were given training on the program for the intervention purpose. Other assistants were also given training on data collection procedure. At that time 3 hospitals and 4 institutions were approached for getting referral and conducting research work. Different 7 awareness programs were conducted in the institutions for making people aware of mental health and childhood anxiety disorders. Of the 5 institutions which permitted to work collaboratively in the research activity, the psychologists, psychiatrists or other mental health related professionals of those institutions were provided letters for referring clients (the format of letters for assistance to the mental health professionals are attached in appendix-4).Children with anxiety disorders were referred by psychiatrists, school psychologists, by other practitioners or parents. The recruitment process began in 11th April 2018, and all follow-ups were completed by 30th June 2019. 124 participants were referred from the interested organizations for eligibility testing and recruitment in the study. Consent from a psychiatrist working with child mental health from National Institute of Mental Health (NIMH), Sher-e-Bangla Nagar, Dhaka was taken to work collaboratively for assisting in the necessary diagnosis related activities. The diagnosis and severity level of the participants were confirmed by the psychiatrist.

In phase2 as noted in the CONSORT flowchart (see Figure 1), 109 of 124 children were finally selected for the study. The participants were randomly allocated to the treatment group (TG) and the wait-list group (WLG). Written informed and verbal consent (see the consent form in appendix-5) was taken for each children from one of the parents, and written and verbal assent

(see the assent form in appendix-6) was taken from each children (protocol approved by Department of Clinical Psychology Ethics Committee, University of Dhaka). The eligibility of discontinuing the study at any point of the participants was also confirmed. Measures of confidentiality were strictly maintained during the study and participants were informed about that. During the study time the participants were free to quit at any point. As the WLG group were kept without any psychological intervention, they were provided with proper information about the psychological service centers (see, Appendix-17) from where they were able take treatment at any point if they felt any necessity. In that case they would discontinue the study process. The participants from both of the groups completed the baseline assessment. After the baseline assessment the TG began to get intervention according to the "Cool Kids Anxiety Program" form the trained therapists and the WLG remained without intervention or any sort medication during this period. Then after 2 and 1/2 months post-assessment was conducted on both of the groups. The interval for each session of the TG was 5-7 days. After the collection data for the 2nd time follow-up data was collected from the participants for the 3rd time after 1 month. By the time when data collection procedure were completed the participants of WLG were provided with the intervention according to their demand.

Statistical analysis:

The study contained two groups (TG and WLG). The participants were allocated randomly for comparing treatment effectiveness between the two groups. Such studies have been referred to as either experimentally staged introduction trials, or a stepped wedge design (Cook, Campbell, & Day, 1979; Group, 1987).Since the main purpose of the study was to evaluate the intervention and thereby improve distress levels, analyses were made on participants who had completed all assessments and intervention initially (completers) and then with all the

participants who enrolled in the study (intent to treat). Last observation carried forward (LOCF) was used to handle missing data. Continuous measures were analyzed using mixed model ANOVAs (Hussey & Hughes, 2007).Results of analyses of data based on these two methods were almost identical, hence only intent-to-treat analyses are reported in tabular format. Some of the demographic variables that differed significantly between groups (child educational qualification, parental educational qualifications, parental occupation, type of family, number of siblings, family monthly income, duration of anxiety problems for the participants, history of taking other services for anxiety) were included as covariates. Baseline comparisons between the two conditions were carried out using independent samples t-tests or chi-square tests as appropriate.In the models, group was a fixed factor, time was included as a repeated measure and covariates were unstructured(Deeba & Rapee, 2015). Therefore results on intervention (treatment or CBT group X wait-list group), time (Time 1 X Time 2) and interaction of intervention and time (Group X time) were checked. Analyses were done using simple comparison tests for showing the treatment effectiveness from time1 to time2, time2 to time3 and time1 to time3.To denote the variances between groups within each time point, effect sizes are presented as partial eta squared($\eta 2$). All statistical analyses were carried out using Statistical Product and Service Solutions (SPSS) version 20.

Chapter-3

Result

Baseline comparison between groups

Of 109 participants 55 were allocated to CBT treatment group and 54 to waitlist (WL) group. Participants allocated to the two experimental groups were compared on both demographic variables and pretreatment measures of psychopathology (see Table 1). Group comparison based on demographic variables and related descriptive statistics are presented in Table 1. There were no significant differences between groups based on some of the demographic variables, those are, child's age, gender, number of family members and religion (all *ps*> .05). But the groups differed significantly (all *ps*< .01) on child's educational status, parental educational qualifications, parental occupation, family type, number of family members and family monthly income. On measures of psychopathology, there were no significant difference between groups on their principal diagnosis, number of co-morbid diagnoses or history of consumption medication for anxiety (all *ps*> .05, see Table 2), but significant difference was found for the duration and history of service seeking for participant's anxiety. Among the participants it was found that 81.7% of the participants had comorbid other disorders with primary diagnosis of an anxiety disorder. The variables that differed significantly between the two groups were entered as covariates during analysis. A series of *t*-tests comparing the two groups on the baseline measures revealed that the CBT based TG scored significantly higher on the SCAS-20, $t(109)= 7.65$, $p< .001$; SCAS-p, $t(109)=7.47$, $p< .001$, and SMFQ, $t(109)=6.97$, $p<.001$; SMFQ-p, $t(109)= 7.65$, $p < .001$; CATS, $t(109)=8.16$; $p< .001$; SDQ-p, $t(109)=4.16$, $p<.01$, compared to the WL group.

Table 1

Group comparison based on demographic variables and related descriptive statistics

Demographic Variables	**TG (n=55)**	**WLG (n=54)**	**Statistics**
Child mean age in years*M(SD)*	11.72 (2.16)	11.35(2.21)	$t(109)=.702$, $p=.484$
Gender (N, % of total)			$\chi^2(1, N=109)= .008$, $p=0.927$
Male	29 (26.6)	28 (25.7)	
Female	26 (23.9)	26 (23.9)	
Educational status of child (*N*, %)			$\chi^2(4, N=109)= 11.69$, $p=.020$
Class 1-3	12 (11.0)	17 (15.6)	
Class 4-5	25 (22.9)	13 (11.9)	
Class 6-8	9 (8.3)	15 (13.8)	
Class 9-S.S.C	7 (6.4)	2 (1.8)	
H.S.C	2 (1.8)	7 (6.4)	
Educational qualification of mothers/fathers (*N*, % of total)			F: $\chi^2(4, N=109)= 74.28$, $p<.001$ M: $\chi^2(4, N=109)= 58.04$, $p<.001$
Masters or above	8/ 6 (7.3/5.5)	33/49(30.3/ 45.0)	
Hons- Higher secondery	9/10 (8.3/9.2)	21/ 5 (19.3/4.6)	
Secondary	24/21(22.1/19.2)		

Illiterate	14/18(12.8/16.5)		
Occupation of father			$\chi^2(3, N=109)= 14.656, p=.002$
(*N*, % in total)			
Service holder	19(17.4)	23(21.1)	
Businessman	20(18.3)	26(23.9)	
Living abroad	3(2.8)	5 (4.6)	
Unemployed	13(11.9)		
Occupation of mother			$\chi^2(1, N=109)= 21.647, p<.001$
(*N,* % in total)			
Housewife	26 (23.9)	48 (44.0)	
Service holder	29 (26.6)	6 (5.5)	
Family type			$\chi^2(2, N=109)= 10.445, p=.005$
(*N*, % in total)			
Nuclear	44 (40.4)	40 (36.7)	
Extended	5 (4.6)	14 (12.8)	
Other (divorced or seperated)	6 (5.5)	0 (0.0)	
Number of siblings *M(SD)*	2.89(1.706)	1.70 (.702)	$t(109)=4.289$, $p=.003$
Number of family members	4.98(1.649)	5.12(2.442)	$t(109)=-.371$, $p=.711$
M(SD)			
Religion (*N*, % in total)			$\chi^2(1, N=109)= 1.00$, p=.317
Islam	52 (47.7)	53 (48.6)	
Hindu	3 (2.8)	2 (0.9)	
Family monthly income (%)			$\chi^2(2, N=109)= 59.624, p<.001$

<15,000 BDT	33 (30.3)	0 (0.0)
15,001-30,000 BDT	6 (5.5)	0 (0.0)
> 30,000 BD	16 (14.7)	54 (49.5)

Comparison between two conditions

To compare changes between the two groups across baseline or pre-intervention (Time 1), post- intervention (Time 2) assessments after 10-weeks and follow-up (Time 3) assessments after 1 months form post assessment on measures were compared using a mixed model ANOVA in the study. The means and standard deviations are presented in Table 3.

Symptoms of Anxiety

When comparing the groups on symptoms of Anxiety measured with the SCAS-20 at baseline and post-intervention, there were significant main effects for intervention, $F(1, 107)=16.34$, $p<.001$, $\eta_p^2=.13$ the two groups; time, $F(2, 214)=264.72$, $p<.38$, $\eta_p^2=.71$and there was a significant time by group interaction, $F(2, 214)=194.98$, $p<.001$, $\eta_p^2=.65$. The result indicates that significant difference was found for child reported anxiety symptoms between TG and WLG for the CBT based intervention. The result also suggest that there were significant difference for child reported anxiety symptoms over the three time period (pre, post, follow-up) between TG and WLG for intervention.

Analyses showed that children in the WLG failed to change significantly, $t(107)=-1.63$, $p=.11$, from Time 1to Time 2 and also from Time 2 to Time 3, $t(107)=-1.63$, $p=.12$, when mean scores on the SCAS-20 decreased significantly among children in the TG from Time 1 to Time 2 , $t(107)=-34.14$, $p<.0001$, but did not change significantly from Time 2 to Time 3, $t(107)= -0.93$, $p= 0.36$. The scores suggest that there no change in child-reported anxiety symptoms among

participants of WLG over the three time period. On the contrary, symptoms of TG reduced significantly from Time 1 to Time 2 which indicates that the intervention was effective in reducing the symptoms of anxiety but there was no significant difference between Time 2 to Time 3 which indicates that the reduction of symptoms were maintained from post-treatment to follow-up.

Again when comparing the groups on symptoms of Anxiety measured with the parent report measure SCAS-p at baseline, post-intervention and follow-up, there were significant main effects for intervention, $F(1, 107)=16.34$, $p<.001$, $\eta_p^2=.13$ between the two groups, time, $F(2, 214)=264.72$, $p<.38$, $\eta_p^2=.71$and there was a significant time by group interaction, $F(2, 214)=194.98$, $p<.001$, $\eta_p^2=.65$. The result indicates that significant difference was found for parent reported anxiety symptoms between TG and WLG for the CBT based intervention. The result also suggest that there were significant difference for parent reported anxiety symptoms over the three time period (pre, post, follow-up) between TG and WLG for intervention.

Analyses showed that parent reported observed anxiety in children of the WLG failed to change significantly $t(106)= -0.931$, $p = 0.3539$ from Time 1to Time 2 and also $t(107)= -1.139$, $p= 0.2574$ from Time 2 to Time 3 but mean scores on the SCAS-p decreased significantly, $t(107)= -18.866$, $p< 0.0001$, among children in the CBT group from Time 1 to Time 2 but did not change significantly $t (107)= -1.329$, P = 0.1867, from Time 2 to Time 3. The scores suggest that there no change in parent-reported anxiety symptoms among participants of WLG over the three time period. On the contrary, symptoms of TG reduced significantly from Time 1 to Time 2 which indicates that the intervention was effective in reducing the symptoms of anxiety but there was

Table 2

Diagnostic characteristics and differences in the scores of the measures used at the baseline level.

Variables	**TG (n=53)**	**WLG (n=51)**	**Statistics**
Duration of anxiety for participants(N, % in total)			$\chi^2(3, N=109) = 21.105$ $p<.001$
Last 6 months	18 (16.5)	7(6.4)	
6 months-12 months	28 (25.7)	16 (14.7)	
< 12 months to 6 years	9 (8.3)	27(24.8)	
More than 6 years	0 (0.0)	4 (3.7)	
History of consumption of medication for anxiety			$\chi^2(1, N=109) = .351$ $p=.553$
Yes	16 (14.7)	13 (11.9)	
No	39 (35.8)	41(37.6)	
Primary Diagnosis (N, % of total)			$\chi^2(8, N=109) = 3.038$ $p=.932$
GAD	12 (11.0)	8 (7.3)	
SoAD	5 (4.6)	7 (6.4)	
SAD	5 (4.6)	8 (7.3)	
SP	13 (11.9)	13 (11.9)	
PD	5 (4.6)	3 (2.8)	
AP	3 (2.8)	2 (1.8)	

OCD	6 (5.5)	7 (6.4)	
PTSD	4 (3.7)	5 (4.6)	
ADNOS	2 (1.8)	1 (0.9)	
Comorbid Diagnosis (*N*, % of total)			$\chi^2(4, N=109) = 3.011$; $p = .556$
Other anxiety disorders	11 (10.1)	13 (11.9)	
Mood disorder	19 (17.4)	12 (11.0)	
Externalizing disorder	7 (6.4)	9 (8.3)	
No comorbidity	8 (7.3)	12 (11.0)	
Others	10 (9.2)	8 (7.3)	

Note. GAD= Generalized Anxiety Disorder. SoAD= Social Anxiety Disorder SAD= Separation Anxiety Disorder. OCD= Obsessive Compulsive Disorder. SPEC= Specific Phobia. PD= Panic Disorder. PTSD= Post Traumatic Anxiety Disorder. ADNOS= Anxiety Disorder Not Otherwise Specified

Other disorder include Selective Mutism.

no significant difference between Time 2 to Time 3 which indicates that the reduction of symptoms or the effect of intervention was maintained from post-treatment to follow-up.

Symptoms of internalizing problems

Depression

According to scores of children on the SMFQ, there was significant main effect difference found

for intervention between the two groups, $F(1, 107)= 10.45$, $p<.01$,$\eta_p^2=.089$, significant main effect for reduction in symptoms of depression over time between the two groups,

Table 3

Mean pretreatment, posttreatment, and follow-up Data across the three conditions for all participants (intention to treat) with last data carried forward (SDs in parentheses)

	Pre-test	**Post –test**	**Follow-up**
	Mean (SD)	**Mean (SD)**	**Mean (SD)**
SCAS-20			
CBT	44.56 (7.195)	6.56 (4.045)	5.82 (4.334)
Wait- list	29.61 (12.545)	25.55 (13.277)	21.61 (13.131)
SCAS-P			
CBT	75.74 (22.505)	13.23 (9.867)	10.91 (8.385)
Wait- list	45.93 (18.968)	42.22 (22.306)	37.46 (21.12)
SMFQ-C			
CBT	19.18 (3.81)	3.36 (1.47)	2.87 (1.754)
Wait- list	11.94 (6.671)	11.74 (7.204)	9.75 (6.198)
SMFQ-p			
CBT	16.87 (6.325)	2.65 (1.468)	2.75 (1.946)
Wait- list	11.8 (5.903)	11.2 (4.868)	9.91 (5.594)
CATS			
CBT	113.1 (23.145)	24.16 (6.59)	18.15 (6.75)
Wait- list	66.94 (34.839)	62.94 (37.74)	54.7 (39.857)
SDQ-P			

CBT	32.8 (9.588)	26.38 (5.533)	27.61 (5.586)
Wait- list	26.74 (4.82)	25.69 (5.02)	24.64 (5.29968)

Note. Pre= pretreatment; Post=posttreatment; SCAS = Spence Children's Anxiety Scale; SCAS-P = Spence Children's Anxiety Scale, Parent Version; SMFQ = Short Mood and Feeling Questionnaire; SMFQ-p = Short Mood and Feeling Questionnaire-parent version; CATS = Children's Automatic Thoughts Scale; SDQ-p = Strength and Difficulties Questionnaire- parent version.

$F(2, 214)= 264.72$, $p<.001$,$\eta_p^2=.712$. There was a significant interaction between time and group, $F(2, 214)= 194.98$, $p<.001$,$\eta_p^2=.646$. The result indicates that significant difference was found for child- reported depressive symptoms between TG and WLG for the CBT based intervention. The result also suggest that there were significant difference for child- reported depressive symptoms over the three time period (pre, post, follow-up) between TG and WLG for intervention.

Analyses found that level of depressive symptoms in children in the wait-list group did not change significantly from Time 1 to Time 2, $t(107)= -0.150$, $p = 0.88$, and from Time 2 to Time 3, $t(107)= -1.539$, $p = 0.13$.But there was a significant reduction from Time 1 to Time 2 in the CBT group $t(107)= -28.730$, $p< 0.0001$ and no change from Time 2 to Time 3 $t(107)= -1.588$, $p= 0.1867$. The scores suggest that there no change in child-reported depressive symptoms among participants of WLG over the three time period. On the contrary, symptoms of TG reduced significantly from Time 1 to Time 2 which indicates that the intervention was effective in reducing the symptoms of depression but there was no significant difference between Time 2 to Time 3 which indicates that the reduction of symptoms or the effect of intervention was

maintained from post-treatment to follow-up.

According to scores of parent reported measure of children's observed depression on the SMFQ-p, there was significant main effect difference found for intervention between the two groups, $F(1, 107)= 23.05$, $p<.01$,$\eta_p^2=.177$, significant main effect for reduction in symptoms of depression over time between the two groups, $F(2, 214)= 186.52$, $p<.001$,$\eta_p^2=.625$. There was also a significant interaction between time and groups, $F(2, 214)= 131.47$, $p<.001$,$\eta_p^2=.551$. The result indicates that significant difference was found for parent reported depressive symptoms between TG and WLG for the CBT based intervention. The result also suggest that there were significant difference for parent- reported depressive symptoms over the three time period (pre, post, follow-up) between TG and WLG for intervention.

Analyses found that level of parent reported depressive symptoms in children of the WLG did not change significantly from Time 1 to Time 2, $t(107)= -0.576$, $p= 0.55$, and from Time 2 to Time 3, $t(107)=-1.278$, $p= 0.2039$. But there was a significant reduction of symptoms from Time 1 to Time 2 in the TG $t(107)= -28.730$, $p< 0.001$ and no change from Time 2 to Time 3 $t(107)= 0.288$, $p= 0.7735$. The scores suggest that there no change in parent-reported depressive symptoms among participants of WLG over the three time period. On the contrary, symptoms of TG reduced significantly from Time 1 to Time 2 which indicates that the intervention was effective in reducing the symptoms of depression but there was no significant difference between Time 2 to Time 3 which indicates that the reduction of depressive symptoms or the effect of intervention was maintained from post-treatment to follow-up according to parent report.

Changes in cognitions

There was a significant main effect difference in negative cognitions as measured by the CATS betweengroups, $F(1, 107)= 25.83$, $p<.001$,$\eta_p^2=.196$, and significant effect of time over changes in cognitions, $F(2, 214)= 472.3$, $p<.001$,$\eta_p^2=.815$. These were confirmed by the significant interaction between time and group, $F(2, 214)= 326.58$, $p<.001$,$\eta_p^2=.753$. The result indicates that significant difference was found for child- reported cognitive bias between TG and WLG for the CBT based intervention. The result also suggest that there were significant difference for child- reported cognitive bias over the three time period (pre, post, follow-up) between TG and WLG for intervention.

Analyses showed that there was significant change in cognition from Time 1 to Time 2, $t(107)=.847$, $p<001$, and no change from Time 2 to Time 3, $t(107)= -1.058$, $p= 0.2925$, in the wait-list group. The mean scores on the CATS obtained by children in the CBT group showed significant reduction in child reported negative cognition from Time 1 to time 2, $t(107)= -27.409$, $p< 0.0001$, and from Time 2 to Time 3, $t(107)= -4.725$, $p< 0.0001$.The scores suggest that child-reported cognitive bias among participants of WLG had changed from pre to post assessment period but the symptoms did not change from post to follow-up assessment. On the contrary, symptoms of TG reduced significantly from Time 1 to Time 2 which indicates that the intervention was effective in reducing the symptoms of cognitive bias and helped in reducing symptoms from Time 2 to Time 3 also.

Symptoms of externalizing problems

Changes in Behavior

According to scores of parent reported measure of children's observed negative behaviors

on the SDQ-p, there was significant main effect difference found for intervention between the two groups, $F(1, 107)= 10.31$, $p<.01$,$\eta_p^2=.088$, significant main effect for reduction in symptoms of depression over time,$F(2, 214)= 31.13$, $p<.001$,$\eta_p^2=.225$. There was also a significant interaction between time and groups, $F(2, 214)= 12.4$, $p<.001$,$\eta_p^2=.104$.The result indicates that significant difference with medium effect size was found for parent reported behavioral problems between TG and WLG for the CBT based intervention. The result also suggest that there were significant difference for parent- reported behavioral problems over the three time period (pre, post, follow-up) between TG and WLG for intervention.

Analyses found that level of parent reported negative behavioral symptoms in children of the wait-list group did not change significantly from Time 1 to Time 2, $t(107)=-1.109$, $p= 0.2701$, and from Time 2 to Time 3,$t(107)= -1.058$, $P = 0.3$. But there was a significant reduction of symptoms from Time 1 to Time 2 in the TG$t(107)= -4.301$, $P< 0.001$ and no change from Time 2 to Time 3 $t(107)= 1.60$, $P=0.25$.The scores suggest that there no change in parent-reported behavioral problems among participants of WLG over the three time period. On the contrary, symptoms of TG reduced significantly from Time 1 to Time 2 which indicates that the intervention was effective in reducing the symptoms of behavioral problems but there was no significant difference between Time 2 to Time 3 which indicates that the change of behavioral problems or the effect of intervention was maintained from post-treatment to follow-up according to parent report.

Chapter-4

Discussion

Discussion

The study evaluated the effectiveness of cognitive behavior therapy for children with anxiety disorders in the context of Bangladesh. The translated Bengali-version of CBT based Cool Kids Program was used for treating the anxiety disorders of the young population.It was the first evaluation of a CBT program for anxiety disorders of young people in Bangladesh, where there is inadequate care seeking as well as poor service delivery for mental health disorders and no health benefits for psychological treatment for such disorders (Hossain et.al., 2014).

The findings of the study are relatively straightforward and provide support for CBT based psychological interventions in treating youth with various anxiety disorders. The result of the current trial demonstrated that children who received CBT improved more than children in WL condition over times. Reductions in the treatment condition were significantly greater compared to the WLcondition (with large effect sizes; i.e., $\eta^2 > 0.14$)(Arendt et al., 2016) across times in the outcome measures (i.e. SCAS-20, SCAS-P, SMFQ-C, SMFQ-P and CATS). The improvement was maintained during 1-month follow-up. This finding is consistent with other studies (Arendt et al., 2016; Rapee& Mifsud,2005; Wuthrich, Rapee, Cunningham, Lyneham, Hudson, &Schniering, 2012; Schuurmans et al., 2006). So, from the current result it can be indicated that CBT based TG showed significant reduction in primary anxiety symptoms as well as other co-morbid internalizing (mood, cognition) and externalizing (behavioral) symptoms. Although significant changes in behavioral problems were found in CBT condition compared to WL condition. Medium effect size ($.05<\eta^2<0.14$) (Arendt et al., 2016) was found across time for the outcome measure (SDQ-P) where large effect size was found for other co-morbid internalizing symptoms. The reason behind it is that the CBT based “Cool Kids Anxiety Program” is most commonly operationalised for meeting criteria for a principal diagnosis of any

anxiety disorder (Rapee et.al. 2018). Research shows that children with a range of anxiety disorders including obsessive-compulsive disorder demonstrate significant improvements following Cool Kids intervention (Hudson et al., 2015).But in cases of co-morbid behavioral or oppositional problem a child may not be co-operative with their parents in practicing skills between sessions which can interfere will the effectiveness of the intervention. For this the reduction in symptoms in such participants may not be as significant as for children with other internalizing problems (Rapee et.al. 2018). It has been also shown that children with significant comorbidity which is secondary to anxiety, will respond very well to the Cool Kids program but may not improve quite as much as purely anxious children at the end of 10 sessions (Rapee et al., 2013).In accordance to our current result there were significant reduction in anxiety as well as in the co-morbid difficulties that were secondary to anxiety. It is also consistent with other research findings where successful completion of CBT based Cool Kids program were not only related to the reduction of participants anxiety symptoms but also to the reduction of non-anxiety symptoms like mood disorder, behavioral problems or cognitive bias (Rapee et al., 2013). In the pre-assessment for both TG and WL group significant co-morbidity of depression, cognitive bias and behavioral problems were found with the primary diagnosis of anxiety. This finding can provide some support to a recent study conducted by Mallik, Radwan and Binte (2018) where it was found that 77.8% of the children and adolescents with psychiatric disorders had low pro-social behavior, high peer problem andhighly significant relationship between them was ($P > 0.001$). All of this problems are addressed through the intervention process of the study and significant reduction has been found. So, it can be indicated that our present intervention tools are not only effective for treating primary anxiety disorders of Bangladeshi children and adolescents but also the tools can be used in combination with other psychological treatment

processes. In the present study in both of the groups (CBT and WL) parents were involved and data were collected from both children and parents. It allowed us to collect measures from both sides. The measures showed that significant change in anxiety and other co-morbid problems occurred from pre to post assessment in the CBT based TG and the change was maintained from post to follow-up assessment. Besides the WL group failed to show such type of change over time. Again parental involvement was assured during the intervention process which helped the TG to change more precisely over time and maintain the treatment outcome. The main reason behind this was that during intervention parents were introduced with psychoeducation, realistic thinking, parenting traps and strategies etc (see Figure 3) which helped them to assist not only their child but also themselves. According to Rapee (2018) wherever possible primary careers or parents should be encouraged to attend sessions, in addition to the child because it allows them to learn strategies to support and coach their child during and after the intervention. It was also found that parental anxiety and attitude can influence a child's anxiety and if they can be involved to the intervention process they can identify not only their child's problem but also their own problems that are contributing to their child's anxiety (Aydin, 2014, Rapee et.al., 2018). Through this parental involvement in the CBT based intervention can improve the treatment efficacy for anxious children which is consistent to out result. It is alos consistent with other studies which indicate that parental involvement have increased the efficacy of the treatment in CBT based intervention during especially working with young children (Monga, Rosenbloom, Tanha, Owens, & Young , 2015) and having at least one anxious parent (Aydin, 2014). Moreover, parental involvement can help to maintain the treatment effect (Walczak, Esbjørn, Breinholst, & Reinholdt-Dunne, 2017) which can also be supported by our current study. Conducting awareness program during conducting the study allowed the researcher to spread

awareness about the childhood anxiety symptoms among the population who participated in the study process. It can be considered as the initial step in resolving some of the issues that come out of some recent studies conducted on young population of Bangladesh. In a study by Jesmin et.al. (2006) it was found that generalized anxiety disorder was under-represented (0.4%) probably due to the lack of awareness and ignorance about mental health. They also found that the pattern of diagnosis for mental health problems in Bangladeshi children does not match up to an extent with the western studies due to culture variation and other factors like ignorance, lack of awareness, and social stigma. Mallik and Radwan (2018) also found that among the children with mental health problems 77.8% had low prosocial behavior and significant ($P > 0.001$) peer and relationship problem from children with no mental health problems. These type of symptoms are related to childhood anxiety disorders (Connolly et al., 2007; Kendall et al. 2004; Costello, Mustillo, Erkanli, Keeler, &Angold, 2003). So, building awareness and involving parents in intervention process can be beneficial for improving awareness, reducing ignorance and stigma about childhood anxiety disorders among the general population. It will also help them to seek for proper diagnosis and mental health service in our cultural context.

The study has some limitation. First, All the participants were collected from Dhaka city which reduced the diversity of the participant group. Also, The treatment group was compared to wait-list group and not to an active control condition (Arendt et.al., 2016). Again, only 1-month follow-up assessment was done to see the maintenance effect. Moreover, no assessment of therapist competence or adherence to protocol was conducted (Arendt et.al., 2016). With those limitations the study also has some strengths. The inclusion of control group (wait-list) group helped to compare the result in a more accurate way. Simple random sampling technique was used in the study. Again using a structured session plan was used for intervention which helped

the researcher to implement treatment on CBT group properly.

In future research in the areas of childhood and adolescent anxiety can be initiated based on the present study. Like controlled trials comparing medications, CBT, and their combination are needed to determine whether combined treatment provides an additive benefit in terms symptom reduction. Again, treatment-dismantling studies should be conducted to identify the relative contributions of specific CBT components to symptom reduction and treatment acceptability. Besides, Follow-up studies with adequate control groups can be conducted to evaluate the long-term benefit of CBT. Examining whether booster CBT sessions reduce relapse rates and whether intervening in childhood prevents the onset of adult psychiatric disorders are also necessary. Overall, studies with diverse patient populations should be conducted to evaluate the exportability and generalizability of currently available therapeutic interventions.

The study has some practical implications. This include providing evidence of the effectiveness of CBT among the young population of our country; introducing an internationally renowned structured CBT based session plan with evidence to the therapist for managing anxiety of the children of Bangladesh; promoting awareness among parents and teachers of children about identifying the symptoms of anxiety; creating awareness concerning seeking for proper treatment as most of the people are unaware about the mental health services and the consequences of mental disorder (Hossain et.al., 2014). The study can also add a new step in introducing mental health services to the general population. It can also work as a baseline for initiating further research on effectiveness of psychological intervention in young people of Bangladesh.

Chapter-5

References

Achenbach, T.M., Rescorla, L.A., & Ivanova, M.Y. (2012). International epidemiology of child and adolescent psychopathology i: Diagnoses, dimensions, and conceptual issues. *Journal of the American Academy of Child and Adolescent Psychiatry, 51*, 1261–1272.

American Psychiatric Association. (2013). *Diagnostic and statistical manual of mental disorders (5th ed.)*. Washington, DC. APA.

Angold, A., Costello, E.J., Messer, S.C., Pickles A., Winder F., & Silver D. (1995). The development of a short questionnaire for use in epidemiological studies of depression in children and adolescents. *International Journal of Methods in Psychiatric Research.* 1995;5:237–249.

APA Task Force on the Promotion and Dissemination of Psychological Procedures (1995). Training in and dissemination of empirically-validated psychological treatments: Report and recommendations. *Clinical Psychologist. 48*:3–24.

Arendt, K., Thastum, M., & Hougaard, E. (2016). Efficacy of a Danish version of the Cool Kids program: A randomized wait-list controlled trial. *Acta Psychiatrica Scandinavica*, *133*(2), 109–121. https://doi.org/10.1111/acps.12448.

Aydın A. (2014). Parental involvement in cognitive-behavioral therapy for children with anxiety disorders. *Turkish Journal of Psychiatry, 25*(3),181-9.

Bangladesh Bureau of Statistics (2010). *Statistical Pocketbook of Bangladesh*. P.88.

Bass J.K., Bornemann T.H., Burkey M., Chehil S., Chen L., Copeland J.R.M., Eaton W.W., Ganju V., Hayward E., Hock R.S., Kidwai R., Kolappa K., Lee P.T., Minas H., Or F., Raviola G.J., Saraceno B., & Patel V. (2012). A United Nations General Assembly Special Session for Mental, Neurological, and Substance Use Disorders: The Time Has Come. *PLoS Med*, 9(1):e1001159. doi:10.1371/journal. pmed.1001159

Belfer, M.L. (2007). Critical review of world policies for mental healthcare for children and adolescents. *Current Opinion in Psychiatry*, 20, 349–352.

Belfer M.L. (2008). Child and adolescent mental disorders: the magnitude of the problem across the globe. *J Child Psychol Psychiatry*. Mar;49(3):226-236.

Benjamin C. L., Puleo C. M., Settepani C. A., Brodman D. M., Edmunds J. M., & Cummings C. M. (2011). History of cognitive–behavioral therapy in youth. *Child and Adolescent Psychiatric Clinics of North America*, 20, 179–189.

Bennett K., Manassis, K., Walter, S. D., & Cheung, A. (2013). Cognitive behaviral therapy age effects in child and adolescent anxiety: an individual parent data meta-analysis, *841*, 829–841. https://doi.org/10.1002/da.22099

Bitsko, R. H., Holbrook, J. R., Ghandour, R. M., Blumberg, S. J., Viss- er, S. N., Perou, R., & Walkup, J. T. (2018). Epidemiology and Impact of Health Care Provider–Diagnosed Anxiety and Depression Among U.S. Children. *Journal of Developmental & Behavioral Pediatrics*, 39(5), 395-403. doi: 10.1097/DBP.0000000000000571

Cartwright-Hatton, S., Roberts, C., Chitsabesan, P., Fothergill, C., & Harrington, R. (2004). Systematic review of the efficacy of cognitive behaviour therapies for childhood and adolescent anxiety disorders. *British Journal of Clinical Psychology*, 43, 421–436.

Cartwright-Hatton, S., McNicol, K., & Doubleday, E. (2006). Anxiety in a neglected population: Prevalence of anxiety disorders in pre-adolescent children. *Clinical Psychology Review, 26*, 817–833. doi:10.1016/j.cpr.2005.12.002.

Cartwright-Hatton, S., Laskey, B., Rust, S., & McNally, D. (2010). From Timid to Tiger. A treatment manual for parenting the anxious child. UK: John Wiley & Sons Ltd.

Caroline H., Eilis H., Lorraine S., & Patrick C. (2017). "Stigma towards Mental Health Problems

during Childhood and Adolescence: Theory, Research and Intervention Approaches". *Journal of Child and Family Studies,* 26 (11), 2949–2959. doi:10.1007/s10826-017-0829-y. ISSN 1062-1024.

Child Mind Institute, Inc (2015). Child Mind Institute Children's Mental Health Report. *Psychol Med, 30*Retrieved from https://www.childmind.org/wpcontent/uploads/ChildrensMental HealthReport_052015.pdf

Chorpita, B. F. (2007). Guides to individualized evidence-based treatment. Modular cognitive-behavioral therapy for childhood anxiety disorders. New York, NY, US: Guilford Press.

Christiana J.M., Gilman S.E., Guardino M., Mickelson K., Morselli P.L., Olfson M., & Kessler R.C. (2000). Duration between onset and time of obtaining initial treatment among people with anxiety and mood disorders: an international survey of members of mental health patient advocate groups. (3):693-703. DOI: 10.1017/s0033291799002093.

Colton C.W.& Manderscheid R.W., (2006). Congruencies in Increased Mortality Rates, Years of Potential Life Lost, and Causes of Death Among Public Mental Health Clients in Eight States. *Prev Chronic Dis*, 3(2):A42 [http://www.ncbi.nlm.nih.gov/pmc/articles/PMC1563985/pdf/PCD32A42.pdf]

Comer, J. S., Blanco, C., Hasin, D. S., Liu, S.-M., Grant, B. F., Turner, J. B., & Olfson, M. (2011). Health-Related Quality of Life Across the Anxiety Disorders. *The Journal of Clinical Psychiatry*, *72*(01), 43–50. https://doi.org/10.4088/JCP.09m05094blu.

Compton, S. N., March, J. S., Brent, D., Albano, A. M., Weersing, V. R., & Curry, J. (2004). Cognitive–behavioral psychotherapy for anxiety and depressive disorders in chil- dren and adolescents: An evidence-based medicine review. *Journal of the American Academy of Child and Adolescent Psychiatry*, 43, 930–959.

Connolly S.D., Bernstein G.A., & the Work Group on Quality Issues (2007). Practice parameter for the assessment and treatment of children and adolescents with anxiety disorders. *J Am Acad Child Adolesc Psychiatry,46*,267–283.

Cook, T. D., Campbell, D. T., & Day, A. (1979). Quasi-experimentation: design & analysis issues for field settings. Boston: Houghton Mifflin.

Copeland, W. E., Angold, A., Shanahan, L., & Costello, E. J. (2014). Longitudinal Patterns of Anxiety From Childhood to Adulthood: The Great Smoky Mountains Study. *Journal of the American Acad- emy of Child and Adolescent Psychiatry, 53*(1), 21–33. http://doi. org/10.1016/j.jaac.2013.09.017.

Copeland W.E., Shanahan L., Costello EJ, et al. (2009). Childhood and adolescent psychiatric disorders as predictors of young adult disorders. *Arch Gen Psychiatry*, 66(7),764–772. doi: 10.1001/archgenpsychiatry.2009.85. [PMC free article] [PubMed] [CrossRef]

Costello E.J., Egger H., & Angold A. (2005) 10-year research update review: the epidemiology of child and adolescent psychiatric disorders: I. Methods and public health burden. *J Am Acad Child Adolesc Psychiatry,* 44:972–986.

Costello, E. J., Egger, H. L., Copeland, W., Erkanli, A., & Angold, A. (2011). The devel- opmental epidemiology of anxiety disorders: phenomenology, prevalence, and comorbidity. In: W. K. Silverman, & A. P. Field (Eds.), Anxiety disorders in children and adolescents (2nd ed., pp. 56–75). Cambridge University Press.

Costello, E. G., Egger, H. L., & Angold, A. (2005). The developmental epidemiology of anxiety disorders: Phenomenology, prevalence and comorbidity. *Child and Adolescent Psychiatric Clinics of North America*, 14, 631–648.

Costello, E. G., Mustillo, S., Erkanli, A., Keeler, G., & Angold, A. (2003). Prevalence and

development of psychiatric disorders in childhood and adolescence. *Archives of General Psychiatry*, 60, 837–844.

Coysh C. (2011). Thesis. Psych Doctorate in Clinical Psychology. 2011. Investigation of the relationships between magical thinking, thought fusion and anxiety in young people.

Deeba, F., & Rapee, R. M. (2015). Evaluation of an innovative intervention for traumatized children from a low resourced country. *Mental Health & Prevention*, *3*(4), 157–169. https://doi.org/10.1016/j.mhp.2015.05.001

Essau, C. A., Conradt, J., Ollendick, T. H., & Tech, V. (2012). Prevention of Anxiety Symptoms in Children : Results From a Universal School-Based Trial. *Behavior Therapy*, *43*(2), 450–464. https://doi.org/10.1016/j.beth.2011.08.003

Hossain, M. D., Ahmed, H. U., Chowdhury, W. A., & Niessen, L. W. (2014). Mental disorders in Bangladesh : a systematic review, 1–8. https://doi.org/10.1186/s12888-014-0216-9.

Mehta, M., & Sagar, R. (2015). A practical approach to cognitive behaviour therapy for adolescents. *A Practical Approach to Cognitive Behaviour Therapy for Adolescents*, 1–429. https://doi.org/10.1007/978-81-322-2241-5

Murphy, R., & Hallahan, B. (2016). Differences between DSM-IV and DSM-5 as applied to general adult psychiatry, 135–141. https://doi.org/10.1017/ipm.2015.54

Schuurmans, J., Comijs, H., Emmelkamp, P. M. G., Gundy, C. M. M., Weijnen, I., Van Den Hout, M., & Van Dyck, R. (2006). A randomized, controlled trial of the effectiveness of cognitive-behavioral therapy and sertraline versus a waitlist control group for anxiety disorders in older adults. *American Journal of Geriatric Psychiatry*, *14*(3), 255–263. https://doi.org/10.1097/01.JGP.0000196629.19634.00

Davis, T. E., May, A., & Whiting, S. E. (2011). Evidence based treatment of anxiety and phobia

in children and adolescents: Current status and effects on the emotional response. *Clinical Psychology Review, 31*, 592–602.

Deeba, F., & Rapee, R. M. (2015). Evaluation of an innovative intervention for traumatized children from a low resourced country. *Mental Health & Prevention, 3(*4), 157–169. https://doi.org/10.1016/j.mhp.2015.05.001

Glazebrook C., Hollis C., Heussler H., Goodman R., & Coates l. (2003). Detecting emotional and behavioural problems in paediatric clinics. *Child Care Health Dev, 29*(2),141-149.

Goodwin R.D. & Stein M.B., (2002). Generalized anxiety disorder and peptic ulcer disease among adults in the United States. *Psychosomatic Medicine, 64*,862–866. [PubMed: 12461190].

Goodman R. (1997). The strengths and difficulties questionnaire: a research note. *J Child Psychol Psychiatry; 38*,581–6.

Goodman R.(1999). The extended version of the strengths and difficulties questionnaire as a guide to child psychiatric caseness and consequent burden. *J Child Psychol Psychiatry, 40*, 791–801.

Goodman R., Ford T., Simmons H., Gatward R. & Meltzer H. (2000). Using the strengths and difficulties question- naire (SDQ) to screen for child psychiatric disorder in a community sample. *Br J Psychiatry, 177*, 534–9.

Goodman R., Meltzer H. & Bailey V. (1998). The strengths and difficulties questionnaire: a pilot study on the valid- ity of the self-report version. *Eur Child Adolesc Psychiatry ,7*,125–30.

Goodman R, Renfrew D, & Mullick M. (2000). Predicting type of psychiatric disorder from strengths and difficulties questionnaire (SDQ) scores in child mental health clinics in London and Dhaka. *Eur Child Adolesc Psychiatry, 9*,129–34.

Goodman R, Scott S. Comparing the strengths and difficulties questionnaire and the child behavior checklist: is small beautiful? J Abnorm Child Psychol 1999; 27:17–24.

Group, G. H. S. (1987). The Gambia hepatitis intervention study. *Cancer Research, 47*(21), 5782–5787.

Hudson, J. L., R. M. Rapee, C. Deveney, C. A. Schniering, H. J. Lyneham and N. Bovopoulous (2009). "Cognitive behavioral treatment versus an active control for children and adolescents with anxiety disorders: A randomized trial." *Journal of the American Academy of Child and Adolescent Psychiatry, 48*(5), 533-544.

Hudson, J. L., R. M. Rapee, H. J. Lyneham, L. McLellan, V. M. Wuthrich and C. A. Schniering (2015). "Comparing outcomes for children with different anxiety disorders following cognitive behavioural therapy."Behaviour Research and Therapy72: 30-37.

Hussey, M. A., & Hughes, J. P. (2007). Design and analysis of stepped wedge cluster randomized trials. *Contemporary Clinical Trials, 28*(2), 182–191. http://dx.doi.org/10.1016/j.cct.2006.05.007.

Hock R.S., Or F., Kolappa K., Burkey M.D., Surkan P.J., & Eaton W.W. (2012). A new resolution for global mental health. *Lancet*, *379*(9824):1367–1368. doi:10.1016/S0140-6736(12)60243-8.

Hofstra M.B., Van der Ende J., & Verhulst F.C. (2002). Child and adolescent problems predict DSM-IV disorders in adulthood: a 14-year follow-up of a Dutch epidemiological sample. *J Am Acad Child Adolesc Psychiatry*,*41*(2),182–189. doi: 10.1097/00004583-200202000-00012. [PubMed] [CrossRef]

Hossain, M. D., Ahmed, H. U., Chowdhury, W. A., & Niessen, L. W. (2014). Mental disorders in Bangladesh : a systematic review, 1–8. https://doi.org/10.1186/s12888-014-0216-9.

Ihle W. & Esser G. (2002). Epidemiologie psychischer Sto¨rungen im Kindes- und Jugendalter. Pra¨valenz, Verlauf, Ko morbidita¨t und Geschlechtsunterschiede. *Psychol Rundsch*, 53:159–169.

In-Albon, T., & Schnieder, S. (2006). Psychotherapy of childhood anxiety disorders: A meta-analysis. *Psychotherapy and Psychosomatics, 76*,15–24.

Insel, T.R. (2014). Mental disorders in childhood: Shifting the focus from behavioral symptoms to neurodevelopmental trajectories. *JAMA, 311*, 1727–1728.

Ishikawa, S., Okajima, I., Matsuoka, H., & Sakano, Y. (2007). Cognitive behavioural therapy for anxiety disorders in children and adolescents: A meta-analysis. *Child and Adolescent Mental Health, 12,* 164–172.

Islam A. & Biswas T. (2015). Mental Health and the Health System in Bangladesh: Situation Analysis of a Neglected Domain. *American Journal of Psychiatry and Neuroscience, 3*(4): 57-62. doi: 10.11648/j.ajpn.20150304.11.

Jayashree K., Mithra P. P., Nair M.K., Unnikrishnan B., & Pai K. (2018). Depression and anxiety disorders among schoolgoing adolescents in an urban area of South India. Indian *Journal of Community Medicine, 43*(5);28-32. DOI: 10.4103/ijcm.IJCM_209_18.

James, A.C., James, G., Cowdrey. F.A., Soler, A., & Choke, A. (2013). Cognitive behavioural therapy for anxiety disorders in children and adolescents. *Cochrane Database Syst Rev, 6*,1–104.

James, A., Soler, A., &Weatherall, R. (2005). Cognitive behavioural therapy for anxiety disorders in children and adolescents. *Cochrane Database of Systematic Reviews*, 19(5).

Jezzard R.G. (1995). Child and adolescent psychiatric disorders in general practice. *Adv Psychiatr Treat,1*,184-191.

Judge D., Nadel S., Vergnaud S., & Garralda M. (2002). Psychiatric adjustment following meningococcal disease treated on a PICu. *Intensive Care Med*, *28*(5),648-650.

Kapçı, E. G., R. I. Uslu, D. Sukhodolsky, D. Atalan-Ergin and G. Çokamay (2012). "Cognitive-Behavioral therapy for anxiety in elementary school students." Bilişsel Davranışçı Psikoterapi ve Araştırmalar Dergisi1: 121-126.

Keller, M. B., Lavori, P. W., Wunder, J., Beardslee, W. R., Schwartz, C. E., & Roth, J. (1992). Chronic course of anxiety disorders in children and adolescents. *Journal of the American Academy of Child & Adolescent Psychiatry, 31*(4), 595–599. http://dx.doi.org/10.1097/00004583-199207000-00003

Kendall, P. C. (1990). Coping cat workbook. *Ardmore*, PA: Workbook Publishing.

Kendall, P.C., Safford, S., Flannery-Schroeder, E., & Webb, A. (2004). Child anxiety treatment: Outcomes in adolescence and impact on substance use and depression at 7.4-year follow-up. *Journal of Consulting and Clinical Psychology, 72*, 276–287. doi:10.1037/0022-006X.72.2.276.

Kendall, P., & Hedtke, K. (2006a). Coping cat workbook (3rd Ed.). *Ardmore*, PA: Work- book Publishing.

Kendall, P.C. & Hedtke, K. (2006b) Cognitive-behavioral therapy for anxious children: Therapist manual. 3. Ardmore, PA: Workbook Publishing.

Kessler, R. C., Aguilar-Gaxiola, S., Alonso, J., Chatterji, S., Lee, S., Or- mel, J., & Wang, P. S. (2009). The global burden of mental disorders: An update from the WHO World Mental Health (WMH) Surveys. *Epidemiology and Psychiatric Sciences, 18*(1), 23–33.

Kessler, R., Berglund, P., Demler, O., Jin, R., & Walters, E.E., (2005). Lifetime prevalence and age-of-onset distributions of DSM-IV disorders in the National Comorbidity Survey

Replication. *Arch Gen Psychi- atry,62*,593-602.

Kessler, R.C., Avenevoli, S., Costello, E.J., Georgiades, K., Green, J.G., Gruber, M.J., Merikangas, K.R. (2012). Prevalence, persistence, and sociodemographic correlates of DSM-IV disorders in the national comorbidity survey replication adolescent supplement. *Archives of General Psychiatry, 69*,372–380. doi:10.1001/archgenpsychiatry.2011.160.

Kessler RC, Frank RG. The impact of psychiatric disorders on work loss days. *Psychol Medicine 27*, 861–873.

Kim-Cohen J., Caspi A., Moffitt T.E., et al. (2003). Prior juvenile diagnoses in adults with mental disorder: developmental follow-back of a prospective-longitudinal cohort. *Arch Gen Psychiatry*,*60*(7),709–717. doi: 10.1001/archpsyc.60.7.709. [PubMed] [CrossRef]

Knudsen, E.I., Heckman, J.J., Cameron, J.L., & Shonkoff, J.P. (2006). Economic, neurobiological, and behavioral perspectives on building America's future workforce. *Proceedings of the National Academy of Sciences of the United States ofAmerica, 103,* 10155–10162.

Langley, A. K., Bergman, R. L., McCracken, J., &Piacentini, J. C. (2004). Impairment in childhood anxiety disorders: preliminary examination of the Child Anxiety Impact Scale – Parent version. *Journal of Child and Adolescent Psychopharmacology, 14*, 105–114. doi: 10.1089/104454604773840544.

LeViness, P., Bershad, C., & Gorman, K. (2017). The Association for University and College Counseling Center Directors Annual Survey. Retrieved from: https://www.aucccd.org /public.

Lyneham, H.J. & Rapee, R.M., (2006). Evaluation of therapist-supported parent-implemented CBT for anxiety disorders in rural children. *Behaviour Research and Therapy, 44*, 9, 1287-

1300.

Manassis, K., Lee, T., Bennett, K., Yan Zhao, X., Mendlowitz, S., Duda, S., Saini, M., Wilansky, P., et.al., (2014). Types of Parental Involvement in CBT With Anxious Youth: A Preliminary Meta-Analysis. *Journal of consulting and clinical psychology*, *82*(6). DOI: 10.1037/a0036969

Manassis K., Avery D., Butalia S., & Mendlowitz S., (2004). Cognitive- behavioral therapy with childhood anxiety disorders: functioning in adolescence. *Depress Anxiety, 19*, 209–216.

Martinelli, K., Cohen, Y., Kimball, H., & Miller, C. (2018). Understanding Anxiety in Children and Teens: 2018 Children's Mental Health Report, 1–20. Retrieved from https://childmind. org/ downloads/CMI_2018CMHR.pdf

Mathers C., Fat D.M., & Boerma J.T. (2008). The global burden of disease: 2004 update. *Geneva: WHO press*.

Mehta, M., & Sagar, R. (2015). A practical approach to cognitive behaviour therapy for adolescents. *A Practical Approach to Cognitive Behaviour Therapy for Adolescents*, 1–429. https://doi.org/10.1007/978-81-322-2241-5

Mendlowicz MV, Stein MB. Quality of life in individuals with anxiety disorders. Am J Psychiatry 2000;157:669–682. [PubMed: 10784456].

Merikangas, K.R., He, J., Burstein, M., Swanson, S.A., Avenevoli, S., Cui, L., Benjet, C., Georgiades, K., Swendsen, J., (2010). Lifetime Prevalence of Mental Disorders in US Adolescents: Results from the National Comorbidity Study-Adolescent Supplement (NCS-A). *Journal of the American*

Mental Health Facts and Statistics. NIMH Website. National Institute of Mental Health, n.d. Web. 20 Feb. 2013

Mifsud, C., & Rapee, R. M. (2005). Early Intervention for Childhood Anxiety in a School Setting: Outcomes for a Disadvantaged Population. *Journal of the American Academy of Child and Adolescent Psychiatry, 44*(10), 996-1004.

Monga, S., Rosenbloom, B.N., Tanha, A., Owens M., & Young, A. (2015). Comparison of child-parent and parent-only cognitive-behavioral therapy programs for anxious children aged 5 to 7 years: short- and long-term outcomes. *J Am Acad Child Adolesc Psychiatry, 54(2)*,138-46. doi: 10.1016/j.jaac.2014.10.008.

Mullick, M.S., Khanom M., & Islam H. (1995). Psychiatric morbidity of outpatient children in institute of mental health and research. *Bang J Psychiatry,7*(1),4-8.

Mullick M, Goodman R. (2000). Questionnaire screening for mental health problems in Bangladeshi chil- dren: a preliminary study. *Soc Psychiatry Psychiatr Epidemiol, 36,*94–9.

Mullick M.S. & Goodman R. (2001). Questionnaire screening for mental health problems in Bangladeshi children: a preliminary study. *Soc Psychiatry Psychiatr epidemiol*, *36*(2):94-99.

Mullick M.S, & Goodman R. (2005). The prevalence of psychiatric disorders among 5-10 year olds in rural, urban and slum areas in Bangladesh: an exploratory study. *Soc Psychiatry Psychiatr epidemiol*, 40(8):663-671.

Murphy R. & Hallahan B. (2016). Differences between DSM-IV and DSM-5 as applied to general adult psychiatry. *Irish Journal of Psychological Medicine*, *33,* 135–141. doi:10.1017/ipm.2015.54

National Institute of Mental Health & Hospital (Bangladesh), WHO Bangladesh: Prevalence, Medical Care, Awareness and Attitude Towards Mental Illness in Bangladesh. In Edited by Karim ME, Zaman MM. 2007:1–27.

Nauta, M. H., Scholing, A., Rapee, R. M., Abbott, M., & Spence, S. H. (2004). Development of

a parent report measure of children's anxiety: Psychometric properties and comparison with child report in a clinic and normal sample. *Behaviour Research and Therapy, 42(7),* 813–839. Retrieved from: http://dx.doi.org/10.1016/s0005-7967(03)00200-6

Ollendick, T., & King, N. J. (2004). Empirically supported treatments for children and adolescents: Advances toward evidence-based practice. In P. M. Barrett & T. H. Ollendick (Eds.), Handbook of interventions that work with children and adolescents: Prevention and treatment (pp. 3–25). London: *Wiley*.

Ollendick, T. & King, N. (2012). Evidence-based treatments for children and adolescents: Issues and commentary. In: Kendall, PC., editor. Child and adolescent therapy: Cognitive-behavioral procedures. 4. New York, NY: *Guilford Press*.

Palfrey, J.S., Tonniges, T.F., Green, M., & Richmond. J. (2005). Introduction: addressing the millennial morbidity — the context of community. *Pediatrics,* 115,1121–1123.

Patel V., Flisher A.J., Hetrick S., & McGorry P. (2007). Mental health of young people: a global public-health challenge. *Lancet*, *369*,1302–1313..

Palfrey J.S., Tonniges T.F., Green M., & Richmond J. (2005) Introduction: addressing the millennial morbidity- the context of community. *Pediatrics.* 115:1121–1123.

Pine, D. S., Cohen, P., Gurley, D., Brook, J., & Ma, Y. (1998). The risk for early-adulthood anxiety and depressive disorders in adolescents with anxiety and depressive disorders. *Archives of General Psychiatry, 55*(1), 56–64. http://dx.doi.org/10.1001/archpsyc.55.1.56.

Pine, D.S., & Klein, R.G. (2008). Anxiety disorders. In M. Rutter, D. Bishop, D. Pine, S. Scott, J.S. Stevenson, E.A. Taylor & A. Thapar (Eds.), Rutter's child and adolescent psychiatry (pp. 628–647). Oxford: Blackwell.

Polanczyk, G. V., Salum, G. A., Sugaya, L. S., Caye, A., & Rohde, L. A. (2015). Annual

research review: A meta-analysis of the worldwide prevalence of mental disorders in children and adolescents. *Journal of Child Psychology and Psychiatry and Allied Disciplines*, *56*(3), 345–365.

Rabbani M.G, Alam M.F, Ahmed H.U., Sarkar M., Islam M.S., Anwar N., et al. (2009). Prevalence of mental disorders, mental retardation, epilepsy and substance abuse in children. *Bang J Psychiatry, 23,*11-52.

Rapee, R. M., A. Wignall, J. L. Hudson and C. A. Schniering (2000). Treating anxious children and adolescents: An evidence-based approach. Oakland, CA, New Harbinger Publications.

Rapee, R.M., Abbott, M.J., & Lyneham, H.J. (2006). Bibliotherapy for Children with Anxiety Disorders Using Written Materials for Parents: A Randomized Controlled Trial. *Journal of Consulting and Clinical Psychology, 74*, 436-444.

Rapee, R.M., Lyneham, H.J., Schniering, C. et al. (2006). The cool kids child and adolescents anxiety program – therapist manual. Sydney, NSW: Centre for Emotional Health, Macquarie Sydney, NSW: Centre for Emotional Health, Macquarie University.

Rapee R.M., Lyneham H.J., Hudson J.L., Wuthrich V.M., Kangas M., Schniering C.A., & Wignall A., (2018). The Cool Kids Anxiety Program, 2nd Edition. Centre for Emotional Health, Macquarie University: Sydney.

Rapee, R. M., H. J. Lyneham, J. L. Hudson, M. Kangas, V. M. Wuthrich and C. A. Schniering (2013). "The effect of comorbidity on treatment of anxious children and adolescents: Results from a large, combined sample." *Journal of the American Academy of Child and Adolescent Psychiatry, 52*(1), 47-56.

Rapee, R. M., H. J. Lyneham, V. Wuthrich, M.-L. Chatterton, J. L. Hudson, M. Kangas and C. Mihalopoulos (2017). "A randomised comparison of stepped care compared with a single,

empirically validated CBT program for youth with anxiety disorders." Manuscript submitted.

Rapee, R.M., Schniering, C.A., & Hudson, J.L., (2009). Anxiety disorders during childhood and adolescence: origins and treatment. *Annu Rev Clin Psychol,5*,311-341.

Rapee, R. M. (2014). Preschool environment and temperament as predictors of social and nonsocial anxiety disorders in middle adolescence. *Journal of the American Academy of Child and Adolescent Psychiatry*, *53*(3), 320–328. https://doi.org/10.1016/j.jaac.2013.11.014

Ravens-Sieberer, U., Wille, N., Erhart, M., Bettge, S., Wittchen, H. U., Rothenberger, A., & Döpfner, M. (2008). Prevalence of mental health problems among children and adolescents in Germany: Results of the BELLA study within the national health interview and examination survey. *European Child and Adolescent Psychiatry*, *17*(SUPPL. 1), 22–33. Retrived from: https://doi.org/10.1007/s00787-008-1003-2

Roberts L.W., Louie A.K. (2014). (eds). Diagnosis and DSM-5. In *Study guide to DSM-5, pp. 3–19*. American Psychiatric Publishing: Arlington.

Report of the Children's Evidence Based Practices Expert Panel. (2005). Submitted to DSHS-children's administration, mental health division.

Rutter M. (1995). Relationships between mental disorders in childhood and adulthood. *Acta Psychiatr Scand, 91*(2),73–85. doi: 10.1111/j.1600-0447.1995.tb09745.x.

Schniering, C. A., & Rapee, R. M. (2002). Development and validation of a measure of children's automatic thoughts: The Children's Automatic Thoughts Scale. *Behaviour Research and Therapy*, *40*, 1091–1109.

Schulz K. F. & Grimes D. A. (2002). Allocation concealment in randomised trials: defending

against deciphering. *Lancet, 359*(9306),614–618.

Schuurmans, J., Comijs, H., Emmelkamp, P. M. G., Gundy, C. M. M., Weijnen, I., Van Den Hout, M., & Van Dyck, R. (2006). A randomized, controlled trial of the effectiveness of cognitive-behavioral therapy and sertraline versus a waitlist control group for anxiety disorders in older adults. *American Journal of Geriatric Psychiatry*, *14*(3), 255–263. https://doi.org/10.1097/01.JGP.0000196629.19634.00

Silverman, W. K., Pina, A. A., & Viswesvaran, C. (2008). Evidence-based psychosocial treatments for phobic and anxiety disorders in children and adolescents. *Journal of Clinical Child and Adolescent Psychology, 37*(1), 105–130.

Simon E. & Bögels S.M. (2009). Screening for anxiety disorders in children. *Eur Child Adolesc Psychiatry, 18*(10),625-34. doi: 10.1007/s00787-009-0023-x.

Smith, k.(2019). *Remedy Health Media.* Retrieved from https://www.psycom.net/6-types-anxiety-and-kids.

Spence S.H.(1998). A measure of anxiety symptoms among children. *Behaviour Research and Therapy,36*(5),545–566. doi: 10.1016/S0005-7967(98)00034-5.

Spence S.H., Barrett P.M., & Turner C.M. (2003). Psychometric properties of the Spence Children's Anxiety Scale with young adolescents. *Journal of Anxiety Disorders.* 2003;17(6):605–625. doi: 10.1016/s0887-6185(02)00236-0

Susan S.H., Donovan C. & Toussaint M.B. (2000). The Treatment of Childhood Social Phobia: The Effectiveness of a Social Skills Training-based, Cognitive-behavioural Intervention, with and without Parental Involvement. *The Journal of Child Psychology and Psychiatry and Allied Disciplines, 41*(6), 713-726.

Thapar A. & McGuffin P. (1998). Validity of the shortened mood and feelings questionnaire in a

community sample of children and adolescents: a preliminary research note. *Psychiatry Research, 81*(2),259–268. doi: 10.1016/S0165-1781(98)00073-0.

Thulin, U., Svirsky, L., Serlachius, E., Andersson, G., & Öst, L. G. (2014). The Effect of Parent Involvement in the Treatment of Anxiety Disorders in Children: A Meta-Analysis.*Cognitive Behaviour Therapy*, *43*(3), 185–200. https://doi.org/10.1080/16506073.2014.923928.

Walczak, M., Esbjørn, B.H., Breinholst, S., & Reinholdt-Dunne, M.L., (2017). Parental Involvement in Cognitive Behavior Therapy for Children with Anxiety Disorders: 3-Year Follow-Up. *Child Psychiatry Hum Dev,48*(3),444-454. doi: 10.1007/s10578-016-0671-2.

Weir K. (2017). Brighter futures for anxious kids. Monitor on Psychology. *American Psychological Association, 48*(3), p.15. Retrieved from https://www.apa.org/monitor /2017/03/anxious-kids.

Whiteford, H.A., Degenhardt, L., Rehm, J.T., Baxter, A.J., Ferrari, A.J., Erskine, H.E., & Vos, T. (2013). Global burden of disease attributable to mental and substance use disorders: Findings from the Global Burden of Disease Study 2010. *The Lancet, 382*, 1575–1586.

Widenfelt, B., Treffers, P. A., Beurs, E., Siebelink, B., & Koudijs, E. (2005). Translation and cross-cultural adaptation of assessment instruments used in psychological research with children and families. *Clinical Child and Family Psychology Review, 8*(2), 135–147. doi.org/10.1007/s10567-005-4752-1.

World Health Organization (2001) The World health report. Mental health: new understanding, new hope. Geneva, WHO. Available at: http://www. who.int/whr/2001/en/whr01_en.pdf Accessed August 2008.

World Health Organization. Atlas: child and adolescent mental health resources: global concerns, implications for the future (2005). *Geneva: World Health Organization,* p.16.

Wood, J. J., & McLeod, B. D. (2008). Child anxiety disorders: A family-based treatment manual for practitioners (L. S. Hiruma & A. Q. Phan, Illustrators). New York, NY, US: W W Norton & Co.

Woodward LJ, Fergusson DM. Life course outcomes of young people with anxiety disorders in adolescence. *J Am Acad Child Adolesc Psychiatry, 40,*1086–1093.

Zarafshan, H., Mohammadi, M.-R., & Salmanian, M. (2015). Prevalence of Anxiety Disorders among Children and Adolescents in Iran: A Systematic Review. *Iranian Journal of Psychiatry, 10*(1), 1-7. Retrieved from http://ijps.tums.ac.ir/index.php/ijps/article/view/56.

Chapter-6

APPENDICES

Appendix-1

চিকিৎসা মনোবিজ্ঞান বিভাগ
ঢাকা বিশ্ববিদ্যালয়
কলা ভবন (৫ম তলা)
ঢাকা–১০০০, বাংলাদেশ

DEPARTMENT OF CLINICAL PSYCHOLOGY
UNIVERSITY OF DHAKA
Arts Building (4th floor)
Dhaka-1000, Bangladesh

Tel: 9661900-73, Ext. 7801, Fax: 880-2-8615583, E-mail: clinpsy@du.ac.bd

Certificate of Ethical Approval

Project Number : **MP180202**

Project Title : **Effectiveness of Cognitive Behavior Therapy for Children with Anxiety Disorder**

Investigators : **Lutfun Nahar** and **Dr. Farah Deeba**

Approval Period : **11 April 2018 to 10 April 2019**

Terms of Approval

1. Any changes made to the details submitted for ethical approval should be notified and sought approval by the investigator(s) to the Department of Clinical Psychology Ethics Committee before incorporating the change.
2. The investigator(s) should inform the committee immediately in case of occurrence of any adverse unexpected events that hampers wellbeing of the participants or affect the ethical acceptability of the research.
3. The research project is subject to monitoring or audit by the Department of Clinical Psychology Ethics Committee.
4. The committee can cancel approval if ethical conduction of the research is found to be compromised.
5. If the research cannot be completed within the approved period, the investigator must submit application for an extension.
6. The investigator must submit a research completion report.

Chairperson
Ethics Committee
Department of Clinical Psychology
University of Dhaka

Appendix-2

Professor Dr. M. Imdadul Hoque
Dean
Faculty of Biological Sciences
The University of Dhaka
Dhaka-1000, Bangladesh

Tel: 58613243, 9673387 (Office)
PABX: *9661900-73/4355, 754*
Fax: *(+880-2)-861558*
E-mail: *mimdadul07@yahoo.com*
deanbio@du.ac.bd

Ref. ...48...../Biol.Scs./2017-2018

Date: 16.11.2017
০২ অগ্রহায়ন, ১৪২৪

Ethical Review Committee

Dr. Farah Deeba
Associate Professor
Department of Clinical Psychology
University of Dhaka
Dhaka-1000

Sub: Ethical Clearance.

Dear Dr. Deeba,

With reference to your application on the above subject, this is to inform you that your research proposal entitled **"Effectiveness of cognitive behavior therapy for children with anxiety disorders"** has been reviewed and approved by the Ethical Review Committee of the Faculty of Biological Sciences, University of Dhaka.

I wish for the success of your research project.

Professor Dr. M. Imdadul Hoque
Dean, Faculty of Biological Sciences
University of Dhaka
Dhaka-1000.

Appendix-3

Permission letter

Date:

To

The Principal

Dhaka, Bangladesh.

Subject: Seeking permission to conduct a research on psychological treatment of childhood anxiety disorders.

Dear Sir/Madam,

With due respect I would to state that I am an M.Phil researcher of Dhaka University. My supervisor is Dr. Farah Deeba, Associate Professor, Department of Clinical Psychology, University of Dhaka. You probably know that more than 5 to 30% of all children and adolescents are suffering from anxiety disorders which can cause academic performance problems, social adjustment problems, relationship problems, low-confidence, examination phobia, etc. if go untreated. Unfortunately though the prevalence rate of anxiety disorders among school going children is about 11% yet most of the times these children remain unidentified. If we can provide information on the disorders and available mental health services to this school going children and their parents then developing awareness to overcome the problem will be ascertain. As part of my M.Phil degree I am going to do a research entitled " Effectiveness of Cognitive Behavior Therapy for Children with Anxiety Disorders" where I am going to use an internationally accepted psychological treatment method for children and adolescents through this research[1]. The sample in this study are the children and adolescents with anxiety disorders.

Therefore I request you to assist me in helping children and adolescents and their parents of Bangladesh to become aware and overcome anxiety through this widely used psychological intervention by giving me permission to work with the students of your institution. Your guidance, technical support and assistance would be very useful for the successful completion of the study and contribute to the development of better mental health service in our country.

Sincerely yours

Lutfun Nahar
M.Phil(part-II)
Department of Clinical
University of Dhaka.

1. **TBD (2017). *Cool Kids Child and Adolescent Anxiety Management Program Children's Workbook* (2nd Ed). Centre for Emotional Health, Macquarie University: Sydney, Australia.**

Appendix-4

Letter for Assistance

Date:

To

.....

.....

.....

Subject: Request for assistance in conducting a research on effectiveness for children with anxiety disorder.

Dear Sir/madam,

With due respect to state that I am an M. Phill researcher of Dhaka University under the supervision of Dr. Farah Deeba, Associate Professor of the Department of Clinical Psychology, University of Dhaka. As part of my M.Phil degree I am doing a research entitled " Effectiveness of Cognitive Behavior Therapy for Children with Anxiety Disorder".

As a mental health professional you know that about 18.4% children of Bangladesh are suffering from mental health related problems. Among them anxiety disorders are very common. According to American Psychiatric Association (APA) about 7% children are suffering from anxiety related problems. This type of problem can cause different types of problems in different areas of the affected children (e.g. physical, psychological, social, educational etc). But you know that such type of problems can be managed by using different types of psychological management techniques. Cognitive Behavior Therapy (CBT) is one of them. Though it is one of the most widely used psychological management techniques in our country for managing mental health problems in our country, still now no remarkable scientific research has been conducted on the specific area. For that reason I am very interested to do my research.

Though you have already been working with the mental health issues of children and adolescents, I am requesting you to help me in finding children with anxiety disorder and apply psychological intervention on them. I hope you can understand my concern and help me in conducting the research procedure properly.

Thank you for your cooperation.

Sincerely yours

Lutfun Nahar
M.Phil(part-II)
Department of Clinical
University of Dhaka.

Appendix-5

Consent form

জনাব,

আমি লুৎফুন নাহার, ঢাকা বিশ্ববিদ্যালয়ের চিকিৎসা মনোবিজ্ঞান বিভাগের একজন এম.ফিল গবেষক। আমি শিশু-কিশোরদের মানসিক স্বাস্থ্য নিয়ে ঢাকা বিশ্ববিদ্যালয়ের জীববিজ্ঞান অনুষদ এবং চিকিৎসা মনোবিজ্ঞান বিভাগের নৈতিক কমিটির অনুমতিক্রমে একটি গবেষনা কাজ করছি। আমার গবেষনার বিষয় "Effectiveness of cognitive behavior therapy for children with anxiety disorders"। আপনি জানেন যে, বাংলাদেশের ১৮.৪% শিশু-কিশোর নানাবিধ মানসিক স্বাস্থ্য সমস্যায় আক্রান্ড় । আমি আমার গবেষনাটিতে বাংলাদেশে শিশু-কিশোরদের উদ্বিগ্নতা সংক্রান্ড় মানসিক স্বাস্থ্য সমস্যা এবং তাদের সুস্থতার জন্য কোন ধরনের চিকিৎসা অধিক কার্যকর তা নিয়ে কাজ করছি। একজন সচেতন অভিভাবক হিসেবে প্রতিটি পিতা-মাতার প্রয়োজন সন্ড়ানের সুস্থ মানসিক ও শারীরিক স্বাস্থ্য নিশ্চিত করা। আমার গবেষনায় অংশগ্রহনের মাধ্যমে আপনি আপনার সন্ড়ানের বর্তমান উদ্বিগ্নতার পরিমান কত তা জানতে এবং প্রয়োজনে যথাযথ চিকিৎসা সুবিধা নিশ্চিতকরণে সক্ষম হবেন। যেহেতু আমার গবেষনায় মানসিক চিকিৎসা প্রদান করা হচ্ছে, অতএব এটিতে অংশগ্রহনের মাধ্যমে প্রয়োজনীয় চিকিৎসা সুবিধা গ্রহনের সুযোগ রয়েছে। এছাড়াও কোথায় গেলে এই চিকিতসা সুবিধা পেতে পারেন সে ব্যাপারে আপনাকে অবগত করার লক্ষে এ চিঠির সাথে কিছু প্রতিষ্ঠানের তালিকা প্রদান করা হল যার মাধ্যমে আপনি ও আপনার পরিবার মানসিক চিকিৎসা গ্রহনে সক্ষম হবেন। এমতাবস্থায় আপনার সন্ড়ানকে আমার গবেষনায় অংশগ্রহনে অনুমতি প্রদানের জন্য অনুরোধ জানাচ্ছি।

যদি আপনি গবেষনায় আপনার সন্ড়ানের অংশগ্রহনে সম্মত থাকেন তাহলে অনুগ্রহ পূর্বক নিম্নে যথাযথ স্থানে আপনার সাক্ষর প্রদান করবেন।

ধন্যবাদসহ
লুৎফুন নাহার
এম.ফিল গবেষক
চিকিৎসা মনোবিজ্ঞান বিভাগ
ঢাকা বিশ্ববিদ্যালয়।

.....

অংশগ্রহনকারীর অভিভাবকের স্বাক্ষর

Appendix-6

Ascent form

প্রিয় অংশগ্রহণকারী,

আমি লুৎফুন নাহার, ঢাকা বিশ্ববিদ্যালয়ের চিকিৎসা মনোবিজ্ঞান বিভাগের একজন এম.ফিল গবেষক। আমি শিশু-কিশোরদের মানসিক স্বাস্থ্য নিয়ে ঢাকা বিশ্ববিদ্যালয়ের জীববিজ্ঞান অনুষদ এবং চিকিৎসা মনোবিজ্ঞান বিভাগের নৈতিক কমিটির অনুমতিক্রমে একটি গবেষনা কাজ করছি। আমার গবেষনার বিষয় "Effectiveness of cognitive behavior therapy for children with anxiety disorders" ।এই গবেষনায় আপনার উদ্বিগ্নতা পরিমাপ করা হবে এবং প্রয়োজনে চিকিৎসা প্রদান করা হবে। গবেষনায় অংশগ্রহনে আপনাকে আমন্ত্রন জানাচ্ছি।

আপনি গবেষনায় অংশগ্রহনে সম্মত হলে অনুগ্রহ পূর্বক নিম্নে যথাযথ স্থানে আপনার সাক্ষর প্রদান করবেন।

ধন্যবাদসহ
লুৎফুন নাহার
এম.ফিল গবেষক
চিকিৎসা মনোবিজ্ঞান বিভাগ
ঢাকা বিশ্ববিদ্যালয়।

.....

অংশগ্রহনকারীর স্বাক্ষর

Appendix-7

বঙ্গবন্ধু শেখ মুজিব মেডিক্যাল বিশ্ববিদ্যালয়
Bangabandhu Sheikh Mujib Medical University
শাহবাগ, ঢাকা, বাংলাদেশ।

নং-বিএসএমএমইউ/২০১৮/ ১১২৭৬ তারিখঃ ২০/০৯/২০১৮ইং

অফিস আদেশ

ঢাকা বিশ্ববিদ্যালয়ের চিকিৎসা মনোবিজ্ঞান বিভাগের এম ফিল এর ছাত্রী জনাব লুৎফুন নাহার তাঁর এম ফিল গবেষণা কার্যক্রম পরিচালনার জন্য বিশ্ববিদ্যালয়ে আগত মানসিক সমস্যায় আক্রান্ত রোগীদের নিকট হতে এই বিশ্ববিদ্যালয়ের মনোরোগ বিদ্যা বিভাগে তথ্য উপাত্ত সংগ্রহের অনুমতি প্রদান করা হ'ল।

আদেশক্রমে,

স্বাঃ
(অধ্যাপক মোঃ আসাদুল ইসলাম)
অতিরিক্ত রেজিস্ট্রার

নং-বিএসএমএমইউ/২০১৮/ ১১২৭৬(৭) তারিখঃ ২০/০৯/২০১৮ইং

অনুলিপি সদয় অবগতি ও প্রয়োজনীয় ব্যবস্থা গ্রহণের জন্য প্রেরিত হ'ল ঃ

১. চেয়ারম্যান, মনোরোগ বিদ্যা বিভাগ, বঙ্গবন্ধু শেখ মুজিব মেডিক্যাল বিশ্ববিদ্যালয়, ঢাকা (সহযোগিতা করার জন্য নির্দেশক্রমে অনুরোধ করা হ'ল)।
২. পরিচালক (হাসপাতাল), বঙ্গবন্ধু শেখ মুজিব মেডিক্যাল বিশ্ববিদ্যালয়, ঢাকা।
৩. জনাব লুৎফুন নাহার, চিকিৎসা মনোবিজ্ঞান বিভাগ, ঢাকা বিশ্ববিদ্যালয়, ঢাকা।
৪. একান্ত সচিব, মাননীয় ভাইস-চ্যান্সেলর, বঙ্গবন্ধু শেখ মুজিব মেডিক্যাল বিশ্ববিদ্যালয়, ঢাকা।
৫. একান্ত সচিব, মাননীয় প্রো-ভাইস চ্যান্সেলরগণ/ কোষাধ্যক্ষ, বঙ্গবন্ধু শেখ মুজিব মেডিক্যাল বিশ্ববিদ্যালয়, ঢাকা।
৬. রেজিস্ট্রার মহোদয়ের ব্যক্তিগত কর্মকর্তা, বঙ্গবন্ধু শেখ মুজিব মেডিক্যাল বিশ্ববিদ্যালয়, ঢাকা।
৭. অফিস কপি।

২০/০৯/১৮

অতিরিক্ত রেজিস্ট্রার

Government of the People's Republic of Bangladesh
Office of the Director-cum-Professor
National Institute of Mental Health & Hospital
Sher-e-Bangla Nagar, Dhaka-1207

Memo No.NIMH/2018/ 1408 Dated : 15/09/18

To

Dr. Farah Deeba
Associate Professor
Dept. Clinical Psychology
University of Dhaka.

Subject: Permission for research data

Dear Sir,

Thank you for your letter. The Research Proposal entitled **"Effectiveness of Cognitive Behavior Therapy for Children with Anxiety Disorders"** has been reviewed and approved by the ethical committee of this institute.

I am happy to permit your student **Lutfun Nahar** to conduct his study in this institute.

(Prof. Dr. Md. Faruq Alam)
Director-cum-Professor
National Institute of Mental Health
Sher-e-Banga Nagar, Dhaka

Memo No. NIMH/2018/1408/1 (2) Dated : 15/9/18

Copy forwarded for information and necessary action to :-

1. Lutfun Nahar, M.Phil (part-II), Dept. of Chinical Psychology,University of Dhaka
2. Office Copy.

(Prof. Dr. Md. Faruq Alam)
Director-cum-Professor
National Institute of Mental Health
Sher-e-Banga Nagar, Dhaka

Student/N/342

VP/ [illegible]

Permission letter

Date: 18.09.2018

To

The Principal

Bangladesh-German Technical Training Center,

Dhaka,Bangladesh.

Subject: Seeking permission to conduct a research on psychological treatment of childhood anxiety disorders.

Dear Sir,

With due respect I would like to state that I am an M.Phil researcher of Dhaka University. My supervisor is Dr. Farah Deeba, Associate Professor, Department of Clinical Psychology, University of Dhaka. As a mental health professional, you know that about 5 to 30% of all children and adolescents are suffering from anxiety disorders which can cause academic performance problems, social adjustment problems, relationship problems, low-confidence, examination phobia, etc. if go untreated. Again the prevalence rate of anxiety disorders among school going children is about 11%. In this situation it is our duty to provide all type of mental health services to this future generation of our country. Considering this I am going to do a research as part of my M.Phil degree entitled " Effectiveness of Cognitive Behavior Therapy for Children with Anxiety Disorders" where I am going to use an internationally accepted psychological treatment method for children and adolescents through this research[1]. The sample in this study are the children and adolescents with anxiety disorders.

Therefore I request you to assist me in helping children, adolescents and their parents of Bangladesh to become aware and overcome anxiety through this widely used psychological intervention by giving me permission to work with the clients (children with anxiety disorders), coming for mental health services in your renowned institution. Your guidance, technical support and assistance would be very useful for the successful completion of the study and contribute to the development of better mental health service in our country.

Sincerely yours

Lutfun Nahar
M.Phil(part-II)
Department of Clinical
University of Dhaka.

Strongly recommended
Farah Deeba
Associate Professor
Clinical Psychology Dept.
Dhaka University

1. TBD (2017). *Cool Kids Child and Adolescent Anxiety Management Program Children's Workbook* (2nd Ed). Centre for Emotional Health, Macquarie University: Sydney, Australia.

Permission letter

Date: 30.10.2018

To

The Principal

Sher-e-Bangla Govt. Girls' IIigh School,

Sher-e-Bangla Nagar, Dhaka

Bangladesh.

Subject: Seeking permission to conduct a research on psychological treatment of childhood anxiety disorders.

Dear Sir/Madam,

With due respect, I would to state that I am an M.Phil researcher of Dhaka University. My supervisor is Dr. Farah Deeba, Associate Professor, Department of Clinical Psychology, University of Dhaka. You probably know that more than 5 to 30% of all children and adolescents are suffering from anxiety disorders which can cause academic performance problems, social adjustment problems, relationship problems, low-confidence, examination phobia, etc. if go untreated. Unfortunately though the prevalence rate of anxiety disorders among school going children is about 11% yet most of the times these children remain unidentified. If we can provide information on the disorders and available mental health services to this school going children and their parents then developing awareness to overcome the problem will be ascertain. As part of my M.Phil degree I am going to do a research entitled "Effectiveness of Cognitive Behavior Therapy for Children with Anxiety Disorders" where I am going to use an internationally accepted psychological treatment method for children and adolescents through this research[1]. The samples in this study are the children and adolescents with anxiety disorders.

Therefore I request you to assist me in helping children and adolescents and their parents of Bangladesh to become aware and overcome anxiety through this widely used psychological intervention by giving me permission to work with the students of your institution. Your guidance, technical support and assistance would be very useful for the successful completion of the study and contribute to the development of better mental health service in our country.

Sincerely yours

30.10.2018

Lutfun Nahar
M.Phil(part-II)
Department of Clinical
University of Dhaka.

1. **TBD (2017). *Cool Kids Child and Adolescent Anxiety Management Program Children's Workbook* (2nd Ed). Centre for Emotional Health, Macquarie University: Sydney, Australia.**

তারিখ: ২৭.০৮.২০১৮ ইং

বরাবর

প্রিন্সিপাল,

মোহাম্মদ প্রিপারেটরী স্কুল এন্ড কলেজ,

মোহাম্মদপুর, ঢাকা ।

বিষয়: গবেষণা কাজে শিক্ষার্থীদের অংশগ্রহণের জন্য মানসিক স্বাস্থ্য সচেতনতা সৃষ্টির লক্ষ্যে অনুষ্ঠান সম্পাদনের অনুমতি প্রদান প্রসঙ্গে ।

জনাব,

বিনীত নিবেদন এই যে, আমি ঢাকা বিশ্ববিদ্যালয়ের ক্লিনিক্যাল সাইকোলজি ডিপার্টমেন্টের একজন এম.ফিল গবেষক । আমি শিশুদের উদ্বেগ জনিত মানসিক স্বাস্থ্য সমস্যা নিয়ে কাজ করছি । আমার গবেষণা কার্য সম্পাদনের জন্য অত্র স্কুল হতে ইতিমধ্যে সম্মানীত প্রিন্সিপাল মহোদয়ের কাছ থেকে অনুমতি প্রাপ্ত হয়েছি । বর্তমানে গবেষণার অংশ হিসেবে আমি অত্র স্কুলের অডিটরিয়ামে আগামী ২৩.০৯.২০১৮ ইং, ২০-০৯-২০১৮ ইং, এবং 29-09-2018 ইং তারিখে সম্মাক্রমে ৬ষ্ঠ, ৭ম এবং ৯ম শ্রেণির শিক্ষার্থীদের সাথে মানসিক স্বাস্থ্য সচেতনতা বিষয়ক অনুষ্ঠান পরিচালনা করতে ইচ্ছুক ।

অতএব, বিনীত নিবেদন, আমাকে উক্ত দিনগুলোতে অনুষ্ঠান সম্পাদনের অনুমতি প্রদান করে বাধিত করবেন ।

বিনীত

প্রসূন নাহার

এম.ফিল. গবেষক

ক্লিনিক্যাল সাইকোলজি ডিপার্টমেন্ট

Forwarded

২৮/৮/১৮

ফেরদৌসী

উপাধ্যক্ষ

বাংলা মাধ্যম (মাধ্যমিক শাখা)

প্রিপারেটরি স্কুল এন্ড কলেজ

Appendix-8

Demographic Data collection form

কোড.....

১) শিশুর নামঃ

২) শিশুর বয়সঃ

৩)অধ্যায়নরত শ্রেণীঃ

৪) লিঙ্গঃ ক)ছেলে খ)মেয়ে

৫) রেফারেলঃ ক)সাইকিয়াট্রিস্ট খ) সাইকোলজিস্ট গ)ব্যাক্তিগত ভাবে ঘ)অন্যান্য

৬) বাবার শিক্ষাগত যোগ্যতাঃ ক)অক্ষর জ্ঞান নেই খ)১ম হতে ৫ম শ্রেণী গ)৬ষ্ঠ হতে এস. এস. সি.

ঘ)এইচ এস সি হতে,াতক/অনার্স ঙ),াতকোত্তর বা তদূর্ধ্ব

৭) বাবার পেশাঃ ক)চাকুরীজীবী খ)ব্যবসায়ী গ)প্রবাসী ঘ)কর্মহীন

৮) মায়ের শিক্ষাগত যোগ্যতাঃ ক)অক্ষর জ্ঞান নেই খ)১ম হতে ৫ম শ্রেণী গ)৬ষ্ঠ হতে এস. এস. সি.

ঘ)এইচ এস সি হতে,াতক/অনার্স ঙ),াতকোত্তর বা তদূর্ধ্ব

৯) মায়ের পেশাঃ ক)গৃহিণী খ)কর্মজীবী

১০)পারিবারিক মাসিক আয়?

ক) ১৫,০০০/- খ) ১৫,০০১/- থেকে ৩০,০০০/- গ) ৩০,০০১/- অথবা উর্দ্ধে

১১) ভাই-বোনের সংখ্যাঃ

১২) জন্মক্রমঃ

১৩) পরিবারের সদস্য সংখ্যাঃ

১৪) পরিবারের ধরণঃ ক)একক খ)যৌথ গ)অন্যান্য

(অন্যান্য হলে- ১)ডিভোর্স ২)সেপারেশন)

১৫) ধর্মঃ

১৬) কতদিন যাবৎ উদ্বেগের সমস্যায় ভুগছে ?

ক) বিগত ৬ মাস খ)৬ মাস হতে ১ বছর গ) ৩-৬ বছর ঘ)৭-১০ বছর

১৭) কখনও শিশুর উদ্বেগের সমস্যার জন্য ঔষধ খেয়েছিল কি? হ্যাঁ / না

হ্যাঁ হলে, ক) অনুগ্রহপূর্বক ঔষধের নাম উল্লেঢখ কর"ন .....

খ) কতদিন ধরে ঔষধ খাচ্ছে/ গ্রহণ করছে?.....

১৮) শিশুর উদ্বেগের জন্য ঔষধ ছাড়া আর কোন ধরণের মানসিক স্বাস্থ্য সেবা গ্রহণ করেছিলেন কি? হ্যাঁ / না

উত্তর হ্যাঁ হলে অনুগ্রহপূর্বক উল্লেঢখ কর"ন যে কোন ধরণের মানসিক স্বাস্থ্যকর্মীর কাছে থেকে সেবা

নিয়েছিলেন?

ক)মনোবিজ্ঞানী হতে খ)চিকিৎসা মনোবিজ্ঞানী হতে গ)কাউন্সিলর হতে

ঘ) অকুপেশনাল থেরাপিষ্ট ঙ)সোশাল ওয়ার্কার চ)অন্যান্য (উল্লেঢখ কর"ন.....)

Appendix-9

SPENCE CHILDREN'S ANXIETY SCALE- 20
SCAS-20

(SHORT FORM of SCAS)

		অনুগ্রহ করে বাঁ-পাশের বিষয়টি তোমার ক্ষেত্রে যতবার হয় তা ডান পাশের যে শব্দটি দিয়ে সঠিকভাবে প্রকাশ করে সেটিকে বৃত্ত এঁকে চিহ্নিত করো। এখানে সঠিক বা ভুল উত্তর বলে কিছু নেই।			
১	আমার কেবল দু:শ্চিন্তা হয়	কখনই হয় না	মাঝে মাঝে হয়	প্রায়ই হয়	সবসময় হয়
৩	আমার কোন সমস্যা হলে আমার পেটে কেমন অদ্ভুত অনুভূতি হয়	কখনই হয় না	মাঝে মাঝে হয়	প্রায়ই হয়	সবসময় হয়
৬	পরীক্ষা দিতে হলে আমার ভয় লাগে	কখনই হয় না	মাঝে মাঝে হয়	প্রায়ই হয়	সবসময় হয়
৯	আমি অন্যদের সামনে নিজেকে বোকা বানাবো ভেবে ভয় পাই	কখনই হয় না	মাঝে মাঝে হয়	প্রায়ই হয়	সবসময় হয়
১০	আমি আমার স্কুলের কাজে খুব খারাপ করবো ভেবে দু:শ্চিন্তায় থাকি	কখনই হয় না	মাঝে মাঝে হয়	প্রায়ই হয়	সবসময় হয়
১২	আমার পরিবারের কারো সাথে খারাপ কোনকিছু ঘটবে ভেবে আমি দু:শ্চিন্তায় থাকি	কখনই হয় না	মাঝে মাঝে হয়	প্রায়ই হয়	সবসময় হয়
১৩	কোন কারণ ছাড়াই হঠাৎ আমার শ্বাস নিতে পারছি না বলে মনে হয়	কখনই হয় না	মাঝে মাঝে হয়	প্রায়ই হয়	সবসময় হয়
১৫	আমাকে একা ঘুমাতে হলে আমি ভয় পাই	কখনই হয় না	মাঝে মাঝে হয়	প্রায়ই হয়	সবসময় হয়
১৬	নার্ভাস বা ভয় লাগার কারণে সকালে স্কুলে যাবার সময় আমার সমস্যা হয়	কখনই হয় না	মাঝে মাঝে হয়	প্রায়ই হয়	সবসময় হয়
১৯	আমি মাথা থেকে বাজে আর তুচ্ছ চিন্তাগুলো সরাতে পারি না	কখনই হয় না	মাঝে মাঝে হয়	প্রায়ই হয়	সবসময় হয়
২২	আমার সাথে খারাপ কিছু ঘটবে বলে দু:শ্চিন্ড়া হয়	কখনই হয় না	মাঝে মাঝে হয়	প্রায়ই হয়	সবসময় হয়
২৪	যখন আমার কোন সমস্যা হয় তখন আমি বিচলিত বোধ করি	কখনই হয় না	মাঝে মাঝে হয়	প্রায়ই হয়	সবসময় হয়
২৭	খারাপ কিছু ঘটা থামাতে আমাকে বিশেষ ধরনের চিন্তা মনে আনতে হয় (যেমন: সংখ্যা বা শব্দ)	কখনই হয় না	মাঝে মাঝে হয়	প্রায়ই হয়	সবসময় হয়
২৯	অন্যরা আমাকে নিয়ে কি ভাবছে তা নিয়ে আমি দু:শ্চিন্তায় থাকি	কখনই হয় না	মাঝে মাঝে হয়	প্রায়ই হয়	সবসময় হয়
৩২	কোন কারন ছাড়াই হঠাৎ আমি সত্যি ভীতবোধ করি	কখনই হয় না	মাঝে মাঝে হয়	প্রায়ই হয়	সবসময় হয়
৩৬	কোন কারণ ছাড়াই হঠাৎ আমার হৃদস্পন্দন খুব দ্রুত হতে থাকে	কখনই হয় না	মাঝে মাঝে হয়	প্রায়ই হয়	সবসময় হয়
৩৭	ভয় পাবার মত কিছু না থাকলেও আমি হঠাৎ সন্ত্রস্তবোধ করতে পারি বলে আমার দু:শ্চিন্তা হয়	কখনই হয় না	মাঝে মাঝে হয়	প্রায়ই হয়	সবসময় হয়
৪১	আমার মনে আসা বাজে অথবা তুচ্ছ চিন্তা/ ছবিগুলো আমাকে খুব বিরক্ত করে	কখনই হয় না	মাঝে মাঝে হয়	প্রায়ই হয়	সবসময় হয়
৪২	খারাপ কিছু ঘটা থামাতে আমাকে কিছু কাজ নির্দিষ্ট নিয়মে করতে হয়	কখনই হয় না	মাঝে মাঝে হয়	প্রায়ই হয়	সবসময় হয়
৪৪	রাতে বাড়ীর বাইরে থাকতে হলে আমার ভয় লাগে	কখনই হয় না	মাঝে মাঝে হয়	প্রায়ই হয়	সবসময় হয়

Deeba F(1), Rapee RM, Prvan T., Psychometric properties of two measures of childhood internalizing problems in a Bangladeshi sample. Br J Clin Psychol. 2015 Jun;54(2):214-32. doi: 10.1111/bjc.12071. Epub 2014 Dec 18.

Translated by- Farah Deeba

Appendix-10

SPENCE CHILDREN'S ANXIETY SCALE

অভিভাবকপত্র

আপনার নাম ঃ ..... তারিখ ঃ .....

আপনার শিশুর নাম ঃ .....

অনুগ্রহ করে বাঁ পাশের কথাটি আপনার শিশুর ক্ষেত্রে যদি প্রযোজ্য হয় তা ডান পাশের যে শব্দটি দিয়ে সঠিকভাবে প্রকাশ করে সেটিকে বৃত্ত এঁকে চিহ্নিত করুণ। **অনুগ্রহ করে সবগুলো প্রশ্নের উত্তর দিন।**

		কখনও না	মাঝে মাঝে	প্রায়ই	সবসময়
১.	আমার শিশুর কেবল দুঃশ্চিন্তা হয়।				
২.	আমার শিশুটি অন্ধকারে ভয় পায়।				
৩.	আমার শিশুর যখন কোন সমস্যা হয়, তখন সে তার পেটে কেমন অদ্ভূত অনুভূতি হয় বলে অভিযোগ করে।				
৪.	আমার শিশু "ভয় লাগে" বলে অভিযোগ করে।				
৫.	আমর শিশু বাড়ীতে একা থাকতে হলে ভয় পায়।				
৬.	আমার শিশুর পরীক্ষা দিতে হলে ভয় লাগে।				
৭.	পাবলিক টয়লেট বা বাথরুম ব্যবহার করতে হলে আমার শিশুর ভয় লাগে।				
৮.	আমার শিশু আমার/আমাদের কাছ থেকে দূরে থাকতে হলে দুঃশ্চিন্তা করে।				
৯.	আমার শিশু অন্যদের সামনে নিজেকে বোকা বানাবে ভেবে ভয় পায়।				
১০.	আমার শিশু তার স্কুলের কাজে খুব খারাপ করবে ভেবে দুঃশ্চিন্তায় থাকে।				
১১.	আমাদের পরিবারের কারো সাথে খারাপ কোন কিছু ঘটবে ভেবে আমার শিশু দুঃশ্চিন্তায় থাকে।				
১২.	আমার শিশু কোন কারণ ছাড়াই হঠাৎ শ্বাস নিতে পারছে না বলে অভিযোগ করে।				
১৩.	আমার শিশু পূনঃ পূনঃ বা বারবার পরীক্ষা করতে থাকে যে সে কাজটি সঠিকভাবে সম্পন্ন করেছে (যেমনঃ- সুইচ বন্ধ করা অথবা দরজায় তালা লাগানো)।				
১৪.	আমার শিশুকে একা ঘুমাতে হলে ভয় পায়।				
১৫.	নার্ভাস বা ভয় লাগার কারণে সকালে স্কুলে যাবার সময় আমার শিশুর সমস্যা হয়।				
১৬.	আমার শিশু কুকুর ভয় পায়।				
১৭.	আমার শিশু তার মাথা থেকে বাজে আর তুচ্ছ চিন্তাগুলো সরাতে পারে না।				
১৮.	যখন আমার শিশুটি কোন সমস্যায় পরে তখন তার হৃদস্পন্দন খুব দ্রুত চলছে বলে অভিযোগ করে?				

		কখনও না	মাঝে মাঝে	প্রায়ই	সবসময়
১৯.	আমার শিশু কোন কারণ ছাড়াই হঠাৎ কাঁপুনী বা ঝাঁকুনী দিতে শুরু করে।				
২০.	আমার শিশু দুঃশ্চিন্তায় থাকে যে তার সাথে খারাপ কোনকিছু ঘটবে।				
২১.	আমার শিশু কোন ডাক্তার বা দন্তচিকিৎসক এর কাছে যেতে ভয় পায়।				
২২.	যখন আমার শিশুর কোন সমস্যা হয়, সে, জড়সড় বোধ করে।				
২৩.	আমার শিশু উচ্চতাকে ভয় পায় (যেমনঃ- পাহাড়ের চূঁড়ায় দাড়াঁনো)।				
২৪.	খারাপ কোন ঘটনা ঘটা থামাতে হলে আমার শিশুকে কিছু বিশেষ চিন্তা (যেমনঃ-সংখ্যা বা শব্দ) মনে করতে হয়।				
২৫.	মোটরগাড়ী, বাস বা ট্রেনে চড়তে হলে আমার শিশু ভীতবোধ করে।				
২৬.	আমার শিশু অন্যরা তাকে নিয়ে কি ভাবছে তা নিয়ে দুঃশ্চিন্তায় থাকে।				
২৭.	ভীড় হয় এমন জায়গাগুলোতে থাকতে আমার শিশু ভয় পায় (যেমনঃ- শপিং সেন্টার, সিনেমা হল, বাস, ব্যস্ত খেলার মাঠ)।				
২৮.	আকস্মিক/হঠাৎ কোন কারণ ছাড়াই আমার শিশু ভীতবোধ করে।				
২৯.	আমার শিশু পোকামাকড় বা মাকড়সা ভয় পায়।				
৩০.	কোন কারণ ছাড়াই আমার শিশু অভিযোগ করে যে, তার মাথা ঘুরছে বা অজ্ঞান লাগছে।				
৩১.	ক্লাশে সবার সামনে কথা বলতে হলে আমার শিশু ভয় পায়।				
৩২.	হঠাৎ-ই- কোন কারণ ছাড়াই তার হৃদস্পন্দন খুব দ্রুত হতে শুরু করে বলে আমার শিশু অভিযোগ করে।				
৩৩.	ভয় পাবার মত কিছু না থাকলে ভীতবোধ করতে পারে ভেবে আমার শিশু দুঃশ্চিন্তায় থাকে।				
৩৪.	আমার শিশু ছোট বদ্ধ জায়গা, যেমনঃ- সুরঙ্গ বা ছোট্ট রুম-এ থাকতে ভয় পায়।				
৩৫.	আমার শিশুকে কোন কোন কাজ বার বার করতে হয় (যেমনঃ- নিজের হাত ধোয়া, পরিষ্কার করা বা জিনিষপত্র নির্দিষ্ট নিয়মে সাজানো)।				
৩৬.	আমার শিশু তার মাথার খারাপ আর তুচ্ছ চিন্তা বা ছবিগুলোর কারনে বিরক্ত হয়।				
৩৭.	খারাপ কোন ঘটনা থামাতে হলে আমার শিশুকে কোন কোন কাজ একদম নির্দিষ্ট নিয়মে করতে হয়।				
৩৮.	রাতে বাড়ীর বাইরে থাকতে হলে আমার শিশু আতঙ্কিতবোধ করবে।				
৩৯.	এর বাইরে কি আপনার শিশু অন্য আরো কিছু খুব ভয় পায়? হ্যাঁ/না অনুগ্রহ করে লিখুন সেটা কি, এবং লিখুন কত ঘনঘন সে ঐ বিষয়টি ভয় পায়?	হ্যাঁ		না	

Translated by-Farah Deeba

Appendix-11

Short Mood and Feelings Questionnaire (SMFQ)

নির্দেশনা: এই ফর্মটি তুমি গত ২ সপ্তাহ যাবত কেমন অনুভব করছো আর তার জন্য কি করছো তা বোঝার জন্য। প্রতিটি প্রশ্নের ক্ষেত্রে তোমার জন্য কোনটি কতখানি প্রযোজ্য তা পাশের ১টি সংখ্যাকে বৃত্ত এঁকে চিহ্নিত করো। যদি একটি বাক্য তোমার জন্য বেশীরভাগ সময় সত্য হয় তাহলে **সত্য** চিহ্নিত করো। যদি বাক্যটি তোমার জন্য সবসময় সত্য না নয় কিন্তু কখনও কখনও সত্য হয়, তাহলে **মাঝে মাঝে** চিহ্নিত করো এবং যদি বাক্যটি তোমার জন্য কখনও সত্য না হয়, তাহলে **কখনও নয়** চিহ্নিত করো।

		কখনও নয়	মাঝে মাঝে	সত্য
1.	আমি দু:খিত বা অসুখীবোধ করছিলাম	০	১	২
2.	আমি কোন কিছু উপভোগ করছিলাম না.....	০	১	২
3.	আমি এত ক্লান্ত বোধ করছিলাম যে শুধু বসে থেকেছি এবং কিছু করিনি	০	১	২
4.	আমি খুব অস্থির ছিলাম	০	১	২
5.	আমার মনে হচ্ছিল যে আমি আর ভালো কিছু করার মতো নেই.....	০	১	২
6.	আমি অনেক কেঁদেছি	০	১	২
7.	আমার সঠিকভাবে চিন্তা করা আর মনোযোগ দেয়া কঠিন ছিল	০	১	২
8.	আমি নিজেকে ঘৃনা করছিলাম	০	১	২
9.	আমি যেন একজন খারাপ মানুষ	০	১	২
10.	আমি একাকীত্বে ভুগছিলাম	০	১	২
11.	আমি ভাবছিলাম কেউ আসলে আমাকে ভালোবাসে না.....	০	১	২
12.	আমি ভাবছিলাম আমি কখনও অন্য শিশুদের মত ভালো হতে পারবো না	০	১	২
13.	আমি সবকিছু ভুল করেছি.....	০	১	২

@Angold et al., (1995)
Translated by Farah Deeba (2010)

Deeba F(1), Rapee RM, Prvan T., Psychometric properties of two measures of childhood internalizing problems in a Bangladeshi sample. Br J Clin Psychol. 2015 Jun;54(2):214-32. doi: 10.1111/bjc.12071. Epub 2014 Dec 18.

Appendix-12

Short Mood and Feelings Questionnaire (SMFQ)

নির্দেশনা: এই ফর্মটি আপনার শিশু গত ২ সপ্তাহ যাবত কেমন অনুভব করেছে আর তার জন্য কি করেছে তা বোঝার জন্য। প্রতিটি প্রশ্নের ক্ষেত্রে আপনার শিশুর জন্য কোনটি কতখানি প্রযোজ্য তা পাশের ১টি সংখ্যাকে বৃত্ত এঁকে চিহ্নিত করুণ। যদি একটি বাক্য আপনার শিশুর জন্য বেশীরভাগ সময় সত্য হয় তাহলে সত্য চিহ্নিত করুণ। যদি বাক্যটি আপনার শিশুর জন্য সবসময় সত্য না নয় কিন্তু কখনও কখনও সত্য হয়, তাহলে মাঝে মাঝে চিহ্নিত করুণ এবং যদি বাক্যটি আপনার শিশুর জন্য কখনও সত্য না হয়, তাহলে কখনও নয় চিহ্নিত করুণ।

		কখনও নয়	মাঝে মাঝে	সত্য
1.	সে দুঃখী বা অসুখীবোধ করছিল	০	১	২
2.	সে কোনকিছুতেই আনন্দ পাচ্ছিল না.....	০	১	২
3.	সে এতই ক্লান্ত অনুভব করছিল যে, সে শুধু বসেছিল এবং কিছু করেনি	০	১	২
4.	সে খুব অস্থির ছিল	০	১	২
5.	তার মনে হচ্ছিল যে, সে আর কোন কাজের উপযুক্ত নয়.....	০	১	২
6.	সে অনেক কেঁদেছিল	০	১	২
7.	কোন কিছু সঠিকভাবে চিন্তা করা বা মনোযোগ দেয়া তার পক্ষে কঠিন ছিল	০	১	২
8.	সে নিজেকে ঘৃনা করছিল	০	১	২
9.	সে নিজেকে একজন খারাপ মানুষ ভাবছিল.....	০	১	২
10.	সে একা একা ভুগছিল / কষ্ট পাচ্ছিল।	০	১	২
11.	সে ভাবছিল যে, আসলে কেউ তাকে ভালবাসে না	০	১	২
12.	সে ভাবছিল সে আর কখনও অন্য শিশুদের মত ভাল হতে পারবে না।	০	১	২
13.	সে মনে করছিল যে, সে সবকিছুই ভুল করেছে।	০	১	২

Translated by Farah Deeba

Appendix-13

CHILDREN'S AUTOMATIC THOUGHT SCALE (CATS)

নামঃ..... বয়সঃ..... লিঙ্গঃ পুরুষ/নারী শ্রেণীঃ .....

নির্দেশনাঃ নিম্নের তালিকাটি হল শিশু ও কিশোরদের ভাষ্যমতে তাদের মাথায় উঁকি দেয়া কিছু চিন্তা। দয়া করে প্রতিটি চিন্তা সতর্কতার সাথে পড়ুন এবং সিদ্ধান্ত নিন গত সপ্তাহ জুড়ে প্রতিটি চিন্তা যদি একবারও এসে থাকে, কতটা ঘনঘন আপনার মাথায় উঁকি দিয়েছে। আপনার উত্তরটি নিম্নোক্ত উপায়ে বৃত্তাকার করুন-

০=একেবারেই না, ১=মাঝে মাঝে, ২=প্রায়ই, ৩=ঘনঘন, ৪= সবসময়

নিজেকে বল "গত সপ্তাহ জুড়ে আমি যা ভেবেছি"	একেবারেই না	মাঝে মাঝে	প্রায়ই	ঘনঘন	সবসময়
১।বাচ্চারা ভাববে আমি বোকা					
২।আমার অন্যের উপর প্রতিশোধ নেয়ার অধিকার রয়েছে যদি সে সেটার যোগ্য হয়					
৩।আমি কোন কিছুই সঠিকভাবে করতে পারি না					
৪।আমার একটি দুর্ঘটনা ঘটতে যাচ্ছে					
৫।অন্য বাচ্চারা বোকা					
৬।আমি চিন্তিত যে অন্যরা আমাকে উত্যক্ত করবে					
৭।আমি পাগল হয়ে যাচ্ছি					
৮।বাচ্চারা আমাকে নিয়ে হাসাহাসি করবে					
৯।আমি মারা যাব					
১০।অধিকাংশ মানুষ আমার বিপক্ষে					
১১।আমি অপদার্থ					
১২।আমার মা অথবা বাবা আঘাত পাবে					
১৩।কোন কিছুই আর আমার জন্য ঠিকমত হয় না					
১৪।আমাকে তুচ্ছ দেখাবে					
১৫।আমাকে কেউ খোঁচালে ছেড়ে দিব না					
১৬।আমার নিয়ন্ত্রণ হারানোর ভয় হয়					
১৭।আমার দোষেই শব ভুল হয়েছে					
১৮।মানুষ আমার সম্পর্কে খারাপ কিছু ভাবছে					
১৯।যদি কেউ আমাকে আঘাত করে আমার তাদের আঘাত করার অধিকার রয়েছে					
২০।আমি আঘাত পেতে যাচ্ছি					
২১।অন্য বাচ্চারা আমার সম্পর্কে কি ভাবছে তা নিয়ে আমি ভীত					
২২।কিছু লোক যে যেমন সে তেমনটাই পায়					
২৩।আমি আমার জীবনটাকে বিশৃঙ্খল বানিয়ে দিয়েছি					
২৪।ভয়াবহ কিছু ঘটতে যাচ্ছে					
২৫।আমাকে বোকার মত দেখায়					
২৬।আমি অন্যদের মত ভাল কখনই হতে পারব না					
২৭।সবসময় বিনা দোষে আমাকে দোষারোপ করা হয়					
২৮।আমি ব্যর্থ					
২৯।অন্য বাচ্চারা আমাকে নিয়ে মজা করছে					
৩০।বেঁচে থাকা অর্থহীন					
৩১।সবাই আমার দিকে তাকিয়ে আছে					
৩২।আমি ভীত যে আমি নিজেকে একটা বোকায় পরিণত করব					
৩৩।আমি শঙ্কিত যে সবাই হয়ত মারা যাবে					
৩৪।আমি আমার সমস্যা থেকে কখনও বের হয়ে আসতে পারব না					
৩৫।মানুষ সবসময় আমাকে বিপদে ফেলতে চেষ্টা করে					

৩৬।আমার নিশ্চয়ই খুব বড় সমস্যা আছে					
৩৭।কিছু মানুষ খারাপ					
৩৮।আমি নিজেকে ঘৃণা করি					
৩৯।আমার প্রিয় কারো কিছু ঘটবে					
৪০।খারাপ মানুষদের শাস্তি প্রাপ্য					

Translated by Dr. Farah Deeba & Lutfun Nahar, Department of Clinical Psychology, University of Dhaka.

Appendix-14

সবলতা বা অসুবিধা নির্ণয়ক প্রশ্নমালা

(৪-১৭ বছরের শিশুর পিতামাতা ও শিক্ষকের জন্য)

প্রত্যেকটি প্রশ্নের জন্য সত্য নয়, কিছুটা সত্য বা নিশ্চিতভাবে সত্য ঘরে টিক চিহ্ন দিন। সবকটি প্রশ্নের উত্তর দিলে আমাদের যাচাই করতে সুবিধে হবে। দয়া করে বিগত ছয় মাসে অথবা চলতি শিক্ষা বছরে শিশুর আচরণের ওপর ভিত্তি করে উত্তর দিন।

শিশুর নাম..... ছেলে/মেয়ে

জন্মতারিখ.....

	সত্য নয়	কিছুটা সত্য	নিশ্চিতভাবে সত্য
অন্যদের অনুভূতিকে মূল্য দেয়	☐	☐	☐
অস্থির, ছটফটে, বেশিক্ষণ চুপ করে থাকতে পারে না	☐	☐	☐
প্রায়ই মাথাধরা, পেটব্যথা বা বমি বমি ভাবের কথা বলে	☐	☐	☐
অন্য ছেলেমেয়েদের সাথে খাবার, খেলনা, পেন্সিল ইত্যাদি সহজেই ভাগাভাগি করে নেয়	☐	☐	☐
প্রায়ই জেদী আচরণ করে বা গরম মেজাজ দেখায়	☐	☐	☐
অনেকটা একা থাকে, একা একা খেলতে ভালোবাসে	☐	☐	☐
বেশ বাধ্য, সাধারণতঃ বড়দের কথা শোনে	☐	☐	☐
অনেক দুশ্চিন্তা করে, প্রায়ই চিন্তিত দেখায়	☐	☐	☐
কেউ ব্যথা পেলে, মন খারাপ করলে বা অসুস্থবোধ করলে সাহায্য করে	☐	☐	☐
সারাক্ষণ উসখুস করে বা গা-হাত মোড়ামুড়ি করে	☐	☐	☐
অন্ততঃ একজন ভালো বন্ধু আছে	☐	☐	☐
প্রায়ই অন্য ছেলেমেয়েদের সাথে মারামারি করে বা গায়ের জোর দেখায়	☐	☐	☐
প্রায়ই বিষণ্ন, মনমরা ও কাঁদো কাঁদো থাকে	☐	☐	☐
সাধারণভাবে অন্য ছেলেমেয়েরা তাকে পছন্দ করে	☐	☐	☐
সহজেই অন্যমনস্ক হয়ে পড়ে, মনোযোগ ধরে রাখতে পারে না	☐	☐	☐
অচেনা পরিবেশে ঘাবড়ে যায় বা আড়ষ্ট থাকে, সহজেই সাহস হারায়	☐	☐	☐
ছোটদের প্রতি মায়া মমতা আছে	☐	☐	☐
প্রায়ই মিথ্যে বলে বা ধাপ্পা দেয়	☐	☐	☐
অন্য ছেলেমেয়েরা তার পেছনে লাগে বা তার ওপর গায়ের জোর দেখায়	☐	☐	☐
অপরকে সাহায্য করতে প্রায়ই এগিয়ে যায় (বাবা-মা, শিক্ষক, অন্য ছেলেমেয়েদের)	☐	☐	☐
ভেবে চিন্তে কাজ করে	☐	☐	☐
বাড়ি, স্কুল বা অন্য জায়গা থেকে চুরি করে	☐	☐	☐
ছোটদের চেয়ে বড়দের সাথে ভালো মিশতে পারে	☐	☐	☐
অনেক ভয়, একটুতেই চমকে যায়	☐	☐	☐
কাজ ধরলে শেষ করে, মনোযোগের পরিমাণ ভালো	☐	☐	☐

স্বাক্ষর ..... তারিখ .....

পিতামাতা/শিক্ষক/অন্য কেউ (উল্লেখ করুন):

আপনার সাহায্যের জন্য অনেক ধন্যবাদ

Appendix-15

Licence Agreement

Translation of Cool Kids Material

ACCESS MACQUARIE LIMITED

and

DEPARTMENT OF CLINICAL PSYCHOLOGY, UNIVERSITY OF DHAKA

Contents

LICENCE AGREEMENT

DATE **8 August 2017**

PARTIES

Access Macquarie Limited ABN 59 003 849 198, 160 Herring Road, Macquarie University, NSW, 2109, Australia (**Macquarie**)

and

Department of Clinical Psychology, University of Dhaka, Dhaka (**Licensee**)

(together the "**Parties**")

RECITALS

(A) Macquarie is the owner of the Intellectual Property Rights in the Materials.

(B) The Licensee wishes to obtain from Macquarie a non-exclusive licence to use, reproduce and translate the Program and Materials for the Permitted Purpose.

(C) Macquarie agrees to grant such a licence to the Licensee on the terms and conditions of this Agreement.

OPERATIVE PROVISIONS

1. INTERPRETATION

1.1 Definitions

The following definitions apply in this document.

Agreement means this agreement together with the Schedule and any amendments made in accordance with this Agreement.

Authorised Personnel means those personnel of the Licensee that Macquarie authorises to use and translate the materials.

Business Day means a day that is not a Saturday, Sunday or public holiday in Sydney, Australia.

Commencement Date means the date this Agreement is executed by the last of the parties to execute it.

Confidential Information means the terms of this Agreement and all other information disclosed by a party to another party under this Agreement or in negotiations in relation to the subject matter of this Agreement, other than information that the recipient can establish:

(a) is already in the public domain other than as a result of a breach of confidentiality;

(b) is independently developed by the recipient; or

(c) is lawfully received by the recipient from another person having the unrestricted legal right to disclose that information without requiring the maintenance of confidentiality.

Derivative Works means all Know How created, developed or acquired by the Licensee based on or using the Materials in the development of the translated version of the Materials and includes the final translated version prepared by the Licensee.

Fees means the amount payable to Macquarie as detailed in **Item 4** of the **SCHEDULE 1**.

Force Majeure Event means any occurrence or omission as a direct or indirect result of which the party relying on it is prevented from or delayed in performing any of its

obligations (other than a payment obligation) under this Agreement and that is beyond the reasonable control of that party including forces of nature, industrial action and action or inaction by a government agency.

Initial Term means the term as detailed in **Item 1** of **SCHEDULE 1**.

Insolvency Event means, for a person, being in liquidation or provisional liquidation or under administration, having a controller or analogous person appointed to it or any of its property, being taken to have failed to comply with a statutory demand, being unable to pay its debts or otherwise insolvent, taking any step that could result in the person becoming an insolvent under administration, entering into a compromise or arrangement with, or assignment for the benefit of, any of its members or creditors, or any analogous event.

Intellectual Property Rights means any and all existing and future intellectual and industrial property rights throughout the world, including rights in relation to copyright, trademarks, designs, circuit layouts, business and domain names, trade secrets and Know How (including the right to apply for registration of any such rights), patents and other results of intellectual activity in the industrial, commercial, scientific, literary or artistic fields.

Know How means scientific, technical and other information which is not in the public domain including inventions, discoveries, concepts, data, chemical formulae, chemical materials, ideas, specifications, procedures for experiments and tests and results of experiments, experimentation and testing, results of research and development and information in laboratory records, case reports, data analyses and summaries and submissions to and information from government agencies but does not include the general expertise of any person.

Materials means the materials as detailed in **Item 3** of **SCHEDULE 1**.

Patent Rights means existing and future patents (including any divisions, continuations, continuations in part, renewals, reissues, extensions, supplementary protection certificates, utility models and foreign equivalents) and rights with respect to existing and future patent applications and patentable inventions, including the right to apply for registration of any such rights.

Permitted Purpose means the purpose as specified in **Item 2** of **SCHEDULE 1**.

Product means any product incorporating all or part of the Materials or Derivative Works in any manner whatsoever, or developed using all or part of the Materials or Derivative Works.

Term means the term as specified in the **SCHEDULE 1**.

1.2 Rules for interpreting this Agreement

Headings are for convenience only, and do not affect interpretation. The following rules also apply in interpreting this document, except where the context makes it clear that a rule is not intended to apply.

(a) A reference to:

(i) legislation (including subordinate legislation) is to that legislation as amended, re-enacted or replaced, and includes any subordinate legislation issued under it;

(ii) a document or agreement, or a provision of a document or agreement, is to that document, agreement or provision as amended, supplemented, replaced or novated;

(iii) a party to this document or to any other document or agreement includes a permitted substitute or a permitted assign of that party;

(iv) a person includes any type of entity or body of persons, whether or not it is incorporated or has a separate legal identity, and any executor, administrator or successor in law of the person; and

(v) anything (including a right, obligation or concept) includes each part of it.

(b) A singular word includes the plural, and vice versa.

(c) A word which suggests one gender includes the other genders.

(d) If a word is defined, another part of speech has a corresponding meaning.

(e) If an example is given of anything (including a right, obligation or concept), such as by saying it includes something else, the example does not limit the scope of that thing.

(f) The word agreement includes an undertaking or other binding arrangement or understanding, whether or not in writing.

1.3 Business Days

If the day on or by which a person must do something under this Agreement is not a Business Day:

(a) if the act involves a payment that is due on demand, the person must do it on or by the next Business Day; and

(b) in any other case, the person must do it on or by the previous Business Day.

2. INTELLECTUAL PROPERTY RIGHTS AND LICENCE GRANT

2.1 Intellectual Property

Nothing in this Agreement constitutes a transfer of any Intellectual Property Rights.

2.2 Grant of Licence by Macquarie of Materials

(a) The Licensee agrees that Macquarie owns the Intellectual Property Rights in the Materials, including the copyright.

(b) Macquarie grants to the Licensee, a non-exclusive licence to translate the Materials during the Initial Term solely for the Permitted Purpose and subject to the terms of this Agreement.

2.3 Derivative Works

(a) In consideration of the rights granted in this Agreement, it is agreed that Macquarie will own the Intellectual Property Rights in the Derivative Works immediately upon their creation.

(b) Macquarie grants to the Licensee a non-transferrable, worldwide and non-exclusive licence to use the Derivative Works for non-commercial, clinical research, development and education purposes for the Initial Term.

(c) At the sole discretion of Macquarie, the licence for the Derivative Works may be renewed for subsequent terms of similar duration to the Initial Term. The Licensee will provide at least 20 Business Days' notice in writing prior to the expiry of the Initial Term or any subsequent term if it wishes to renew the licence pursuant to this subclause. The licence renewal fee will be negotiated by the parties.

(d) The Licensee agrees that it will not release any Product to any third party as a result of its use of the Derivative Works.

(e) In relation to the Materials, the Licensee must clearly cite the translated version according to the English citation. The citation must include the names of the person who prepared the translated version. The Licensee must refer to the English citation as detailed in **Item 5** of **SCHEDULE 1**. Macquarie must also be

notified in writing of the complete details of all persons responsible for the translation.

2.4 No right to sub-licence

The Licensee must not sub-licence any of the rights granted to it under this Agreement without the prior written consent of Macquarie.

3. DERIVATIVE WORKS

3.1 Culturally relevant

The Licensee must only adapt and translate the Program and Materials to the extent that they are culturally relevant for the country of use.

4. CONFIDENTIAL INFORMATION

4.1 Maintain Confidentiality

The parties agree that each of them must:

(a) keep the Confidential Information of the other party confidential;

(b) not use the other party's Confidential Information other than for the purpose of exercising its rights and performing its obligations under this Agreement; and

(c) must use at least the same degree of care to avoid disclosure of the other party's Confidential Information as it uses to protect its own Confidential Information.

4.2 Right to disclose

A party may disclose the Confidential Information of another party:

(a) to its officers, employees, professional advisers or agents, its related bodies corporate, and the officers, employees or agents of a related body corporate who have a need to know the Confidential Information; or

(b) to the extent required by law, or under the rules of any stock exchange, so long as the party gives the other party reasonable advance notice and opportunity to object to the requirement to disclose such information or obtain an appropriate order to protect its Confidential Information.

4.3 Public domain

No piece or body of information shall be deemed to be in the public domain merely because it contains information which is in the public domain or is embraced by a general disclosure which is in the public domain.

5. NO REPRESENTATIONS AND WARRANTIES

The Licensee acknowledges that in entering into this Agreement they have not relied on any representations or warranties about its subject matter except as expressly provided by this Agreement.

6. RELEASE

From the date of this Agreement the Licensee:

(a) releases Macquarie from all responsibility, claims, liability, costs and expenses, present and future ("**Claims**") relating to the Program and Derivative Works, including (without limitation) any Claims relating to the use of the Program and Derivative Works (together the "**Released Subject Matter**"); and

(b) agrees to indemnify Macquarie against any liability, loss or costs arising from any claim, action or cause of action brought by any person with whom it is related or associated in any way against Macquarie relating to the Release Subject Matter.

7. DISPUTES

7.1 Dispute resolution

If a dispute arises out of or in relation to this Agreement (including any dispute as to breach or termination of this Agreement or as to any claim in tort, in equity or pursuant to any statute) (**"Dispute"**), a party may not commence any court or arbitration proceedings relating to the Dispute unless it has complied with this clause 8, except if the party seeks urgent interlocutory relief.

7.2 Dispute Notice

A party claiming that a Dispute has arisen must give written notice to the other party specifying the nature of the Dispute (**"Dispute Notice"**).

7.3 Negotiation

Upon receipt of a Dispute Notice, the parties must procure that the Chief Executive Officer or equivalent of the Licensee and the Director of the Centre for Emotional Health at Macquarie University meet to endeavour to resolve the Dispute expeditiously by negotiation.

7.4 Resolution of Disputes

If the parties have not resolved the Dispute under clause 7 within 14 days of receipt of a Dispute Notice, the parties shall endeavour to resolve the Dispute expeditiously using informal dispute resolution techniques such as mediation, expert evaluation or determination or similar techniques agreed by the parties.

7.5 Mediation

If the parties do not agree within 30 days of receipt of a Dispute Notice (or such further period as the parties agree in writing) as to:

(a) the dispute resolution technique and procedures to be adopted;

(b) the timetable for all steps in those procedures; and

(c) the selection and compensation of the independent person required for such technique;

the parties shall mediate the Dispute in accordance with the Mediation Rules of the Law Society of New South Wales, and the President of the Law Society of New South Wales (or the President's nominee) will select the mediator and determine the mediator's remuneration.

8. TERM AND TERMINATION

8.1 This Agreement shall commence on the Commencement Date and continue for the Term unless terminated earlier in accordance with this clause 9.

8.2 Termination for Breach

Without limiting the generality of any other clause in this Agreement, Macquarie may terminate this Agreement in whole or part, immediately by notice in writing if:

(a) the Licensee is in breach of any term of this Agreement and such breach is not remedied within 20 Business Days of notification by Macquarie; or

(b) the Licensee becomes, threatens or resolves to become or is in jeopardy of becoming subject to any form of insolvency administration.

8.3 Macquarie's Rights on Termination

If notice is given to the Licensee pursuant to clause 9.2, Macquarie, in addition to terminating the Agreement may:

(a) cease to provide the Licensee with access to the Program;

(b) be regarded as discharged from any further obligations under this Agreement; and

(c) pursue any additional or alternative remedies provided by law.

8.4 Termination or expiry of this Agreement shall not affect any rights, remedies, obligations or liabilities of the parties that have accrued up to the date of termination or expiry, including the right to claim damages in respect of any breach of the agreement which existed at or before the date of termination or expiry.

9. GENERAL

9.1 Governing law

This Agreement is governed by the laws of the State of New South Wales, Australia. The Parties submit to the jurisdiction of the courts of the State of New South Wales and any other courts which may hear appeals from those courts.

9.2 Entire agreement

This Agreement constitutes the entire agreement of the Parties with respect to its subject matter and supersedes all prior oral or written representations and agreements.

9.3 Amendment

This Agreement may only be amended in writing signed by the Parties.

9.4 Assignment

A Party may not assign its rights or obligations arising under this Agreement without the prior written consent of the other Party.

9.5 Waiver

A Party's failure to exercise or delay in exercising a right, power or remedy does not operate as a waiver of that right, power or remedy and does not preclude the future exercise of that right, power or remedy. To be effective, a waiver of a right, power or remedy must be in writing and signed by the Party granting the waiver

9.6 Severance

If any provision or part provision of this Agreement is invalid or unenforceable, such provision shall be deemed deleted but only to the extent necessary and the remaining provisions of this Agreement shall remain in full force and effect.

9.7 Notices

Notices must be in writing and signed by a duly authorised person. Notices to or by a Party delivered in person are deemed to be given by the sender and received by the addressee when delivered to the addressee:

(a) if by domestic post, 3 Business Days from and including the date of postage;

(b) if by international post, 10 Business Days from and including the date of postage;

(c) if by email, when an emailed notice is acknowledged by the recipient personally (that is, not by any automatically generated system email); or

(d) or if by facsimile, when transmitted to the addressee;

provided that if transmission is on a day which is not a Business Day or is after 5.00pm (addressee's time) on the next Business Day.

Notice details are included in **Item 5** of **SCHEDULE 1**.

9.8 Relationship of the Parties

The Parties are independent contracting parties, and nothing in this Agreement shall make any Party the agent, partner or legal representative of the other Party for any

purpose whatsoever, nor does it grant either Party any authority to assume or to create any obligation on behalf of or in the name of the other Party.

9.9 Privacy

Each Party must comply with its obligations under all applicable laws in relation to the collection, storage, use and disclosure of any personal or health information which it provides to the other Party or to which it becomes privy as a result of this Agreement.

9.10 Force Majeure

No party is liable for any failure to perform or delay in performing its obligations under this Agreement if that failure or delay is due to anything beyond that party's reasonable control (including acts of God, natural disasters or any change in laws or regulations) (Force Majeure Event), provided that the party affected by the Force Majeure Event uses its reasonable endeavours to mitigate the impact of the Force Majeure Event. If a Force Majeure Event occurs, the affected Party must notify the other Party as soon as practicable thereafter.

9.11 Counterparts

This Agreement may be executed in counterparts. All executed counterparts constitute this Agreement.

Executed as an agreement on _____

Signed on behalf of **ACCESS MACQUARIE LIMITED**
by its authorised officer, in the presence of:

Signature of witness	Signature of authorised officer
Name of witness	Name of authorised officer
	Title of authorised officer

Signed on behalf of **Department of Clinical Psychology, University of Dhaka** by its authorised officer, in the presence of:

Signature of witness	Signature of authorised officer
Name of witness	Name of authorised officer
	Title of authorised officer

SCHEDULE 1

ITEM	DETAIL	
1.	Term	12 months
2.	Permitted Purpose	Translation of Cool Kids Materials. The materials are to be used for internal research purposes and not for general clinical or commercial use, and cannot be sold or otherwise distributed under this contract.
3.	Materials	• Cool Kids Child & Adolescent Therapist Manual • Cool Kids – Child & Parent Workbook set • Cool Kids Adolescent Workbook set
4.	Fee	N/A
5.	Notice Details - Macquarie	Name: Prof Ron Rapee Address: Centre for Emotional Health Level 7, Building C3A Macquarie University NSW 2109 Email: ron.rapee@mq.edu.au Phone: +61 2 9850 8032 Access Macquarie Representative: Name: Vivian Mohan-Ram Address: Access Macquarie Limited Level 2, Siemens Building 160 Herring Road Macquarie University NSW 2109 Australia Email: Vivian.Mohan-Ram@mq.edu.au
	Notice Details - Licensee	Name: Dr Farah Deeba Title: Associate Professor Address: Department of Clinical Psychology University of Dhaka Dhaka Email: Farahdeeba@du.ac.bd
6.	Obligations of Both Parties	Macquarie: The Centre for Emotional Health will: • provide the Materials to enable the Licensee to translate the contents.

		Licensee: The Licensee will: • provide to Macquarie a copy of any publication or thesis that arises from research using the materials.

Appendix-16

Is Your child Anxious?

Want to work with a psychologist on your the Anxiety issues?

Lets Know About Anxiety, it's management
&
Help your Child to Be a Cool Kid

Let's Join the workshop on

Anxiety &It's Effect on Children

Date:

Facilitator: LutfunNahar,MPhil Researcher, Department of Clinical Psychology, University of Dhaka

Mental Health Awareness Program on Anxiety

Are You Anxious?

Want to work with a psychologist on your Anxiety issues?

Lets Know About Anxiety, it's management
&
Be a Cool Kid

Let's Join the workshop on

Anxiety &It's Effect on Children

Date:

Facilitator: LutfunNahar,MPhil Researcher, Department of Clinical Psychology, University of Dhaka

Mental Health Awareness Program on Anxiety

Appendix-17

ক্লিনিক্যাল সাইকোলজি বিভাগ, ঢাকা বিশ্ববিদ্যালয়-এর বিভিন্ন সেবা কার্যক্রমসমূহ	
মেডিক্যাল সেন্টার ঢাকা বিশ্ববিদ্যালয় (শহীদ মিনারের বিপরীতে) ঢাকা সময়: ২-৫টা, সোম, মঙ্গল ও বৃহস্পতি ফোন: ০১৭৩১৭০৯০৯৯	নাসিরুল্লাহ সাইকোথেরাপী ইউনিট কলা ভবন (তৃতীয় তলা) ঢাকা বিশ্ববিদ্যালয় ঢাকা ফোন: ০১৭৫৫৬৫৪৮৩৫ ইমেইল: clinpsy.npu.du@gmail.com (শিশু ক্লিনিক: শনিবার ২-৫টা)
মনোরোগবিদ্যা বিভাগ বঙ্গবন্ধু শেখ মুজিব মেডিক্যাল বিশ্ববিদ্যালয় (ব্লক-ডি, ১২-তলা) শাহবাগ, ঢাকা সময়: ৮-২টা, শনি থেকে বৃহস্পতি (শিশু ক্লিনিক: শনি, সোম ও বৃহস্পতিবার: ৮-২টা)	ক্লিনিক্যাল সাইকোলজি বিভাগ জাতীয় মানসিক স্বাস্থ্য ইন্সটিটিউট (এন আই এম এইচ) শের-এ-বাংলা নগর, (শ্যামলী শিশুমেলার কাছে) আগারগাঁও, ঢাকা (শিশু ক্লিনিক: সোমবার, বুধবার ৮-২টা)
মনোরোগবিদ্যা বিভাগ (বর্হিবিভাগ) ঢাকা মেডিক্যাল কলেজ ও হাসপাতাল (শহীদ মিনারের সাথে) ঢাকা	

ক্লিনিক্যাল সাইকোলজি বিভাগ, ঢাকা বিশ্ববিদ্যালয়-এর বিভিন্ন বিশেষায়িত সেবা কার্যক্রমসমূহ	
নারী ও শিশু নির্যাতন: ন্যাশনাল ট্রমা কাউন্সেলিং সেন্টার (এনটিসিসি) ৩৭/৩, নিউ ইস্কাটন গার্ডেন রোড ঢাকা	**মাদকাসক্তি নিরাময়:** ক্রিয়া বাড়ি -৩১২, রোড -২ বায়তুল আমান হাওজিং সোসাইটি, শ্যামলী ফোন: ০১৭১১১৫৩১৯৭, ০১১৯০৮৭৭৭৭২