Impact of trauma on coping behavior of children

Thesis submitted to the Department of Psychology, University of Dhaka in partial fulfilment of requirements for the degree of Doctor of Philosophy in Psychology

Submitted by

Fayaza Ahmed

Registration No. 112/2018-2019

Department of Psychology

University of Dhaka

April 2024

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Approval of the Thesis

This is to certify that the study **"Impact of trauma on coping behavior of children"** submitted by **Fayaza Ahmed** to fulfill the requirements for the PhD degree in psychology is an original work. The research was carried out by her under our guidance and supervision. We have read the thesis and believe this to be an important work in the field of psychology.

.....

(Mahfuza Khanam)

Professor

Department of Psychology

University of Dhaka

And

..... 16/02/14

(Muhammad Kamruzzaman Mozumder)

Professor

Dept. of Clinical Psychology

University of Dhaka

Abstract

Childhood trauma has short- and long-term impacts on different aspect of life. It can also impact the coping responses and related behavior of children. Study on the relation between childhood trauma and coping behavior is an important area of research in this regard. Despite, increasing work on this area in global arena, little focus in this area of research has been observed in Bangladesh. This research aimed to gain insight into the way different types of traumas influence the coping behavior among children. The specific objectives were, i) to find out impact of trauma on coping behavior among children, and ii) to find out the correlates of coping behavior of children.

A quantitative cross sectional survey design with purposively selected 398 participants from 14 districts was used. With an age range of 9 to 13 years, mean (M=11.28), the participants included approximately similar number of male and female children (with a slightly higher number of boys, 54.5%). Fourteen practicing psychologists were recruited for data collection. Trauma experience was found among 98.49% of the participating children.

In this study total 21 type of trauma and 14 types of coping were analyzed. Among these, 17 types of traumas, showed significant impact on different types of coping behaviors of children. The most common form of trauma for children was trauma from animal attack (n=201) followed by trauma from death of a close person (n=140).

Trauma caused by the death of a close person employed the maximum numbers of coping behaviors (10). Furthermore, trauma from experience and/or witnessing of hijack utilized a variety of coping behaviors (8). Most of the trauma experiences of children indicated change in multiple types of coping. Nevertheless, trauma from animal attack,

earthquake, separation from family and assault indicated changed in single type of coping. Trauma from animal attack and earthquake showed change in coping through physical release of emotion and trauma from separation from family and assault manifested change in coping through control.

It should be noted here that the study was conducted during COVID-19 pandemic period and obviously influence of trauma associated with COVID-19 was observed. Children employed a wide variety of coping mechanisms (up to 11 types of coping) in response to trauma associated with COVID-19.

Problem-focused coping was found to be the most commonly utilized coping strategy which were related to eight types of trauma experiences. Coping behavior of children was also influenced by different predictors besides specific trauma experiences. The most influential predictors for different type of coping were prosocial behavior of children, that was found to be a significant predictor for all the coping except for physical release of emotion and distraction strategies. Furthermore, PTSD symptoms, number of trauma experience, mother's education, and intensity of trauma were also found to be influential predictor for most of coping types.

This research provides an overall understanding of how different trauma changes coping behavior of children and how coping behaviors can be predicted by different corelates. The results suggest to focus on develop a strategy of how children can develop healthy coping behavior in their life.

ACKNOWLEDGEMENTS

I am deeply appreciative of the several individuals who have made substantial contributions to my study. I express my sincere gratitude to my diligent research assistants—Moshiur Rahman, Tahmina Sultana, Najmul Hossain Jewel, Farzana Alam, Rehnuma Nijhum, Abu Sayed, Habibur Rahman Sajib, Rasel Mia, Rumana Haque, Shahin Akter, Jahan Ara Begum, Bidhan Sarker, Irin Parvin Tamanna, and Tarana Anis. Amidst their hectic schedules, they altruistically gave their time to collect data from different places around Bangladesh. I would want to acknowledge my younger brother, Wasif Rahman, for his unwavering assistance during the data accumulating process. I would want to express my gratitude to the children, their guardians, and some institutional authorities who, despite the difficulties presented by the COVID-19 epidemic, granted us permission to accumulate data.

I convey heartfelt gratitude to my supervisor, Professor Dr. Kamruzzaman Mozumder, for his invaluable and constant encouragement during my PhD journey. His intellectual insights and critical analysis significantly enhanced the quality of my research. Through his supervision, I was motivated to engage in more rigorous analysis and explore the depths of my study, greatly benefiting my PhD journey.

I express my gratitude to my mother, Bilkis Ahmed Lily, and my maternal aunt (equally cherished as my mother), Nasima Khan, for their unwavering affection and constant encouragement during the course of this endeavors. Their support has been a cornerstone of my resilience. I also owe a special thanks to my daughter, Rah'ra Haque Ushana, for her patience and understanding in sacrificing our time together, allowing me to pursue my academic goals. Furthermore, I would also like to convey my gratitude to my husband, Khondoker Mofakkharul Haque, for his indispensable technical assistance in helping me overcome the challenges that I encountered along this journey.

Finally, I would like to convey my sincere appreciation to another supervisor, Professor Dr. Mahfuza Khanam, for her unwavering encouragement during the course of my PhD journey. Her encouragement and advice have been of immeasurable value, aiding me in navigating the complexities of this research pursuit.

DEDICATION

This work is dedicated to all individuals struggling with trauma and those devoted to supporting them in preserving their Self-reliance and wellbeing. Additionally, I dedicate this to my father, Faruk Ahmed, whose loss in my early life profoundly impacted me.

CHAPTER 1

INTRODUCTION

Introduction

Trauma in any stage of life can be extremely distressing for any person. However, when trauma occurs in childhood the effect can be devastating (see Dye, 2018). Thanks to our resilience and coping resources we human are capable to averting the devastating impact of trauma in most cases, however, it has a cost, it often changes the way we think, feel, or behave. This study aims to investigate the impact of traumatic experiences on the coping mechanisms of children who have been exposed to trauma.

An individual's vulnerability to trauma or acquisition of resilience is contingent upon a multitude of difficult situations. Indeed, a large number of individuals encounter challenging situations and undergo traumatic experiences at different stages of development in their lives. An individual's mental health and overall well-being can be significantly affected by these experiences. Trauma experience has a significant impact on an individual's mental well-being, self-esteem, and interpersonal connections (Ozdemir & Sahin, 2020), while also elevating their vulnerability to future traumatic events.

In Bangladesh, over 85% of children have direct encounter of at least one traumatic event (Deeba & Rapee, 2015). Trauma in childhood is particularly difficult to cope with, since it occurs during the sensitive phase of development. Prolonged or recurrent exposure to stress and trauma can lead to significant adverse effects on both physical and mental well-being (Al Jowf et al., 2022). This is particularly true when stress is encountered at early stages of development (Dye, 2018).

1.1. Trauma

Trauma is the result of an extreme amount of fear or stress with which person cannot easily cope. The experience of the trauma has a huge impact on individuals overall well-

being. According to American Psychiatric Association (APA, 2013) “trauma refers to an event or circumstance that poses a serious threat to self or others and is coupled with the extreme disturbance in behavior and or/mood; however, this disturbance may not be present at the time of the event”. Trauma may be caused by witnessing the trauma occurring to others, knowing about a traumatic event that a family member, close friend or another member of the society has experienced. Similar to adults, children also show signs of trauma, which is a major concern regarding their healthy growth of physical and mental well-being.

1.2. Classification of Trauma

Trauma is a significant concern for its significant impact on an individual's psychological, emotional, and physical well-being. Classification of trauma comprises classifying traumatic events and their impact on individuals based on different dimensions such as the type of trauma, how long and how frequently the individual was exposed to it, and the circumstances in which the trauma took place. The main classification of trauma is discussed in the following subsections.

1.2.1. Classification Based on the Mode of Impact

The term "trauma" denotes a physical or psychological wound, shock, or injury (Garland, 2018). Trauma is typically categorized into two types based on the mode of its impact, these are physical trauma and psychological or emotional trauma.

1.2.1.1. Physical Trauma. Physical trauma generally represents physical injury and damage of physical health. Physical trauma refers to the breach of an individual's physical well-being, which can arise through accidents, injuries, medical procedures, or assaults. The severity of such trauma is determined by the degree of physical impact or injury, which may

even have the potential to cause disability or death. According to the Encyclopedia Britannica, examples of such trauma include vehicular accidents, falls, cranial impacts, burns, vibrations, wounds, and chemical exposures, which can result in both internal and external physical harm (n.d.). Most often, those who experience a physical wound may also face psychological difficulties due to the abrupt and unpredictable nature of the maltreatment.

1.2.1.2. Psychological or Emotional Trauma. Psychological trauma can be understood as the deep emotional turmoil that arises in an individual when they encounter an event that overwhelms their ability to emotionally cope or process the experience effectively. This emotional stress is not uniform across all individuals due to the subjective nature of psychological processing and resilience. As a result, the impact of potentially traumatic events can vary widely among person. For some people some specific experiences might severely interrupt their psychological balance, manifesting as trauma. In contrast, others may not experience the same level of distress or disruption from the same experience. This process can reflect the various ways in which individuals perceive and manage psychological challenges. The differential responses underscore the complexity of psychological trauma and the highly individualized nature of emotional reactions to stressful or overwhelming events. When the term trauma used in psychological literature, it generally is referring to psychological or emotional trauma.

Psychological or emotional trauma originated from distressing experiences that threaten an individual's sense of safety, concluding in prolonged emotional disturbance, intrusive memories, a sense of detachment, feelings of numbness, and a weakened capacity to trust others (Robinson et al., 2024). Traumatic situations usually involve a perceived threat to one's life or well-being. Any situation that causes an individual to feel overwhelmed

and socially disconnected can result in trauma. The perceived severity of trauma from an incident is more connected to an individual's emotional response to the event, rather than the factual details of the situations.

Experiencing traumatic events may disrupt an individual's perception of being safe and can create a persistent feeling of being in danger. These experiences encompass an widespread range, such as the demise of a parent, vehicular accidents, instances of physical and sexual abuse, encounters with warfare and natural disasters like earthquakes. These diverse situations have the capacity to cause trauma, impacting an individual's emotional and psychological state of well-being. These scenarios encompass immediate and profound disturbances that might lead to psychological trauma. Traumatic situations can weaken an individual's potential to weaken the innate capacity to stop recurrent mental replaying of the incident and consistently engage in thinking the incidents. Thus, they might suffer more for prolonged period of time.

1.2.2. Classification Based on Length of Trauma Incident and Reaction

The most commonly used classification of trauma involves three categories namely, acute trauma, chronic trauma, and complex trauma. This classification incorporates two distinct characteristics which are length of trauma reaction and length of trauma incident.

1.2.2.1. Acute Trauma. This arises from a single incident that is either stressful or dangerous. It may cause a severe state of anxiety immediately following the incident. The reaction is brief typically resolving naturally or with some sort of support (Litz et al., 2002). A car accident, natural disaster, physical or sexual assault, the sudden demise of a loved one, or an invasive medical treatment may develop acute trauma.

1.2.2.2. Chronic Trauma. Chronic trauma refers to the adverse effects of incidences that occur repeatedly or over a prolonged period of time. It can emerge as a consequence of emotional abuse, physical abuse, sexual abuse, persistent bullying, neglect, and experience or witness of domestic violence. Individuals with chronic childhood trauma, is characterized by recurring and unavoidable incidences, may suffer from major mental health consequences and low academic performances (Larson et al., 2017).

1.2.2.3. Complex Trauma. The persistent exposure to numerous types of traumatic events on an individuals may develop complex trauma, in such trauma individual cannot easily avoid or bypass the circumstances, example of the complex trauma is experiencing repeated physical abuse, persistent bullying. Physical, emotional, and educational neglect, and any type of maltreatment in childhood, as well as maltreatment in early childhood have the potential to develop complex trauma. In such situations, individuals feel being confined and become unable to find ways to cope with such trauma. It can enhance the process of being hypervigilant and can damage one's perception of safety around him/her. It may engage them to persistent and tiring surveillance of the surroundings for potential danger. Enduring intense and intricate trauma can often result in conditions such as borderline personality disorder and post-traumatic stress disorder (Jowett et al.,2019).

1.2.3. Classification Based on Duration and Frequency

Based on the duration of trauma exposer and frequency of trauma can be divided into two types namely type-I and type-II trauma (Lenore, 2003)

1.2.3.1. Type-I Trauma. These conditions of childhood follow from unanticipated single events, shocking and intense. Children with type-I conditions recall the event and give vivid recounts. They may have details of the memory of the incident and they can

articulate those. Children may have misidentifications, visual hallucinations, and time distortions as a consequence of a single, intense, and sudden shock (see Lenore, 2003).

1.2.3.1. Type-II Trauma. This trauma has three distinct characteristics, The emotions stirred up by type II traumas may include an absence of feeling, sense of rage, or unremitting sadness. Children who experience repeated traumas can develop denial, intense emotional repression, reluctance to address their traumatic experiences, and a facade of normality in their day-to-day existence. They frequently display profound fury, which may be shown through either aggression or severe apathy. This anger is a reaction to the persistent mistreatment and can result in severe behavioral problems, such as self-inflicted damage and hostility towards others. This trauma in children include self-hypnosis, depersonalization, and detachment resulting from recurring traumatic experiences (see Lenore, 2003). These children frequently utilize these skills to emotionally detach themselves from stress. This behavior could manifest as repetitious speaking or mental trances. Physiological anesthesia, invisibility, and amnesias are more prevalent than multiple personality disorder.

1.2.4. Classification Based on Type of Exposure of Trauma

Based on the nature of exposure to traumatic events, trauma can be divided into three types namely, primary trauma (direct trauma), secondary trauma (indirect trauma), and vicarious trauma.

1.2.4.1. Primary Trauma (Direct Trauma). Primary trauma refers to the personal experience of trauma, either as a victim or witness of the actual occurrence. It encompasses both physical and psychological harm, such as physical abuse, neglect, sexual abuse, bullying etc.

1.2.4.2. Secondary Trauma (Indirect Trauma). Secondary trauma, incorporates the manifestation of trauma symptoms in those who have been exposed to another person's traumatic experience through observation or knowing of it, such as children raised in a family with severe family disharmony with domestic violence may develop trauma symptoms from witnessing and hearing the ongoing assault.

1.2.4.3. Vicarious Trauma. Vicarious trauma, is the manifestation of trauma symptoms that occur gradually as a result of prolonged exposure to the suffering experienced by several individuals, such as following the news, hearing a survivor's account, or witnessing a terrible incident may result to vicarious trauma. It may arise in persons who have close professional contact with trauma survivors, such as therapists, healthcare personnel, and first responders. Prolonged exposure to the terrible experiences of others can result in symptoms similar to post-traumatic stress disorder (PTSD).

1.2.5. Classification Based on the Source of Trauma

Trauma can be divided into three categories by the nature of its the origin, such as natural, accidental and man-made.

1.2.5.1. Natural Incident. Earthquakes and tornadoes can induce varying degrees of trauma as a result of their fast, uncertain, and devastating characteristics. It includes flooding, cyclones, earthquakes, etc. The aftershock of these events can manifest in various ways, impacting individuals and communities both mentally and physically. Though individuals living in areas prone to natural disasters may have greater degrees of adaptability and resilience.

1.2.5.2. Accidental Incident. People can experience a variety of unintentional incidences, including events such as car accidents and sudden encounters with animals. Such incidences can profoundly impact an individual's emotional and psychological well-being.

It can frequently result in enduring psychological consequences. Usually, these traumas happen by accident, which sets them apart from intentional acts of damage. The accidental nature of these experiences might enhance the complexity of the psychological repercussions. The nature of this trauma is, they are usually abrupt and unanticipated, this may pose a challenge to the individual's perception of safety or control over their environments.

1.2.5.3. Man-made Incident. Individuals or groups have the capacity to deliberately cause harm to others by carrying out actions such as physical assault, emotional abuse, sexual abuse, familial and community violence, forced displacement, bullying, fire outbreak, murder, any type of threat, hijacking, and abduction. These behaviors are intentionally planned in order to cause distress and harm, in contrast to unintentional traumas. These traumas may have an enormous impact on the mental and physical health of individuals who are targeted.

1.2.6. Other Pertinent Classifications

Apart from the above-mentioned classifications, there are few other categories of trauma which have been discussed in the research literature. However, these cannot be linked under a single classification. Three such trauma types namely developmental trauma, historical trauma, and system-induced trauma. These are discussed below.

1.2.6.1. Developmental Trauma. Developmental trauma is a provisional diagnosis that occur during child's crucial developmental period and it describes the impact of multiple trauma exposures on human development, specifically impairing domains such as attachment, cognition, behavior regulation, affect regulation, self-concept, dissociation, and biological functioning and maturation (Teague, 2013).This sort of trauma is frequently associated with continuing neglect, mistreatment, or abandonment by caretakers, which

affects the child's capacity to establish strong connections and create an overall self-perception. Developmental trauma is the extensive and lasting exposure to life-threatening experiences during sensitive periods of child development, which disrupts relationships with others, hampers an individual's safety and security processes, modifies vital abilities for cognitive, behavioral, and emotional regulation, and frequently leads to the development of complex PTSD in adulthood (see Cruz et al., 2022).

1.2.6.2. Historical trauma. It involves the enduring psychological and emotional impact experienced by cultural, racial, or ethnic communities, which is transmitted over successive generations. Historical trauma arises from significant, communal occurrences such as slavery, genocide, colonization, and coerced migration such as forced displacement of Rohingya people of Myanmar. The consequences incorporate cultural displacement, destruction of personal identity, and persistent financial and health inequalities.

1.2.6.3. System-induced trauma. It refers to the psychological distress or harm that can occur as a result of participating in social service or healthcare systems, due to unintentional behaviors or policies. Occurrences include being displaced from the residence in child protective services situations, enduring re-traumatization throughout medical assessments, or encountering shelter in institutional environments, such as family break-ups, insensitive or humiliating interviews, separation from sibling.

1.3. Childhood Trauma

Childhood trauma is an emotionally painful or distressing event experienced by a child, which can lead to lasting psychological and physical effects. Children's trauma refers to the psychological consequences that arise from one or more sudden and intense experiences encountered before to reaching the age of 18. These events encompass a range of experiences, such as observing or facing the risk of death, enduring severe physical harm, being in vehicle accidents, facing instances of bullying, encountering acts of terrorism,

being exposed to warfare, enduring childhood abuse (including physical, sexual, and emotional abuse, as well as neglect), and witnessing incidents of domestic violence. These experiences have the potential to overwhelm the child's capacity to cope (National Child Traumatic Stress Network, n.d.) and thus disturb their typical coping mechanisms. This includes direct exposure to trauma, witnessing trauma, or receiving information about a traumatic event influencing a friend or close relative. These experiences can exceed an individual's psychological capacity to respond effectively (Bellis & Zisk, 2014; Woodbury, 2019). Around the world, up to 30% of children and adolescents encounter various types of traumas, such as sexual assault, emotional abuse, or neglect. (Stoltenborgh et al., 2015; Haselgruber et al., 2021).

All childhood traumas are from external sources and may be accompanied with unidentified physiological variations that are triggered by external circumstances. After the events occur, several internal transformations emerge within the child (see Bridge & Duman, 2020). Exposure to trauma is prevalent in childhood and adolescence and is linked to emotional and behavior issues in young adults (Darnell et al.,2019).

Younger individuals face an increased probability of being abused and, if abused, are more prone to developing post-traumatic stress disorder (PTSD) (Kilpatrick & Acierno, 2005). Children face various type of trauma during their development. Adverse Childhood Experiences (ACEs) are major aspect of trauma among children. The ACEs include, a range of experiences such as physical abuse, emotional abuse, sexual abuse, household substance abuse, household mental illness, parental separation and/or divorce, violence to mother, imprisoned family member, abandonment, and physical or emotional neglect. Additionally young children may also experience trauma from parental rejection, violent behavior, maltreatment, accidents, natural disasters, war and ethnic unrest, invasive medical

procedures, loss of attachment figure. Examples of mistreatment include consistent humiliation, neglect, verbal and physical abuse, and sexual molestation (see Babakhanlou & Beattie, 2019). Trauma experience in childhood have serious impact on a child's developmental trajectory. This includes changes in child's behavior, cognition, physical well-being, and emotional state.

1.4. Impact of childhood trauma

Trauma experiences can have a significant impact on the mental and physical health of children and adolescents. Trauma disrupts the typical development of critical brain regions: the brainstem, which is essential for stress management, survival, and metabolic functions; the midbrain and diencephalon, which oversee sensory and motor functions, sleep, and appetite; the limbic system, responsible for emotional regulation, attachment, and mood; and the cortex, which supports cognition, language, and reasoning abilities (Perry, 2006). Studies also show that children who have had trauma exhibit immediate indications of sleep disruption and identify nightmares as their primary post-trauma symptom (Wamser-Nanney & Chesher, 2018).

Childhood traumas have significant effect on most emotional, psychological and physical illnesses, and may persist into adulthood if not addressed. Childhood trauma has effect on brain, attachment, behavior; emotion, cognition, subsequent trauma, relationship with others and psychological illness. Furthermore, the impact of trauma can vary depending on several factors, such as the severity of the trauma, the child's age at the time of the trauma, and the availability of support from family, friends, and community. The following sections present the most common impacts of trauma on children and adolescents.

1.4.1. Developmental Difficulties

Trauma can impact a child's developmental trajectory, potentially leading to delays or disruptions in physical, cognitive, and social-emotional development. Childhood trauma encompasses several experiences that can significantly impact a child's development. Exposure to trauma in infancy can alter a child's long-term ability to manage stress both affectively and behaviorally (Schore, 2001). These experiences encompass abuse (physical, emotional, or sexual), neglect, witnessing violence, loss of a loved one, disasters, and other occurrences that significantly disrupt a child's sense of safety and wellbeing. Early childhood trauma can lead to a discrepancy between biological age and developmental age due to disruptions in normal brain development (Colich, 2020). Another study proposes that numerous adult diseases originate from adverse childhood experiences during early stages of life (Shonkof et al., 2012). Children are vulnerable due to their ongoing developmental stage and limited resources. Though, they have the ability to continuously develop and acquire abilities to adjust to many challenging situations. While some individual gain helpful strategies and skills, others may develop them in a harmful way. However, it is crucial to recognize that the impacts of these traumas are not homogenous. The effects of trauma on children are highly personal and can differ in several ways depending on many significant factors. These experiences are their consequences shaped by their age of trauma, developmental stage and their support system of that time of experience.

1.4.2. Psychological Functioning

Trauma has impact on emotional, cognitive, and behavioral domains of psychological functioning. Experiencing psychological trauma at a young age raises the likelihood of developing psychological issues later in life (Kleim et al., 2007). Children who experienced maltreatment during several stages of development had more instances of

externalizing and internalizing issues and lower IQ scores compared to children who were maltreated during only one developmental period (Jaffee & Maikovich-Fong, 2011). Children and adolescents who have experienced trauma may also struggle with emotional regulation, and may exhibit behaviors such as anger outbursts, self-harm, or substance abuse. These impacts on psychological processing may result in additional difficulties for the child across his/her lifespan. These are discussed below.

1.4.2.1. Emotional disturbances. Childhood trauma may contribute to develop chronic stress and inability to control emotion and danger cues (see Cook et al. 2003). Exposure to cumulative traumatic situations are associated to various forms of psychological distress in children (Hodges et al., 2013). Children who undergo trauma may exhibit a variety of emotional consequences, such as fear, anxiety, depression, rage, and sadness. Additionally, individuals may experience challenges in managing their emotions and may also struggle with feelings of guilt or shame. Children who experience violence, either as a victim or the observer, are more likely to acquire a sense of self-worth and self-identity issues due to abusive connections during their early development, the following can result in anxiety, depression and low self-esteem. (Hurt et al., 2001).

Children who suffer from trauma may be more vulnerable to recurrent trauma, lack clear life objectives, and struggle to establish relationships due to challenges in emotion regulation and recognition of emotional cues (Cook et al., 2003). In extreme cases, these intense emotions can obstruct a child's continued physical, emotional, social, and intellectual development, thereby constituting childhood trauma.

1.4.2.2. Cognitive Impairment. The childhood trauma may create impairment and severe turbulence in IQ, intellectual performance, attention, reading skills, and executive functioning (Delaney-Black et al., 2002; Polak et. Al.,2012). This can lead to difficulties in learning, problem-solving, thinking logically, planning, anticipate future, sustain attention,

deficits in language development, reasoning, abstract reasoning skills, academic performance and decision-making. Research has also demonstrated a correlation between experiences of childhood trauma and maltreatment diminished cognitive functioning. (Barczyk et al., 2023; Hong et al.,2018). This association is observable in both non-clinical and clinical populations, across various cognitive areas, including working memory, inhibitory control, and overall intelligence. (Cowell et al., 2015). The link between cognitive function and childhood trauma aligns with expectations, considering that such trauma is linked to changes in the anatomy, functionality, and connectivity of critical cognitive regions, including the prefrontal cortex, hippocampus, amygdala, and alterations in the integrity of white matter tracts, notably within the corpus callosum. (Jedd et al.,2015; Cimeša et al.,2023). Exposer to violence in early childhood are associated to low academic performance (Hurt et al., 2001).

1.4.2.3. Behavioral Changes. Childhood trauma experiences have enormous impacts on their bahavioral outcome in later life. Childhood trauma and adversity were cited by college students as causes of substance misuse, obesity, unhealthy eating habits, and mental disorders. (Windle et al., 2018). Survivors of trauma frequently resort to substance used to reduce the impact of traumatization and self-medicate to cope with painful memories and emotions linked to adverse events and situations (Khoury et al., 2010). One research on 25 juveniles accused of homicide, almost all (96%) came from dysfunctional familial circumstances marked by domestic violence and drug misuse, as well as frequent shifts in carers. Furthermore, a significant majority (90%) had encountered either physical, emotional or sexual abuse carried out by a family member, the most common type was emotional followed by physical and sexual trauma (Myers et al.,1995). Individuals who have experienced trauma may engage in self-imposed isolation as a result of the intense and complex mental and emotional states they experience following a traumatic incident, which

can have adverse impacts on their overall well-being (see Brand et al., 2017). When people face and acknowledge their trauma, they build resilience and are better equipped to handle future challenges, unlike those who ignore their painful experiences and find themselves more vulnerable when adversity strikes again. (Shallcross et al., 2010). They may also engage in risky behaviors, such as substance abuse, self-harm, or promiscuity, as a way to cope with their emotions. People who've experienced childhood trauma often cope through self-medicating with drugs and alcohol, dissociating from painful memories, or engaging in Tension Reduction Behaviors such as compulsive sexual activity, bingeing and purging, or self-harm, suicidality and impulsive violence all as ways to temporarily distract from and alleviate their deep-seated emotional pain. (see, Briere & Jordan, 2009).

1.4.3. Relational and Social Impairment.

Trauma can impact a child's ability to form and maintain healthy relationships. Children who have experienced trauma may have difficulty trusting others, and may struggle with social skills such as communication and conflict resolution. Individuals who have experienced trauma often describe difficulties in social interactions and relationships (Cook et al., 2005). Children with histories of exposure to violence tend to have problems understanding social cues and have difficulty adopting their behavioral arousal to appropriate social demands. Trauma can also impact a child's ability to form healthy relationships with others. Children who experience trauma may struggle with trust, communication, and close relationship or familiarity (Purvis et al., 2013).

1.4.4. Patho-Physical Impact.

Trauma can also have physical effects on children, including headaches, stomach aches, and other physical symptoms. Children may also experience sleep disturbances, nightmares, and a general sense of fatigue. Childhood adversities and traumas have been

found to be associated with detrimental physical health problems (Beilharz et al., 2020). It can also impact the immune system, making a child more susceptible to illness (Iacono et al., 2018). Childhood traumas may contribute to treatment resistance in epilepsy patients (Yilgör & Kurhan,2024). Experiencing trauma is not same for all, same incident can impact differently on different person. For example, complex trauma has been linked to enduring health consequences (Felitti et al, 1998). Many young people experience physical issues without being aware of them, and self-injury is a regular occurrence. Occasionally, individuals may report some unusual pain in different regions of their body, despite the absence of any identifiable physical source. People who have experienced childhood trauma and abuse have a higher likelihood of being obese, suffering from hypertension, and developing diabetes (Greenfield & Marks, 2009; Roy et al., 2010).

1.4.5. Mental Health Impact.

Trauma can lead to symptoms of anxiety, depression, and post-traumatic stress disorder (PTSD) (Grant et al., 2008). Childhood adversities and traumas have been found to be associated with detrimental mental health problems, and delayed development in children (Hong et al., 2018; Hurt et al., 2001; Shonk & Cicchetti, 2001; Windle et al., 2018). Children with higher exposure to violence in correlates with poorer performance in school, symptoms of anxiety and depression, and lower self-esteem (Hurt et al., 2001). Experience of childhood sexual abuse showed about 30% prevalence to develop eating disorder (Behar et al., 2016). Individuals subjected to childhood trauma are at a heightened risk of facing depression in their adult years, experiencing more persistent depressive episodes, or showing reduced responsiveness to therapeutic interventions. A comprehensive systematic review and meta-analysis examining the impact of childhood trauma on clinical outcomes in bipolar disorder found that those with a history of such trauma exhibited increased

severity and more frequent occurrences of mania, depression, and psychosis, along with a greater likelihood of having co-occurring disorders. (Palmier-Claus et al, 2016). The adverse outcomes of trauma Increase the development of psychotic symptoms (Arseneault et al., 2011; Schreier et al., 2009). Childhood trauma such as childhood sexual abuse and childhood physical abuse can lead to emotional distress and psychopathology in adolescence and young adulthood (Fergusson et al., 2008; Wright et al., 2009). Severe childhood trauma and delusional ideation can develop hallucinations and emotional reactivity in young adults (Wright et al.,2020). Childhood emotional abuse and childhood emotional neglect can lead to depression, anxiety, borderline personality disorder, post-traumatic stress disorder and somatoform dissociation (Fung et al., 2020).

1.4.6. Functional Impairment

Childhood trauma can cause functional impairment in the individual (Lewis et al.,2019; Cotter et al., 2019). Exposure to severe trauma during childhood places individuals at elevated risks for a number of dysfunctional as opposed to resilient pathways (Bonanno, 2004; De Young et al., 2011). Stress and coping abilities are both impaired as a result of childhood trauma. (Schore, 2001; Teicher et al., 2014). Experiencing multiple traumatic events during childhood until the age of 16 is linked to increased risks of psychiatric disorders and negative functional outcomes in adulthood, such as difficulties in finding and maintaining job and social isolation. Childhood trauma exposure was linked to elevated rates of adult mental and functional outcomes even after accounting for several childhood risk factors, such as psychiatric functioning, social isolation and failure to hold a job (Copeland et al, 2018). PTSD led to the development of functional impairments in several domains including general tasks and demands, mobility, self-care, domestic life, interpersonal interactions and relationships, major life areas, and community, social, and

civic life (Jellestad et al., 2021). Research shows that among women who have experienced childhood abuse, symptoms of PTSD might predict substantial psychosocial impairment (Spertus et al, 2003). This suggests that the impact of childhood abuse-related PTSD symptoms is enduring, harmful, and widespread, affecting various aspects of functional impairment (Cloitre et al., 2005). One meta-analysis reveals that trauma-exposed children, both non-familial and familial, exhibit severe cognitive abnormalities in language, verbal abilities, and general IQ, with PTSD exacerbating these impairments, particularly in executive functioning, indicating the significant impact of trauma exposure on cognitive outcomes, independent of PTSD diagnosis (Malarbi et al., 2016).

1.5 Coping with Childhood Trauma

When faced with increased demands or adversities, individuals demonstrate a unique capacity of adjusting with those. This unique process, i.e., coping is observed from very early childhood. Throughout different developmental stages children adopt many coping strategies according to their unique life experiences. When confronted with stress, individuals attempt not only to deal with emotional experience, expression, and physiological reactions, but also to coordinate motor behavior, attention, cognition, and reactions from the social and physical environments (Ogden, 2021; Compas et al. 2001; Eisenberg et al. 1997; Lazarus & Folkman 1984). Furthermore, researchers have established links between coping and several aspects of self-regulation, such as behavioral self-regulation (Metcalfe & Mischel, 1999), ego control and resiliency (Block & Block, 2006) and self-regulation in general (Aspinwall & Taylor, 1997). Childhood traumas played a huge role to cause impairments in their coping strategies (Majer et al.,2010; Cowell et al., 2015). Studies have showed that children who experience early childhood trauma are more susceptible to utilizing alcohol and drugs as a coping mechanism for stressful circumstances

(Enoch, 2011). Children and adolescents are more susceptible to develop disasters than adults because they have limited ability to adapt and cope with stress, and struggle to regulate their anxiety (Norris et al., 2002; Weems & Banks., 2015).

In the literature, different classifications of coping strategies have been proposed. The type of coping used by the children depends on their age, gender, resources, social context, and the nature of stressors they face, such as divorce, illness, or parental conflict (Wolchik & Sandler, 2013). When a child faces any traumatic situation, how he/she responds and adopt is his or her coping behavior. Most generally, coping behavior are categories as positive and negative coping. Different coping responses might be beneficial for some children in some situation and whereas they might not be beneficial for other or in other situations. Coping styles can also be categorized as active or passive. Active coping involves the survivor taking active action to heal from their experiences, while passive coping refers to minimum or no effective action being made to overcome adversities, as they are seen as unavoidable by the survivor (Olff et al., 2005). There is a developmental classification of coping strategies, considering age changes (Zimmer-Gembeck & Skinner, 2016). Deci and Ryan (1985) categorized the strategies into three groups based on their adaptive functions: competence, relatedness, and autonomy. These methods revolve around the exchange of possibilities to achieve one's own objectives.

Research has identified several coping mechanisms that children may use to deal with difficult situations. Lazarus and Folkman (1984) made significant contributions by such as differentiating between problem-focused and emotion-focused coping strategies to address the underlying issue that triggered unpleasant feelings, while the latter focuses on alleviating the resulting pain. Coping has also been distinguished between active and avoidant coping strategies (Schaefer & Moos,1992). Ayers and Sandler (1999) were wanted

to explore and differentiated between numerous copings; they suggested five factor model of coping strategies. Those coping were problem-focused coping, positive cognitive restructuring, distraction strategies, avoidance strategy, and support seeking strategy. There were many types and discriminations of coping. Among all, these five-factor model proved superior in explaining childhood coping over other models of coping (de Boo & Wicherts, 2009). These five factor copings are described below

Problem-focused coping. This coping mechanism involves taking actions to directly address the problem at hand. Children who use this mechanism try to solve the problem by seeking information, making plans, or taking steps to change the situation. For example, a child who is being bullied might confront the bully or seek help from a teacher.

Positive cognitive restructuring. Cognitive restructuring is a technique that aims to modify someone's ideas and thought patterns. The objective of this intervention is to mitigate the adverse impact of deleterious cognitive patterns on an individual's mental well-being (Villines, 2022). Positive cognitive restructuring involves altering the perspective of a stressful situation to see it in a more positive light. This includes adopting an optimistic mindset, encouraging positive thoughts, and developing a belief in one's ability to control the circumstances around them. This coping mechanism involves regulating emotions and cognitive restructuring that arise as a result of the problem.

Distraction strategy. This coping mechanism is a passive type of coping, without confronting the real problem or situation, or willing to solve. For example, reading books, watching Television, exercising, and engaging in hobbies or pleasure activities. It is just temporarily stepping away from the problem.

Avoidance strategy. This coping mechanism involves avoiding or ignoring the problem altogether. Children who use this mechanism try to distance themselves from the

problem by denying its existence. They act in a way that, nothing happened employing different techniques, such as wishful thinking, repression and avoidant action.

Social support strategy. This is a type of coping mechanism where a child seeks support from family members, friends, or other trusted adults. This can be an effective strategy for children who feel supported and validated by those around them.

Studies have shown that the type of coping mechanism used by children can have an impact on their psychological well-being. For example, problem-focused coping has been associated with better mental health outcomes in adolescents (Cong et al., 2019), while avoidance coping has been linked to increased risk for depression and anxiety (Grant et al., 2013). Additionally, children who have more social support tend to use more effective coping mechanisms such as problem-focused and emotion-focused coping.

Children with trauma, often shows numbness, avoidance, restricted affect, and range of dissociative responses. Dissociations are usually utilized by children when they are unable to use coping skills effectively (Perry et al., 1995; Nevan, 2007). The most familiar set of responses to threat are 'fight or flight' reactions. Traumatized children may freeze when they felt anxious (Perry et al., 1995). They also use ‘splitting technique’ i.e The splitting technique, also known as structural dissociation, is a psychological defense mechanism that allows individuals to effectively manage intricate and overpowering emotions by dividing these feelings into separate and more manageable groups, in failure to integrate the positive and negative persona of self or others (Mounier & Andujo, 2003). They commonly use fragmentation of personality, to keep the trauma out of conscious awareness (Mollon, 2018; Hodas, 2006).

Sometimes individuals with experience of being abused in childhood do not remember anything about their experiences for long time, whilst others recall some. This is

also called ‘traumatic amnesia’ (Mollon, 2018). One common reaction is that children believe that they deserve to be punished, because they are bad, i.e. if, ‘she is bad and can become good’, then there is some hope for the future. This is how they minimize the reduction of an experience to the smallest possible effect to cope (Rind et al., 2001). Another very common coping strategy is Please or Appease Strategy that children in abusive environments use to adopt pleasant behaviors (Ostler, 1969).

As discussed earlier in this section, coping skills starts to develop from an early stage of life. Children use these coping in their distress as well as in normal day to day living. They use and adopt a wide range of copings and as they grow and go through a variety of life experiences. When they faced with traumatic situation, especially with the severe types of traumas, this coping system often fails to serve the purpose. The children are required to adopt newer strategies in such situations. Trauma therefore, is a major contributor in changing existing coping strategies of children.

1.6 Changes in Coping Due to Trauma

Although connection between type of trauma and coping strategies have been studied, changes in coping pattern among children due to trauma has only been Investigated in few studies, such as, In a qualitative study of decade long conflict of the Democratic Republic of Congo (DRC), showed how children aged 10-15 years were adapting new coping due to the ongoing trauma, they described a change of wide range of coping strategies in response to experiences of trauma and violence (Cherewick et al., 2015), The prominent cognitive strategies observed were attempts to suppress the traumatic incident from memory, as well as the utilization of prayer (Cherewick et al., 2015). In terms of behavioral strategies, individuals exhibited risk-taking behaviors such as substance abuse, stealing, and violence. and seeking social support (Cherewick et al., 2015).

A qualitative study in post Tsunami Sri-Lanka, showed individual have employed different coping behavior, such as, resilience and faith which is basically coping through positivity, sharing their pain with others, which is social support seeking coping, engaging in activity, such as, work and leisure activity, which is distraction coping, public mourning, and taking outside which is also social support and problem focus coping (Ekanayake et al., 2013).

Research showed that during- or after-trauma experience coping of children varied on depending on the relational aspects in family and personal competencies (Punamäki et al., 2001). In a study with, children admitted in hospital for medical treatment, were found to use cognitive avoidance, positive cognitive restructuring and avoidant action coping (Landolt et al., 2002). They found age, socio-economic status and their functional status predicted coping behavior of children with diseases (Landolt et al., 2002).

1.7. Gap in Knowledge

There are numerous researches on childhood trauma, its consequences and different type of childhood coping behavior. However, these constructs have been generally studied separately. A comprehensive understanding of the development of coping among children going though trauma and the impact of trauma and other correlates of coping behavior of children is still incomplete.

There has been little research on the impact of childhood trauma on coping mechanism in the world. Such knowledge is practically absent in the context of Bangladesh. The present study is therefore, designed to address this gap in knowledge on how trauma effect children's coping behavior.

Furthermore, a comprehensive analysis involving most of the trauma experiences and all of the detailed coping type proposed by the 5-component model has largely been ignored in previous studies. This gap led to the planning of the present study to include wide range of trauma exposure and types coping.

Outcome of the study might help us to get a comprehensive idea on the relationship between childhood trauma and childhood coping behavior. It is a hope that the result of the study will help to plan intervention for childhood trauma and positive coping of children.

1.8. Objectives of the Study

The main aim of the present study is to understand the relation between trauma and coping behavior of children. The objectives are -

1. To find out impact of trauma on coping behavior among children.
2. To find out the correlates of coping behavior of children.

CHAPTER 2

METHOD

Methods

This research aims to gain insight into the relationship between impact of trauma and subsequent coping behavior of children. When children face stressful situation, their responses vary widely according to their coping resources and the nature of the stressor. This research attempted to acquire a comprehensive understanding of the variation of coping behavior among children in relation to the nature of past trauma and other contextual, psychosocial and socio-demographic variables. This chapter presents research design, selection of participants and instrument, procedure, and ethical aspects pertinent to this research.

2.1. Design

This study employed a quantitative cross sectional survey design. Data on coping behaviors from child participants with and without trauma history have been compared to understand the impact of different types of trauma exposure on coping behaviors of children.

2.2. Participants

Purposive sampling was used to recruit participants within age range of 9-13 years. Purposive sampling was used as it is generally recommended for selecting most suitable participants from the population based on focused criterion and also because it saves resources (Patton, 2002).

The participants have been selected from fourteen districts of Bangladesh namely Dhaka, Barishal, Nilphamari, Gopalgonj, Natore, Rangamati, Patuakhali, Naoga, Sirajgonj, Joypurhat, Khulna, Kurigram, Feni and Manikgonj (see Figure 2.1). They were recruited from institutions (including schools, Madrashas, foster cares) as well as from community

(including both rural and urban community). The children were able to comprehend the items and respond to the interview.

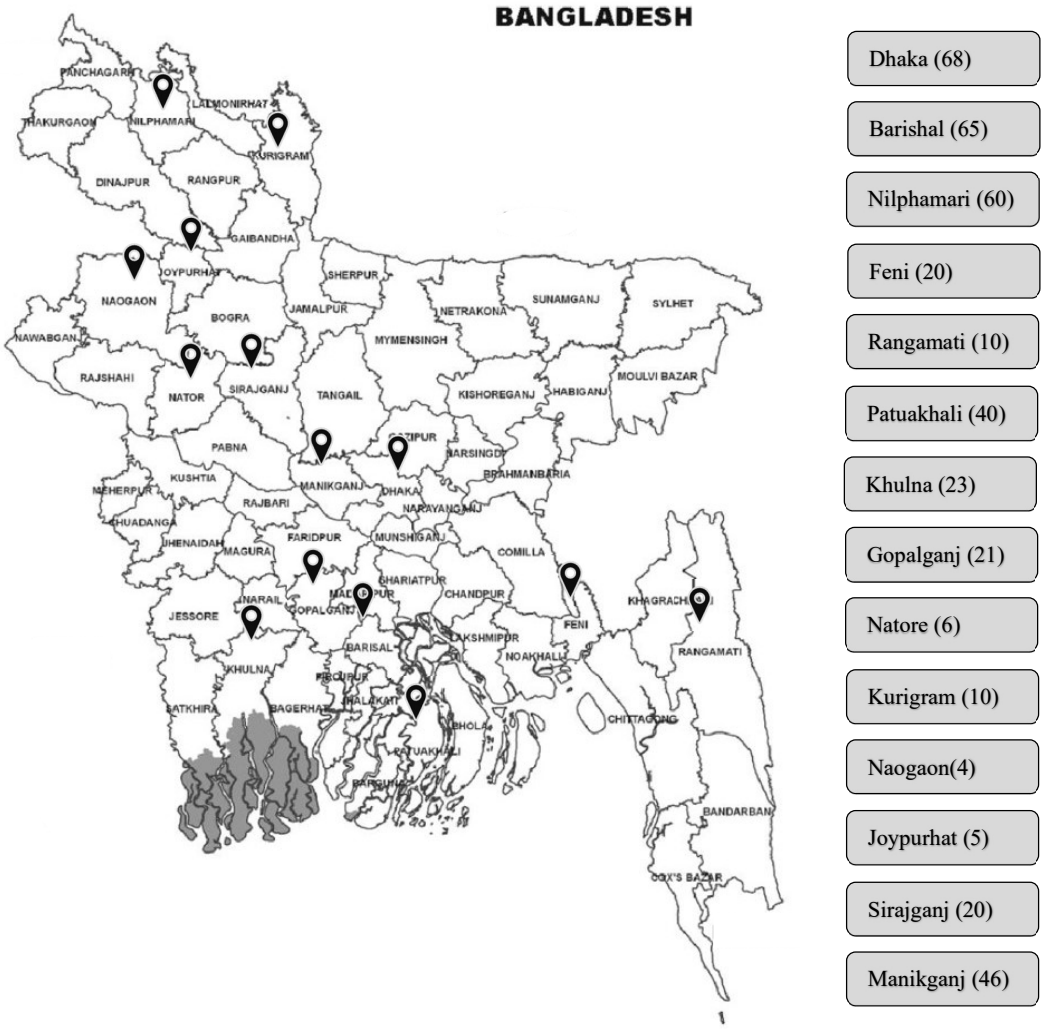

Figure 2.1. Distribution of study participants across the country.

For the participant from institutions, permission from the institutional authority was taken before proceeding with participant selection. Age of the participants (9-13 years) was the only inclusion criterion used for selecting participants. Several exclusion criteria were used considering the concerns regarding quality of data and wellbeing of the participants.

The present study deliberately excluded individuals who exhibit severe neurological and psychiatric problems, significant developmental delays, or profound intellectual disability.

The implementation of this exclusion criterion serves the purpose of maintaining the validity of the research outcomes and ensuring the protection of individuals who may be affected by these conditions. The research approach required that children possess the ability to fully interpret and reply to particular questionnaires. Children who experience significant cognitive and linguistic disabilities may face challenges in understanding the queries or providing information and therefore needed to be excluded. Moreover, the existence of a substantial health or mental health issue, such as a profound neurological or psychiatric disorder, may potentially hinder the children's ability to employ effective coping strategies and thus data from these children may confound the interpretation and potentially obscure or compromise the internal validity of the study. The exclusion of these participants is intended to mitigate the potential bias in our findings and maintain the methodological integrity of the study. It is imperative to recognize that the omission of children with severe illnesses, albeit justified from scientific and ethical perspectives, is a noteworthy constraint of this study. The findings may lack representativeness or generalizability to this specific subset of children. Additionally, it is crucial to conduct further study specifically dedicated to these groups in order to acquire a thorough comprehension of their distinct experiences and requirements.

The rationale behind this decision to exclude is based on the ethical principle of nonmaleficence and the scientific imperative for precision, fidelity, and inclusivity in our research outcomes. Further research efforts are required to enhance our understanding and promote the progress of knowledge pertaining to children with severe impairments. These

research endeavors should employ adapted techniques and ethical frameworks that take into account the unique circumstances and capabilities of these children.

2.3. Sample Size

Estimation of sample size was done using the widely used rule of thumb for survey research "N ≥50+8m" (where N = sample size, and m = number of variable) (see Green, 1991). Considering the number of constructs (43) initially planned for the survey, the formula suggested a sample size of 394 (i.e., 50 + 8 X 43). This study recruited 398 children as participants.

2.4. Measures

Several instruments were used to measure the contracts considered in the study. These include a range of custom-built and translated or adapted instruments. Custom-built instruments include socio-demographic questionnaire, Children and Adolescent trauma checklist, Children, and Adolescent family conflict questionnaire. The already available adapted instruments were the Children's Revised Impact of Event Scale (CRIES-13; Perrin et al., 2005; Deeba et al., 2014), and the Pro-social Behavior section of the Strengths and Difficulties Questionaries (SDQ; Goodman, 1997; Mollick & Goodman, 2001). Due to absence of any adapted version, the present researcher had to translate the Children's Coping Strategies Checklist revision 1 (CCSC-R1; Sandler & Ayers, 2000) and the Attachment of Children (AQ-C; Muris et al., 2001). Necessary permissions were taken from the authors for translation and use of the instruments. The details on the instruments are presented in the following.

2.4.1. Socio-demographic Questionnaire

A demographic questionnaire used to gather descriptive data on the participants. This questionnaire has collected information regarding child age, gender, place of residence, education status, birth order of the child as well as of the parents, parental education, family income, family history (family structure, number of family members, mental health issues, sibling number). All the information collected to understand the socio demographic context of the participants.

2.4.2. Children's Revised Impact of Event Scale (CRIES 13; Perrin et al., 2005)

The Children's Revised Impact of Event Scale (CRIES) is a concise and child-friendly assessment tool created by the Children and War Foundation (Perrin et al., 2005) to identify children who may be vulnerable to develop Post-Traumatic Stress Disorder (PTSD). This I3-item self-report measure is suitable for children aged between 9-17 years. The items are presented with four-point scale with options, not at all = 0, rarely = 1, sometimes=3, often = 5. There are three sub-scales namely, intrusion (four items), avoidance (4 items), and arousal (5 items).

The Bangla version of the CRIES-13 (Deeba et al., 2014) was used in this study to assess the impact of traumatic events experienced by children. Usable Cronbach alphas were reported for the Bengali version of the full scale as well as the three sub-scales (total scale = 0.74, intrusion = 0.60, avoidance = 0.58 and arousal = 0.50; see Deeba et al, 2014).

2.4.3. Strength and difficulties questionnaire (SDQ; Goodman, 1997)

The Bangla translation of Strength and Difficulties Questionnaire (SDQ; Mullick & Goodman, 2001) was used. The SDQ consists of 25 items: emotional symptoms (5 items), conduct problem (5 items), hyperactivity/inattention (5 items), peer relationship problem (5

Items), and pro-social behavior (5 items). The predicted five-factor structure (emotional symptoms, conduct problems, hyperactivity-inattention, peer problems, prosocial behaviors) was confirmed. Internalizing and externalizing scales were relatively "uncontaminated" by one another. Reliability was generally satisfactory, whether judged by internal consistency (mean Cronbach alpha .73), cross-informant correlation (mean= 0.34), or retest stability after 4 to 6 months (mean= 0.62; Goodman, 2001) The SDQ has been translated into over 30 languages. In this study only pro-social behavior questionnaire section was used.

2.4.4. Children's Coping Strategies Checklist Revision 1 (CCSC-R1; Ayers & Sandler, 2000)

The Bangla translation of CCSC-R1 was used to assess children's coping with problems. It's a self-report inventory with 54 statements. The CCSC-R1 is suitable for children aged 9-13 years and takes around 15 minutes to complete. Items are classified into 14 subscales under four dimensions of children's coping strategies namely, active coping, distraction, avoidance, and support seeking (see Figure 2.2).

Active coping subscales are organized into two categories, which are, problem focused coping and positive cognitive restructuring coping. Subsequently, problem focused coping is comprised of three subscales i.e., cognitive decision-making, direct problem solving, and seeking understanding. The positive cognitive restructuring includes positive thinking, optimistic thinking, control, and minimization subscales. Distraction coping consists of two subscales namely, physical release of emotions, and distraction. Avoidance coping consists of three subscales namely, avoidant actions, repression, and wishful thinking. The support seeking strategies coping includes two subscales which are support for actions, and support for feelings.

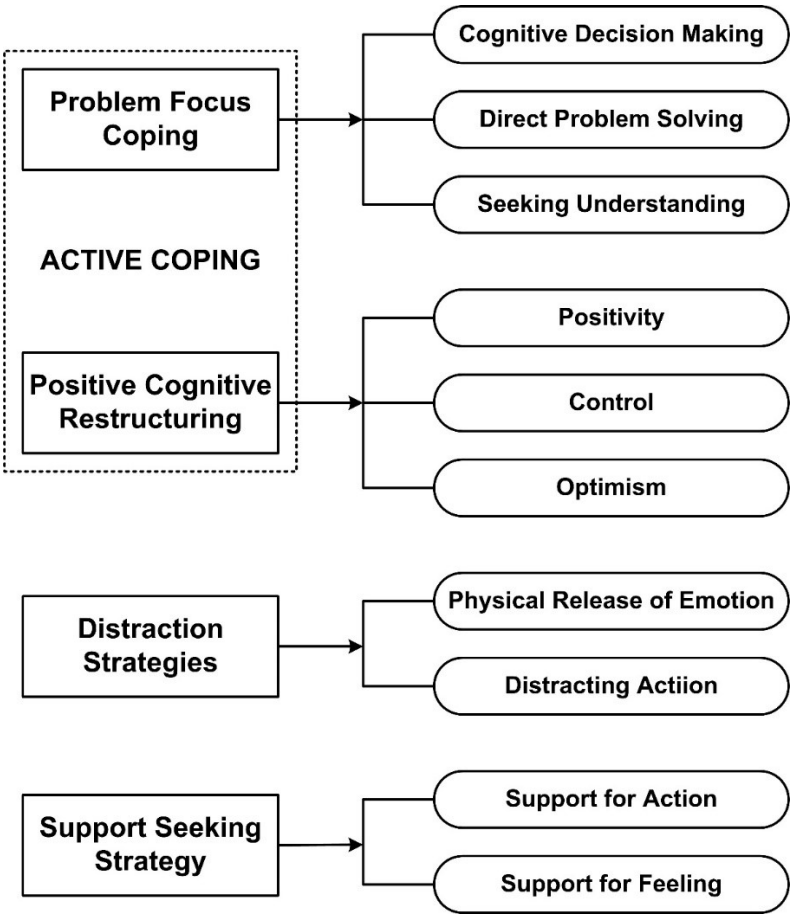

Figure 2.2. Coping categories used in the present research.

Children were asked to describe how often they usually use each of the behaviors described in 54 items on a scale of 0-3 (0=never, 1= sometimes, 2=often, and 3=most of the time) when they face a problem. Score for the subscales is calculated by adding items scores under the specific subscales. The average scores from each of the subscales under the four coping dimensions are used as the score of the coping dimension. Adequate internal consistency reliability has been reported for the four coping dimensions of the CCSC-R1 (Ayers et al., 1996; Sandler, Tein, & West, 1994). Chronbach's alpha was .88 for active coping, .77 for distraction strategies, .65-.69 for avoidance strategies, and .83-.86 for support seeking. The CCSC-R1 was theoretically derived and the factor structure has been supported

by earlier confirmatory factor analytic studies (Ayers & Sandler, 2000; De Boo & Wicherts, 2009).

Absence of Bangla version of the CCSC-R1 necessitated the translation of the instrument for use with the study population. The researchers developed a Bangla translated version of the CCSC-R1 with permission form the author (see permission letter attached as Appendix C2). Upon obtaining authorization from the author, the research team, consisting of the researcher and supervisors, proceed to translate the items into Bangla. The emphasis was placed on conceptual equivalence of items rather than on literal translation. The items translated into Bangla were subsequently retranslated into English by a Bangladeshi individual with no prior knowledge of the questionnaire. The back-translated English version was then sent to the author to assess the equivalence between the back-translated and the original English versions. The list of experts contributing in back translation is presented in Appendix-D2. The review of the original and back-translated version suggested linguistic changes to three items, which were made accordingly and the final the Bangla version of CCSC-R1 was prepared. The detailed process used in preparing the Bangla CCSC-R1 is presented in Figure 2.3.

The Cronbach's alpha coefficients were as follows: .72 for cognitive decision making, .64 for direct problem solving, .60 for seeking understanding, .84 for problem focus coping, .56 for positivity, .67 for control, .73 for optimism, .80 for positive cognitive restructuring, .90 for active coping, .63 for distraction action, .70 for physical release of emotion, .76 for distraction strategies, .80 for support for actions, .71 for support for feeling, and .86 for support seeking strategies. Coping involving avoidance action, repression, wishful thinking and avoidance strategies were excluded for low Cronbach’s alpha (.29-.33) from the analyses.

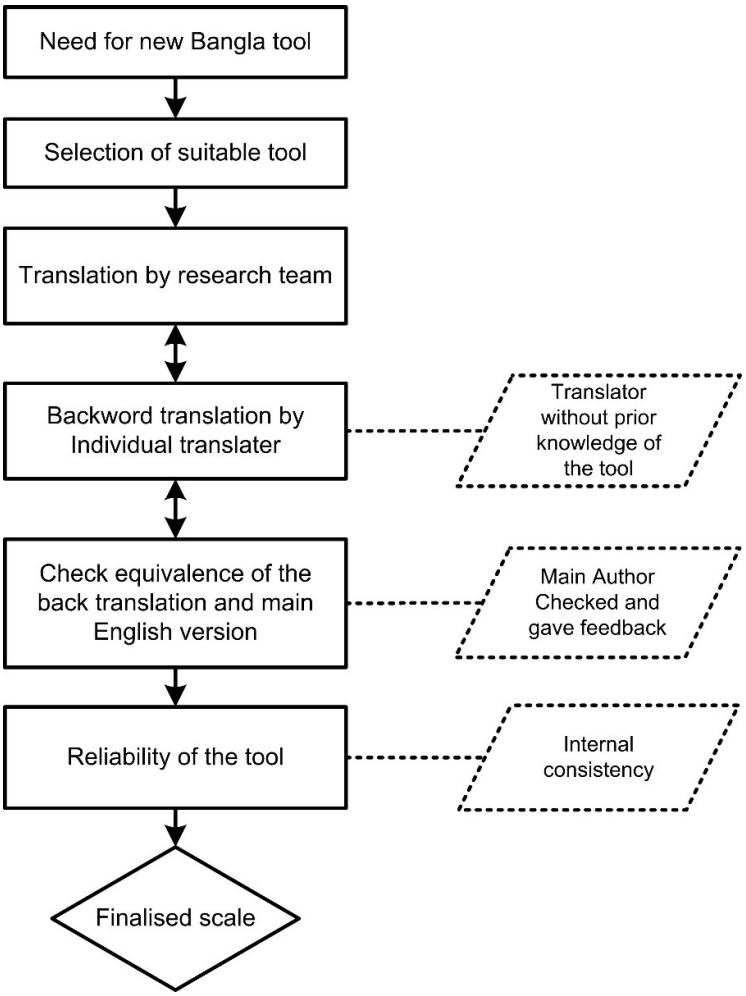

Figure 2.3. Steps used in adaptation of tool

2.4.5. Attachment Questionnaire of Children (AQ-C; Muris et al., 2001)

The AQ-C is 1-item self-report measure of children's attachment style that is based on (Hazan & Shaver's, 1987) single item measure of adult attachment style. The AQ-C is adapted from Attachment Questionnaire AQ (Hazan & Shaver's, 1987) for adults. The AQ and AQ-C are theoretically grounded in attachment theory and the work of Bowlby and Ainsworth (Muris et al., 2001). Children were given three descriptions of feelings and perceptions about relationships with other children and were asked to choose the description that best fits them. It is a single item tool and it takes only 3-5 minutes to be completed. The

measure classifies children according to one of three attachment styles: Secure Attachment, Avoidant Attachment, or Ambivalent Attachment. This tool is suitable for individual between the age of 9 and 18 years.

Due to absence of Bangla version of Bangla version of AQ-C necessitated the translation of the instrument for use with the study population. The researchers developed a Bangla translated version of the AQ-C with permission form the author (see permission letter attached as Appendix D4). The same back translation process used in was for CCSC-R1 was followed in preparing the Bangla AQ-C (see Figure 2.3) and it also checked by the main author (see back translation feedback as Appendix C4)

2.4.6. Child and Adolescent Trauma Checklist

To assess exposure and intensity of trauma between child and adolescent, this 21-item screening tool was developed. Although tools are available to assess trauma across the globe, careful screening indicated lack of suitability of those in Bangladesh context. This tool assessed history of exposure to potentially traumatic experiences, which include direct exposure to or witnessing of severe accidents, illness or natural disaster, family or community conflict or violence, and sexual molestation, experience of hijack or kidnap, animal attack, COVID-19 pandemic related trauma, physical abuse, painful medical procedure, death of close person.

Rigorous process of tool development was followed. Already available childhood trauma tools, as well as texts and literatures on childhood trauma have been checked and analyzed to gain a comprehensive understanding of childhood trauma experience. Initially 21 commonly reported trauma events were selected and initial items were developed on those area. The tool was then reviewed by 15 mental health experts (Psychiatrist and Psychologist) on the suitability of the items in assessing childhood trauma (see the list of

judges as Appendix-D3). The review resulted in retention of 17 items for assessing child and adolescent trauma. All these items pass the selection criteria of average rating of 2.5 by judges (on a scale of 0 to 4). During the pilot administration of the tool, children reported additional instances of traumatic experiences, and their traumatic experiences of COVID-19 pandemic, this resulted in inclusion of three additional items in the tool and an additional item was inserted in the scale to account for other types of traumas that were not covered by the main scale. This item was added to capture numerous traumatic situations stated by the participants, such as transferring houses and schools and losing friends. The detailed process of the development of the checklist is presented as Figure. 2.4.

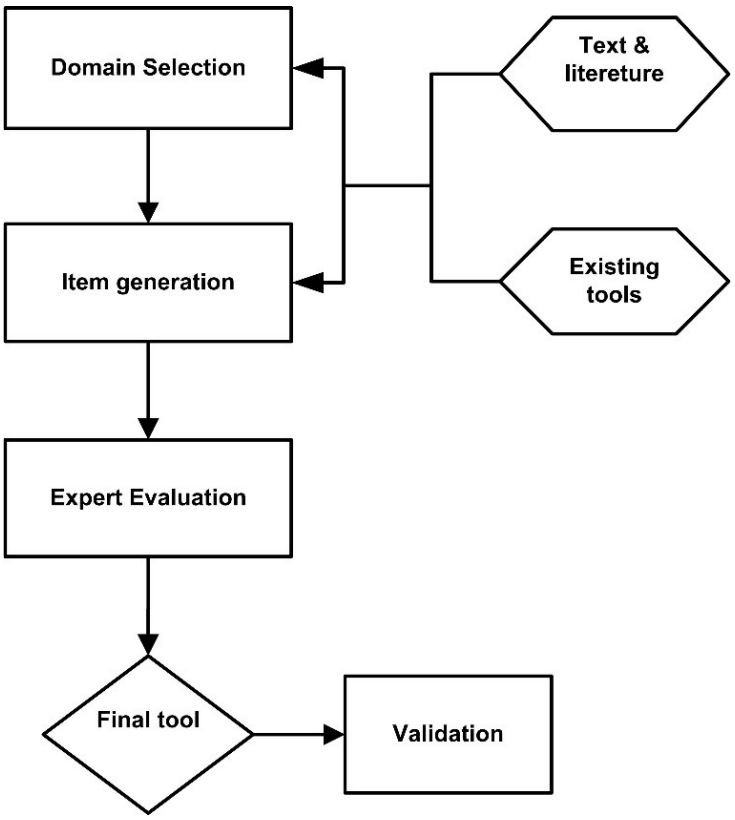

Figure 2.4. Steps used in the development of the Child and Adolescent Trauma Checklist.

Criterion validity of the newly developed Child and Adolescent Trauma Checklist was tested with scores on the CRIES-13-Bangla (Deeba et al., 2014) and a moderate and

significant positive correlation (r= .421) between the two indicated good criterion validity of the Child and Adolescent Trauma Checklist.

2.4.7. Children and adolescent's family conflict scale.

A rigorous process of tool development was followed. The available resources on children's family conflict, such as tools, texts, and literature, have been extensively reviewed and analyzed to gain a full grasp of various scenarios involving childhood family conflict. At first, a collection of 5 commonly reported family disputes was selected, and initial things were generated in this area. Subsequently, 23 mental health professionals, including psychiatrists and psychologists, were solicited for their input regarding the appropriateness of the items. A panel of fifteen professionals (see the list of judges as Appendix-D3) provided their insightful insights. Among 5 items 3 items were selected by them. All these items pass the selected criteria of average or high rating of 2.5 on a scale of highest 4 points.

The same process of tool development used in as for The Child and Adolescent Trauma Checklist tool (See Figure 2.4). These three items have evaluated the familial conflict experienced by children inside their own families. The reliability was reasonably satisfactory, as indicated by the internal consistency measure Cronbach’s alpha .74. The process of developing and validating the scale was identical to that of the Children and Adolescent Trauma Checklist.

2.5. Procedure

Socio-demographic details of the participants were collected from the children, or when unsuitable, from their legal guardian. Voluntary participation was ensured. Fourteen practicing psychologists were recruited for data collection who worked voluntarily as assistants for this research. They were provided with sufficient training by the researchers.

The areas covered in the training include childhood trauma, attachment, childhood coping behavior, pro-social behavior of children, family conflict, importance of taking consent and explanatory statement, child friendly approach, practice of using questionnaire, when to refer, when to stop, consent and its meaning, non-disclosure agreement, ethical responsibility to administer the scales on the children. They have signed the oath of confidentiality (see Appendix -B4). The participants and their legal guardians were provided with detailed description about the purpose and procedures involved in this research (see Appendix- B1). Consent was taken from the legal guardians or parents along with the children based on the understanding level of the children (see Appendix-B2 & Appendix-B3).

Socio demographic questionnaire was completed by the researcher and research assistants with information mostly from the children and sometimes from parents for the younger children. Then researchers took some times to make rapport with participants and to make them feel comfortable with the interview process. Trauma questionnaires and family conflict questionnaire were presented with some cautions, e.g., if the child became psychologically and or physically aroused, then researcher checked if the child need any break. The child was interviewed for the AQ-C, and the CCSC-R1 while for the Pro-social behavior questionnaire, the guardians were interviewed. Researcher or research assistant was present all the time and give explanations, if the child wanted or researcher thought, explanations were needed. If the child felt uncomfortable, then the researcher sent him/her to a psychotherapy center. Whole set of tools (see Appendix-C1) used in one setting.

2.6. Ethical Considerations

To conduct this research, we took an ethical permission the Ethical Committee of biological science faculty, University of Dhaka. While conducting this study, researchers

consider several ethical considerations to protect the welfare and rights of the participants. detailed of the permission (see Appendix A).

2.6.1. Confidentiality

Participant was assured about confidentiality, both verbally and via the information sheet. Only the researcher has the access to any information identifying participants in Confidentiality and Privacy. The identifiable information was kept separated from other questionnaire using a code number that was only known to the researcher.

2.6.2. Voluntary participation

The information sheet and consent form informed participants, their parents and legal guardians about the voluntary nature of this research. It was clarified that they do not have to take part in the study and that if they are not willing to, and that they may choose to withdraw any time. In the present research, no reimbursement for the participants was provided. Because it might affect the choice of voluntary participation.

2.6.3. Wellbeing of the Participants

The participants have to remember their traumatic events. Some of them might have ongoing trauma. Thus, basic support of water and tissues were available at any point of the interview session or feel the need to drink. In addition, breathing relaxation techniques were taught to the participant to reduce stress and researcher also helped to practice it during the session.

2.7. Data analysis

Explanation of the relationship between trauma experience and coping behavior determined the strengths and direction (positive or negative) of relationship among the

variables. The first objective required descriptive analysis of data to identify the frequency and central tendency of the scale scores of different coping behaviors along with comparative analysis using ANOVA between the two groups. The second objective required the use of multiple regressions to identify significant contributors and correlates of coping behavior. All the statistical analyses were done using SPSS software.

The sample were divided into two groups, those with trauma and without trauma as determined by screening of childhood trauma experience and post trauma distress score using the CRIES-13-Bangla. If a participant had a high score on these tools, they have been placed in the trauma group and rest have been placed in the without trauma group. Both groups were assessed by CCSC-R1-Bangla to know the pattern of their generalized effort of coping. Coping behaviors of with and without trauma group were compared.

CHAPTER 3

RESULTS

Results

Two distinct stages of data analysis were conducted in order to interpret the data. Initially, a series of correlation studies were performed to examine the interrelationships among all variables. The second-step involved regression analyses performed to determine the factors and their respective contributions to the prediction of children's coping behavior.

3.1. Impact of Trauma in Coping

For testing the effect of specific trauma on coping behavior, analysis of variance of coping scores between trauma exposed and non-exposed children were calculated. The Assumptions of normality, linearity, and homoscedasticity were checked and no concerned was found. Specifically, a visual inspection of the normal Q-Q and detrended Q-Q plots for each variable confirmed that all were normally distributed. Similarly, visual inspection of the scatterplot of trauma against different coping behavior confirmed that the relationship between these variables were linear and heteroscedastic.

Impact of the 21 types of traumas on coping were assessed using ANVOA. Three COVID-19 related trauma are represented in Table 3.2 while the more conventional forms of trauma are presented in Table 3.1. Presence or absence of a few categories of trauma such as, seeing a dead body, going through painful medical procedure, and witnessing physical abuse, did not have any effect on any of the coping styles. Trauma from death of a close person had influence on the maximum number of copings like Cognitive decision making, Direct problem solving, seeking understanding, Positivity, Control, Physical release of emotion, Problem focus coping, Positive cognitive restructuring, Distractive strategy, Active Coping. Trauma from animal attack was the most experienced trauma by children.

The coping style that was most commonly impacted by different types of traumas were coping through physical release of emotions.

Table 3.1. Coping styles significantly impacted by the specific types of traumas.

Impacted coping styles organized under types of traumas	**Not exposed in the trauma Mean (SD)**	**Exposed in the trauma Mean (SD)**	**F**	**Sig.**
Coping type impacted by experience of earthquake (Not-exposed=356, Exposed=42)				
Physical release of emotion	1.03 (0.71)	1.31 (0.47)	6.35	0.01
Coping type impacted by experience of natural disaster (Not-exposed=314, Exposed=84)				
Direct problem solving	1.22 (0.62)	1.40 (0.55)	6.39	.01
Seeking understanding	1.10 (0.62)	1.26 (0.61)	4.07	.04
Control	1.04 (0.68)	1.20 (0.63)	4.07	.04
Problem focus coping	1.21 (0.55)	1.3 (0.50)	5.59	.02
Active coping	1.20 (0.50)	1.33 (0.44)	4.54	.03
Coping type impacted by experience of accident (Not-exposed=305, Exposed=93)				
Physical release of emotion	1.00 (0.68)	1.23 (0.70)	8.21	.00
Support for action	1.03 (0.60)	1.19 (0.70)	4.85	.03
Problem focus coping	1.22 (0.52)	1.34 (0.59)	3.88	.05
Distraction strategies	1.10 (0.58)	1.27 (0.55)	6.93	.01
Coping type impacted by experience of animal attack (Not-exposed=197, Exposed=201)				

Impacted coping styles organized under types of traumas	Not exposed in the trauma Mean (SD)	Exposed in the trauma Mean (SD)	F	Sig.
Physical release of emotion	0.98 (0.68)	1.13 (0.70)	5.32	.02
Coping type impacted by experience of riot and displacement (Not-exposed=370, Exposed=28)				
Distracting action	1.20 (0.64)	1.44 (0.47)	3.73	.05
Distraction strategies	1.12 (0.58)	1.37 (0.52)	4.94	.03
Coping type impacted by experience of being separated from family (Not-exposed=357, Exposed=40)				
Control	1.05 (0.65)	1.28 (0.82)	4.39	.04
Coping type impacted by experience of hijacking (Not-exposed=369, Exposed=28)				
Cognitive decision making	1.33 (0.65)	1.60 (0.79)	4.15	.04
Direct problem solving	1.24 (0.60)	1.49 (0.76)	4.67	.03
Seeking understanding	1.11 (0.61)	1.53 (0.62)	12.22	.00
Positivity	1.23 (0.60)	1.49 (0.57)	5.14	.02
Physical release of emotion	1.07 (0.68)	0.79 (0.81)	4.42	.04
Problem focus coping	1.23 (0.53)	1.54 (0.63)	8.92	.00
Positive cognitive restructuring	1.20 (0.52)	1.41 (0.63)	4.25	.04
Active coping	1.21 (0.48)	1.48 (0.58)	7.62	.01
Coping type impacted by experience of kidnaping (Not-exposed=379, Exposed=19)				

Impacted coping styles organized under types of traumas	**Not exposed in the trauma Mean (SD)**	**Exposed in the trauma Mean (SD)**	**F**	**Sig.**
Control	1.09 (0.66)	0.67 (0.79)	7.16	.01
Optimism	1.34 (0.66)	1.01 (0.92)	4.22	.04
Positive cognitive restructuring	1.23 (0.52)	0.93 (0.67)	5.69	.02
Coping type impacted by experience of physical abuse by family member (Not-exposed=307, Exposed=90)				
Physical release of emotion	1.11 (0.69)	0.88 (0.67)	8.29	.00
Distraction strategies	1.18 (0.57)	0.99 (0.56)	7.73	.01
Coping type impacted by experience of threat of assault (Not-exposed=367, Exposed=31)				
Support for action	1.09 (0.61)	0.83 (0.73)	5.02	.03
Support for feeling	1.06 (0.64)	0.81 (0.74)	4.15	.04
Support seeking strategies	1.07 (0.58)	0.82 (0.71)	5.36	.02
Coping type impacted by experience of assault (Not-exposed=354, Exposed=44)				
Control	1.10 (.67)	0.84 (0.71)	5.88*	.02
Coping type impacted by experience of sexual abuse (Not-exposed=348, Exposed=49)				
Seeking understanding	1.11 (0.61)	1.34 (0.68)	6.15	.01
Distracting action	1.20 (0.62)	1.41 (0.72)	4.81	.03
Support for feeling	1.01 (0.63)	1.28 (0.76)	7.67	.01

Impacted coping styles organized under types of traumas	Not exposed in the trauma Mean (SD)	Exposed in the trauma Mean (SD)	F	Sig.
Problem focus coping	1.23 (0.53)	1.40 (0.64)	4.50	.03
Support seeking strategies	1.03 (0.56)	1.24 (0.73)	5.84	.02
Coping type impacted by experience of death of close person (Not-exposed=258, Exposed=140)				
Cognitive decision making	1.28 (0.64)	1.47 (0.69)	7.08	.01
Direct problem solving	1.20 (0.60)	1.36 (0.62)	6.40	.01
Seeking understanding	1.08 (0.62)	1.23 (0.62)	5.51	.02
Positivity	1.17 (0.61)	1.38 (0.57)	11.75	.00
Control	1.02 (0.65)	1.16 (0.70)	3.98	.05
Physical release of emotion	1.17 (0.71)	0.85 (0.63)	19.36	.00
Problem focus coping	1.19 (0.53)	1.35 (0.56)	8.69	.00
Positive cognitive restructuring	1.16 (0.53)	1.31 (0.52)	7.22	.01
Distraction strategies	1.21 (0.58)	1.01 (0.54)	10.69	.00
Active coping	1.17 (0.49)	1.33 (0.48)	9.46	.00
Coping type impacted by experience of trauma from other situation such as Shifting home and school, parent's separation/ divorce, loss of a friend, bullying etc. (Not-exposed=373, Exposed=25)				
Physical release of emotion	1.09 (0.69)	0.58 (0.54)	12.89	.00

Impacted coping styles organized under types of traumas	Not exposed in the trauma Mean (SD)	Exposed in the trauma Mean (SD)	F	Sig.
Support for action	1.09 (0.62)	0.73 (0.66)	7.95	.01
Distraction strategies	1.16 (0.57)	0.86 (0.53)	6.44	.01
Support seeking strategies	1.07 (0.58)	0.79 (0.63)	5.35	.02

Note: Coping styles that were nonsignificant are omitted from the table. See Appendix D1 for the complete analyses.

As discussed earlier the present research considered a recent and ongoing trauma exposure related to COVID-19. The findings indicated pervasive influence of this trauma on the most of the coping mechanisms. These three types of traumas could not affect support for feeling coping or the physical release of emotions.

Table 3.2. Coping styles significantly impacted by the specific types of COVID-19 related trauma.

Impacted coping styles organized under types of traumas	Not exposed in the trauma Mean (SD)	Exposed in the trauma Mean (SD)	F	Sig.
Coping type impacted by experience of favorite person's COVID-19 infection (Not-exposed=311, Exposed=87)				
Cognitive decision making	1.25(0.62)	1.69(0.70)	31.34	.00
Direct problem solving	1.16(0.59)	1.58(0.58)	33.57	.00
Seeking understanding	1.04(0.60)	1.47(0.58)	34.73	.00
Positivity	1.16(0.57)	1.53(0.65)	26.41	.00

Impacted coping styles organized under types of traumas	Not exposed in the trauma Mean (SD)	Exposed in the trauma Mean (SD)	F	Sig.
Control	0.99(0.64)	1.36(0.70)	21.67	.00
Optimism	1.27(0.65)	1.54(0.74)	10.98	.00
Distracting action	1.16(0.63)	1.44(0.59)	13.20	.00
Support for action	1.02(0.62)	1.24(0.60)	9.07	.00
Problem focus coping	1.15(0.51)	1.58(0.53)	46.63	.00
Positive cognitive restructuring	1.14(0.50)	1.48(0.56)	28.91	.00
Distraction strategies	1.09(0.58)	1.30(0.54)	9.09	.00
Active coping	1.15(0.45)	1.53(0.51)	45.10	.00
Support seeking strategies	1.01(0.59)	1.19(0.58)	6.24	.01
Coping type impacted by experience of risk of COVID-19 infection (Not-exposed=353, Exposed=45)				
Cognitive decision making	1.31(0.66)	1.67(0.62)	11.78	.00
Direct problem solving	1.23(0.61)	1.47(0.60)	6.16	.01
Seeking understanding	1.10(0.61)	1.39(0.64)	8.56	.00
Positivity	1.21(0.59)	1.48(0.66)	8.08	.00
Control	1.03(0.66)	1.39(0.72)	11.36	.00
Optimism	1.30(0.67)	1.54(0.76)	5.32	.02
Distracting action	1.18(0.63)	1.52(0.58)	11.64	.00
Support for action	1.04(0.62)	1.29(0.62)	6.62	.01
Problem focus coping	1.21(0.54)	1.51(0.52)	12.04	.00

Impacted coping styles organized under types of traumas	Not exposed in the trauma Mean (SD)	Exposed in the trauma Mean (SD)	F	Sig.
Positive cognitive restructuring	1.18(0.52)	1.47(0.58)	12.23	.00
Distraction strategies	1.11(0.58)	1.34(0.50)	6.35	.01
Active coping	1.20(0.48)	1.49(0.52)	14.54	.00
Coping type impacted by experience of close person was severely sick or died due to COVID-19 (Not-exposed=365, Exposed=33)				
Cognitive decision making	1.33(0.65)	1.62(0.75)	6.04	.01
Direct problem solving	1.23(0.61)	1.57(0.57)	9.66	.00
Seeking understanding	1.10(0.61)	1.53(0.68)	14.98	.00
Positivity	1.21(0.59)	1.64(0.62)	15.69	.00
Control	1.04(0.67)	1.41(0.68)	9.31	.00
Distracting action	1.20(0.63)	1.44(0.56)	4.20	.04
Support for action	1.04(0.61)	1.40(0.71)	10.63	.00
Problem focus coping	1.22(0.53)	1.57(0.60)	13.44	.00
Positive cognitive restructuring	1.19(0.52)	1.50(0.58)	10.59	.00
Active coping	1.20(0.48)	1.54(0.57)	14.35	.00
Support seeking strategies	1.03(0.57)	1.31(0.72)	7.20	.01

Note: coping with nonsignificant impact of COVID-19 related trauma is not presented. See Appendix D1 for the complete analyses.

3.2. Identifying Correlates of Specific Types of Coping

The second objective of the study attempted to identify the significant contributors of the coping styles. Preliminary analysis was conducted to ensure no violation of the assumptions of normality, linearity, multi-collinearity and homoscedasticity. Assumption of multivariate normality were tested using box-plots which indicated that all variables in each of the regression models were normally distributed. An inspection of the normal probability plot of standardized residuals as well as the scatterplot of standardized residuals against standardized predicted values indicated that the assumptions of normality, linearity and homoscedasticity of residuals were met.

No violation of normality was indicated. Multicollinearity is a major concern for linear regression model. Relatively high tolerances for almost all the predictors for 15 variables in the regression models indicated that multicollinearity would not interfere with our ability to interpret the outcome of the regression model. However, for two coping styles i.e., 'optimism' and 'support for feeling', tolerance and VIF value for the regression models were slightly beyond the accepted value. Additionally, inter-correlation matrix was checked for the all the 15 variables used in the model which indicates none of the intercorrelation to be of concern for multicollinearity ($r < .8$; see Table 3.3a and Table 3.3b).

Table. 3.3a. Inter-correlation matrix for the fifteen factors used in the regression models.

	Variable	1	2	3	4	5	6	7	8
1	Child's education	1							
2	Mother's education	-0.06							
3	Family income	0	.42**						
4	Family members	0.02	-.22**	-0.02					
5	Number of Sibling	.21**	-.30**	-0.08	.40**				

	Variable	1	2	3	4	5	6	7	8
6	Birth order	0.07	-.31**	-0.03	.23**	.70**			
7	Child age	.39**	0.07	.20**	-.17**	0.01	0		
8	Intensity of trauma	0.06	.11*	.13**	-0.07	-0.06	-0.04	.22**	
9	PTSD symptoms	-0.09	.14**	.26**	-0.06	-0.04	0	.15**	.36**
10	Prosocial behavior	0.04	0.07	0	0.05	0.08	.12*	-0.02	-0.04
11	Trauma total	0.04	.18**	.14**	-.11*	-0.05	-0.03	.24**	.79**
12	Family conflict	.16**	0.01	.15**	-0.02	0.08	0.07	0.09	.23**
13	Secure attachment	0.01	0.05	0.01	0	0.02	0.02	0.02	-0.02
14	Female gender	-0.09	-0.02	0.05	-0.02	0.07	.12*	0.04	0
15	Rural residence	-.12*	-.31**	-.33**	0.04	0.03	0.05	-.21**	-.21**

Note. N = 398. *p < .05 ; **p < .01

Table 3.3b. Inter-correlation matrix for the fifteen factors used in the regression models (extension of Table 3.3.a).

	Variable	9	10	11	12	13	14	15
9	PTSD symptom	1						
10	Prosocial behavior	-0.08						
11	Trauma total	.34**	0.01					
12	Family conflict	.29**	-.10*	.16**				
13	Secure attachment	-.20**	.23**	0.02	-.25**			
14	Female gender	0.1	0.03	-.11*	-0.1	0.07		
15	Rural residence	-.21**	-0.04	-.16**	-.18**	-0.02	0.02	1

Note. N = 398. *p < .05 ; **p < .01

All the fifteen socio-demographic and psychological variables were used in the regression model in predicting coping strategies. Stepwise regression using Backward Method in SPSS (Thayer, 2002) for analyzing the data. The results are presented below.

Among the 15 variables, used in the model, eight were found as significant predictors that explains 22% of the variability in coping through cognitive decision making ($R^2 = .22$, $F_{(8, 381)} = 13.433$, $p < .01$; see table 3.4). The prosocial behavior was the strongest predictor ($\beta = .216$, $p < .01$) which was positively related with coping through cognitive decision making.

Table 3.4. Predictors of coping through cognitive decision making

Variable	Tolerance	B	95% CI for B		SE B	β
			LL	UL		
Child age	.771	0.060	0.011	0.109	0.025	0.124 **
Rural residence	.826	-0.174	-0.306	-0.042	0.067	-0.129**
Family conflict	.859	-0.063	-0.097	-0.030	0.017	-0.181**
PTSD symptoms	.831	0.011	0.006	0.016	0.003	0.208 **
Prosocial behavior	.971	0.051	0.029	0.072	0.011	0.216 **
Family members	.918	-0.032	-0.066	0.003	0.018	-0.084
Mother's education	.842	0.060	0.016	0.104	0.022	0.134**
Child's education	.781	0.095	0.005	0.186	0.046	0.106*
$F_{(8,381)}$			13.433**			
R^2(Adj. R^2)			.220 (.204)			

Note. CI = Confidence interval; * $p < .05$; ** $p < .01$

For direct problem-solving, nine predictors were found significant among the 15 variables, used in the model, that explains 21.8% of the variability in this coping category

(R^2= .218, $F_{(9, 380)}$ = 11.746, p < .01; see Table 3.5). PTSD symptoms were the found as the strongest predictor (β = .266, p < .01) which was positively related with coping through direct problem-solving coping.

Table 3.5. Predictors of direct problem-solving coping.

Variable	***Tolerance***	***B***	***95% CI for B***		***SE B***	***β***
			LL	**UL**		
Child Age	.883	0.058	0.016	0.100	0.021	0.132**
Rural residence	.901	-0.172	-0.288	-0.055	0.059	-0.139**
Family conflict	.878	-0.044	-0.075	-0.014	0.016	-0.139**
Trauma total	.835	0.026	-0.001	0.052	0.013	0.096
PTSD symptoms	.802	0.013	0.008	0.017	0.002	0.266**
Prosocial behavior	.962	0.044	0.025	0.064	0.010	0.205**
Birth order	.503	-0.083	-0.165	-0.001	0.042	-0.127*
Number of siblings	.448	0.098	0.010	0.185	0.045	0.148*
Family members	.806	-0.031	-0.065	0.003	0.017	-0.090
$F_{(9, 380)}$			11.746**			
R^2 (Adj. R^2)			.218 (.199)			

Note. CI = Confidence interval; * p < .05; ** p < .01

For coping through seeking understanding, nine predictors among 15 variables, collectively accounted for 29.6% of the variability (R^2=.296, $F_{(9, 380)}$ = 17.712, p < .01). Among the independent variables, the PTSD symptoms was the strongest predictor (β = .317, p < .01; see table. 3.6) of coping through seeking understanding, which was positively related.

Table 3.6. Predictors of coping through seeking understanding

Variable	Tolerance	B	95% CI for B		SE B	β
			LL	UL		
Child age	.882	0.047	0.006	0.087	0.021	0.103*
Rural residence	.827	-0.137	-0.254	-0.020	0.060	-0.109*
Trauma total	.356	0.060	0.022	0.099	0.020	0.222**
Intensity of Trauma	.357	-0.007	-0.013	-0.002	0.003	-0.186*
PTSD symptoms	.832	0.015	0.011	0.020	0.002	0.317**
Prosocial behavior	.968	0.053	0.035	0.072	0.010	0.244**
Number of siblings	.777	0.112	0.048	0.176	0.033	0.167**
Family members	.801	-0.036	-0.069	-0.003	0.017	-0.102*
Mother's education	.778	0.044	0.003	0.084	0.020	0.104*
$F_{(9,380)}$			17.712**			
R^2 (Adj. R^2)			.296 (.279)			

Note. CI = Confidence interval; * p < .05; ** p < .01

Among the 15 variables, used in the model, 10 were found as significant predictors that conjointly accounted for 31.9% of the variability in problem focused coping (R^2=.319, $F_{(10, 379)}$ = 17.717, p < .01; see Table 3.7). Notably, the PTSD symptoms demonstrated a higher Beta value (β = .297, p < .01) compared to the other independent variables, suggesting a stronger association with problem focused coping.

Table 3.7. Predictors of problem focus coping

			95% CI for B			
Variable	**Tolerance**	**B**	**LL**	**UL**	**SE B**	**β**
Child age	.882	0.059	0.025	0.094	0.018	0.151**
Rural residence	.816	-0.168	-0.27	-0.067	0.052	-0.153**
Family conflict	.865	-0.041	-0.066	-0.015	0.013	-0.143**
Trauma total	.356	0.046	0.013	0.079	0.017	0.193**
Intensity of Trauma	.352	-0.004	-0.009	0	0.002	-0.128
PTSD symptoms	.793	0.013	0.009	0.017	0.002	0.297**
Prosocial behavior	.961	0.047	0.031	0.063	0.008	0.248**
Number of siblings	.768	0.073	0.017	0.128	0.028	0.124*
Family members	.799	-0.034	-0.062	-0.005	0.014	-0.11*
Mother's education	.778	0.04	0.005	0.075	0.018	0.109*
$F_{(10,379)}$			17.717**			
R^2 (Adj. R^2)			.319 (.31)			

Note. CI = Confidence interval; * p < .05; ** p < .01

Coping through positivity, eight predictors among fifteen variables, were found as significant predictors that explains 16.2% of the variability (R^2= .162, $F_{(8, 381)}$=9.193, p < .01;see table. 3.8). Mother's education was the found to be the strongest predictor (β = .242, p < .01) which was positively related with coping through positivity.

Table 3.8. Predictors of coping through positivity

Variable	Tolerance	B	95% CI for B		SE B	β
			LL	UL		
Child age	.910	0.041	-0.001	0.084	0.022	0.094
Family conflict	.884	-0.034	-0.065	0.003	0.016	0.109*
Trauma total	.825	0.033	0.006	0.06	0.014	0.126*
PTSD symptoms	.788	0.007	0.002	0.012	0.002	0.154**
Prosocial behavior	.966	0.034	0.014	0.054	0.01	0.162**
Number of siblings	.891	0.112	0.048	0.175	0.032	0.171**
Monthly family income	.751	0.000	0.000	0.000	0.000	-0.135**
Mother's education	.726	0.099	0.055	0.143	0.022	0.242*
$F_{(8,381)}$			9.193**			
R^2 (Adj.R^2)			.162 (.144)			

Note. CI = Confidence interval; * $p < .05$; ** $p < .01$

Coping through control showed variability in six of the fifteen variables were found as significant predictors that explains for 10.5% (R^2= .105, $F_{(6, 382)}$=7.442, $p < .01$;see Table 3.9). Total Number trauma was the found to be strongest predictor ($\beta = .281$, $p < .01$) which was positively related with coping through control.

Table 3.9. Predictors of coping through control

Variable	Tolerance	B	95% CI for B		SE B	β
			LL	UL		
Trauma total	.366	0.083	0.036	0.129	0.024	0.281**
Intensity of Trauma	.366	-0.009	-0.016	-0.002	0.003	-0.201*
PTSD symptoms	.815	0.005	-0.001	0.010	0.003	0.090
Prosocial behavior	.981	0.042	0.020	0.065	0.012	0.179**
Monthly family income	.780	0.000	0.000	0.000	0.000	-0.113*
Mother's education	.794	0.066	0.018	0.115	0.025	0.146*
$F_{(6,382)}$			7.442**			
R^2 (Adj.R^2)			.105 (.091)			

Note. CI = Confidence interval; * p < .05; ** p < .01

Among the fifteen variables, used in the model, four were found as significant predictors that conjointly accounted for 7.2% of the variability in coping through optimism (R^2= .072, $F_{(4, 385)}$=7.426, p < .05; see Table 3.10). Pro-social behavior of children was the found as the strongest predictor (β = .183, p < .01) which was positively related with coping through optimism.

Table 3.10. Predictors of coping through optimism

Variable	Tolerance	B	95% CI for B		SE B	β
			LL	UL		
Secure attachments style	.916	-0.144	-0.287	-0.002	0.073	-0.102*
PTSD symptoms	.953	0.008	0.002	0.013	0.003	0.144**
Prosocial behavior	.945	0.044	0.020	0.068	0.012	0.183**
Child's education	.991	0.115	0.027	0.204	0.045	0.126*
$F_{(4,385)}$			7.426*			
R^2 (Adj.R^2)			.072 (.062)			

Note. CI = Confidence interval; * p < .05; ** p < .01

The analysis showed that out of the 15 variables examined, six were identified as important predictors that account for 13% of the variation in coping through positive cognitive restructuring. The statistical measures indicate that the model is statistically significant (R^2= .130, $F_{(6, 383)}$=9.499, p < .01). Please refer to Table 3.11 for more details. The study revealed that children's pro-social behavior was the most influential predictor (β = .205, p < .01) and had a positive correlation with coping through positive cognitive restructuring.

Table 3.11. Predictors of coping through positive cognitive restructuring

Variable	Tolerance	B	95% CI for B		SE B	β
			LL	UL		
Trauma total	.865	0.026	0.002	0.049	0.012	0.110*
Intensity of trauma	.833	0.006	0.002	0.010	0.002	0.142**
Prosocial behavior	.974	0.038	0.021	0.056	0.009	0.205**
Number of siblings	.899	0.073	0.017	0.130	0.029	0.128*
Monthly family income	.779	0.000	0.000	0.000	0.000	-0.113*
Mother's education	.729	0.072	0.033	0.112	0.020	0.201**
$F_{(6,383)}$			9.499**			
R^2 (Adj.R^2)			.130 (.116)			

Note. CI = Confidence interval; * p < .05; ** p < .01

The analysis showed that out of the 15 variables examined, ten were identified as important predictors that account for 24.8% of the variation in active coping. The statistical measures indicate that the model is statistically significant (R^2= .248, $F_{(10,379)}$ =12.502, p < .01). Please refer to Table 3.12 for more details. The study revealed that children's PTSD

symptoms was the most influential predictor (β = .253, p < .01) and had a positive correlation with active coping.

Table 3.12. Predictors of active coping

Variable	Tolerance	B	95% CI for B		SE B	β
			LL	UL		
Child Age	.893	0.042	0.009	0.076	0.017	0.119*
Rural residence	.794	-0.119	-0.217	-0.021	0.050	-0.119*
Family conflict	.862	-0.028	-0.052	-0.004	0.012	-0.108*
Trauma total	.357	0.045	0.013	0.076	0.016	0.207**
Intensity of trauma	.353	-0.004	-0.009	0.001	0.002	-0.129
PTSD symptoms	.775	0.010	0.006	0.014	0.002	0.253**
Prosocial behavior	.962	0.042	0.026	0.057	0.008	0.240**
Number of siblings	.884	0.061	0.011	0.110	0.025	0.114*
Monthly family income	.730	0.000	0.000	0.000	0.000	-0.095
Mother's education	.688	0.058	0.023	0.093	0.018	0.174**
$F_{(10,379)}$			12.502**			
R^2 (Adj.R^2)			.248 (.228)			

Note. CI = Confidence interval; * p < .05; ** p < .01

The analysis showed that out of the 15 variables examined, 5 predictors were identified as important predictors that account for 10.4% of the variation in coping through distracting actions. The statistical measures indicate that the model is statistically significant (R^2= .104, $F_{(5, 384)}$ =8.890, p < .05) Please refer to Table 3.13 for more details. The study revealed that children's mother's education was the most influential predictors (β = .285, p < .01) and had a positive correlation with coping through distracting actions.

Table 3.13. Predictors of coping through distracting actions

Variable	Tolerance	B	95% CI for B		SE B	β
			LL	UL		
PTSD symptoms	.920	0.004	0.000	0.009	0.002	0.090
Prosocial behavior	.984	0.022	0.001	0.044	0.011	0.101*
Monthly family income	.779	0.000	0.000	0.000	0.000	-0.182**
Mother's education	.809	0.121	0.076	0.166	0.023	0.285**
Child's education	.986	0.121	0.039	0.202	0.041	0.142**
$F_{(5, 384)}$			8.890*			
R^2 (Adj.R^2)			.104 (.092)			

Note. CI = Confidence interval; * p < .05; ** p < .01

The analysis showed that out of the 15 variables examined, six were identified as important predictors that account for 18.2% of the variation in coping through physical release of emotions. The statistical measures indicate that the model is statistically significant (R^2= .182, $F_{(6,383)}$ = 14.231, p < .01) Please refer to Table 3.14 for more details The study revealed that Intensity of trauma was the most influential predictor (β = .346, p < .01) and had a negative correlation with coping through physical release of emotions

Table 3.14. Predictors of coping through physical release of emotions

Variable	Tolerance	B	95% CI for B		SE B	β
			LL	UL		
Child age	.909	-0.044	-0.092	0.004	0.024	-0.087
Female gender	.949	-0.358	-0.488	-0.228	0.066	-0.257**
Family conflict	.919	-0.042	-0.076	-0.007	0.018	-0.114*
Trauma total	.360	0.086	0.040	0.132	0.023	0.284**

Variable	Tolerance	B	95% CI for B		SE B	β
			LL	UL		
Intensity of trauma	.361	-0.015	-0.022	-0.009	0.003	-0.346**
Monthly family income	.933	0.000	0.000	0.000	0.000	-0.121*
$F_{(6,383)}$			14.281**			
R^2 (Adj.R^2)			.182 (.169)			

Note. CI = Confidence interval; * p < .05; ** p < .01

Among the 15 variables, used in the model, five were found as significant predictors that conjointly accounted for 11.5% of the variability in coping through distraction strategies (R^2= .115, $F_{(5,384)}$ = 10.022, p < .01 see Table 3.15). Intensity of Trauma was the found as the strongest predictor (β =. 268, p < .01) which was negatively related with coping through distraction strategies.

Table 3.15. Predictors of coping through distraction strategies

Variable	Tolerance	B	95% CI for B		SE B	β
			LL	UL		
Female gender	.965	-0.170	-0.281	-0.059	0.056	-0.147**
Trauma total	.359	0.051	0.011	0.090	0.020	0.202*
Intensity of Trauma	.370	-0.010	-0.016	-0.004	0.003	-0.268**
Monthly family income	.809	0.000	0.000	0.000	0.000	-0.201**
Mother's education	.798	0.082	0.041	0.123	0.021	0.211**
$F_{(5,384)}$			10.022**			
R^2 (Adj.R^2)			.115 (.104)			

Note. CI = Confidence interval; * p < .05; ** p < .01

Among the 15 variables, used in the model, 7 were found as significant predictors that conjointly accounted for 11.9% of the variability in coping through support for actions (R^2= .119, $F_{(7,382)}$= 7.376, p < .01 see Table 3.16). Total number of traumas was the found to be the strongest predictor (β = .254, p < .01) which was positively related with coping through support for actions.

Table 3.16. Predictors of coping through support for actions

Variable	Tolerance	B	95% CI for B		SE B	β
			LL	UL		
Female gender	.917	0.138	0.015	0.261	0.063	0.110*
Family conflict	.863	-0.029	-0.062	0.004	0.017	-0.089
Trauma total	.358	0.069	0.026	0.112	0.022	0.254**
Intensity of trauma	.355	-0.007	-0.013	0.000	0.003	-0.163*
PTSD symptoms	.791	0.006	0.001	0.012	0.003	0.131*
Prosocial behavior	.965	0.048	0.027	0.069	0.011	0.218**
Birth order	.959	-0.072	-0.136	-0.008	0.033	-0.108**
$F_{(7,382)}$			7.376**			
R^2 (Adj.R^2)			.119 (.103)			

Note. CI = Confidence interval; * p < .05; ** p < .01

Among the fifteen variables, used in the model, two were found as significant predictors that conjointly accounted for 6.9% of the variability in coping through support for feeling (R^2= .069, $F_{(2,387)}$= 14.252, p < .01 see Table 3.17). Prosocial behavior of children was the found as the strongest predictor (β =. 236, p < .01) which was positively related with coping through support for feeling.

Table 3.17. Predictors of coping through support for feeling

Variable	Tolerance	B	95% CI for B		SE B	β
			LL	UL		
PTSD symptoms	.993	0.007	0.002	0.012	0.003	0.134**
Prosocial behavior	.993	0.054	0.032	0.077	0.011	0.236**
$F_{(2,387)}$			14.252**			
R^2 (Adj.R^2)			.069 (.064)			

Note. CI = Confidence interval; * p < .05; ** p < .01

The analysis showed that out of the fifteen variables examined, six of them were identified as important predictors that account for 10.8% of the variation in support seeking strategies. The statistical measures indicate that the model is statistically significant (R^2=. 108 $F_{(6,383)}$ = 7.707, p < .01) Please refer to Table 3.18 for more details. The study revealed that Prosocial Behavior was the most influential predictor (β =. 231, p < .01) and had a positive correlation with coping through support seeking strategies.

Table 3.18. Predictors of coping through support seeking strategies

Variable	Tolerance	B	95% CI for B		SE B	β
			LL	UL		
Female gender	.951	0.109	-0.006	0.225	0.059	0.093
Trauma total	.353	0.049	0.008	0.090	0.021	0.191*
Intensity of trauma	.361	-0.006	-0.012	0.000	0.003	-0.146
PTSD symptoms	.834	0.005	0.001	0.010	0.002	0.115*
Prosocial behavior	.978	0.048	0.028	0.068	0.010	0.231**
Mother's education	.948	0.035	-0.004	0.074	0.020	0.087
$F_{(6,383)}$			7.707**			
R^2 (Adj.R^2)			.108 (.094)			

Note. CI = Confidence interval; * p < .05; ** p < .01

CHAPTER 4

DISCUSSION

Discussion

This research was conducted to see the impact of trauma on coping behavior of children in Bangladesh. In the context of limited research on this area, the present study aimed to find out the changes in coping behavior among children exposed in traumatic situations and to find the correlates of coping behavior of children. Study participants include children aged between (9 to 13) years (M=11.28) from 14 districts of Bangladesh. Boys (54.5%) from urban or semi-urban location (58.3%) represented a slightly higher portion of the participants.

This study employed a quantitative cross-sectional survey design. The survey questionnaire used in the study was comprised of a multiple off-the-shelf and custom-built instruments suitable for measuring the constructs used in the study. To ensure contextual relevance and sensitivity, two instruments namely, children and adolescent's trauma checklist and children and adolescent's family conflict scale were developed for the study. Inclusion of ideas from existing text, research and available instruments ensured conceptual soundness of the instruments while evaluation by experts ensured contextual relevance of the items. The trauma checklist demonstrated construct validity with the CRIES-13 Bangla (Deeba et al., 2014; r =.421). The family conflict scale demonstrated internal consistency reliability (Cronbach's alpha = .74). Attachment Questionnaire of Children (AQ-C; Muris et al., 2001) used after translation by the present researcher while, the Children's Coping Strategies Checklist Revision 1 (CCSC-R1; Ayers & Sandler, 1999) was adapted for their use with Bangladeshi children.

Children grow fast and they try to explore the world with their limited resources. From their early childhood they have to go through many adverse situations, some of them

seems traumatic for them to cope with. These type experiences have huge impact on their existing coping strategies which they already have. They may adopt new coping strategies as well. In the subsequent section, the impact of different types of traumas on children's coping behaviors are discussed.

4.1. Impact of Trauma on Coping

Changes in coping strategies from trauma experience varied according to the type of trauma. Trauma from natural events were found to be mostly related to problem focus coping. While trauma from accidents was found to be related with coping through physical release of emotions and distraction strategies. Man-made traumas are related to problem focus coping, distraction strategy, positive cognitive restructuring, support seeking strategy and active coping strategies. However, these traumas showed the strongest connection with problem focus coping. Trauma from COVID-19 incidences were found to be mostly related to problem focus coping and positive cognitive restructuring. This trauma was also inclined with distraction strategies, and support seeking strategies. The following section presents, a more detailed account of the varied impact of different categories of trauma on coping behavior of children.

4.1.1. Trauma from Natural Incidences

Findings indicated that trauma from earthquake was connected with coping through physical release of emotions, such as engaging in sports or pursuing recreational activities which is a consistent finding in research literature (see Lee et al., 2013). Adult survivors of Nepal earthquake also reported use of physical release of emotion as distraction coping (Adhikari & Bhagawati, 2019). No other coping was found to be associated with those who have experienced earthquake trauma. Published literature also indicates no or limited impact of earthquake trauma on coping strategies (Raccanello et al., 2017). Childhood trauma

resulting from other natural disasters such as tornadoes, cyclones, flooding, and fire outbreaks can affect coping mechanisms through direct problem-solving, seeking understanding, belief in one's ability to exert control, problem-focused coping strategies, and active coping strategies.

4.1.2. Trauma from Accidents

Children who experience different traffic accidents displayed significantly higher use of coping through physical release of emotion, support for actions, distracting actions and problem-focused coping compared to those without experience of trauma from traffic accidents. Increase use of distraction and problem-solving coping among children with acute stress after road traffic accidents have also been reported in other researches (Marsac et al., 2014). Research findings also suggests that, after experiencing traumatic road accident, children cope through support for action and physical release of emotion (Stallard & Smith, 2007; Stallard, et al., 2001).

Children who have been victims of an animal attack show a clear connection between their coping through the physical release of emotions and distraction strategy. The majority of children in this study had encountered animal attack such as, attack from cats, dogs, cows, snakes, and swans. Studies on coping after animal attack on children are limited, however, the traumatic impact of animal attack on children has been widely published (see Ji, et al., 2010).

4.1.3. Trauma from Man-made Incidents

Childhood trauma resulting from riot and forced displacement affect coping mechanisms through distracting action and distraction strategy. Although research on impact of trauma on coping is limited. psychological impact of trauma through riot is widely

reported (Lyons, 1979; Ni et al., 2020). Studies indicated that displacements impact the coping process of individuals and they use social support and assistance form others (Horn, 2009; Grip & Liljedahl, 2021), Children who experienced trauma through being separated from family displayed significantly higher use of coping through control.

The present study indicated that the children who have personally experienced or witnessed a hijacking incident, or have seen someone close to them being hijacked, have shown significant effects on their coping through cognitive decision-making, direct problem-solving, seeking understanding, positive mindset, problem-focused coping strategies, positive cognitive restructuring, active coping strategies and physical release of emotions. Children mostly employed coping through seeking understanding and problem focus coping from the trauma of being hijack or witnessing hijack. Published literature supported the findings of the present study. The finding also indicates that the experience of being kidnapped or facing the possibility of kidnapping, or having someone close to them being kidnapped, has been found to have a substantial impact on one's sense of control, optimism, and ability to engage in positive cognitive restructuring coping strategies. Published literature has also shown that in such circumstances, children engage in positive cognitive restructuring (Waite, 2016).

This study findings showed that trauma from assault has a significant impact on the coping through control of children. Children who have experienced sexual abuse have been influenced in their search for seeking understanding, distraction action, support for feeling, problem focus coping and support seeking strategies. Increase using of problem focus coping and support seeking strategies coping among children with sexual abuse have also been reported to other study (Futa et al., 2003; Brand & Alexander, 2003; Oaksford & Frude, 2004; Leitenberg et al., 2004).

Trauma from physical abuse from a family member has been found to have impact on the coping mechanisms namely physical release of emotion, and distraction action. This study found, that the trauma from threat of assault has a profound impact on the coping mechanisms of children, including coping trough support for action, support for feeing and support seeking strategy.

4.1.4. Trauma from Multiple Sources

Certain traumas can result from accidents, incidents of nature, and human-made events. These sorts of traumas also employ a variety of strategies for coping. The death of a close person has a profound impact on the coping mechanisms of children, including cognitive decision making, direct problem solving, seeking understanding, maintaining an optimistic perspective, exerting control, physically releasing emotions, concentrating on problem focus coping, engaging in positive cognitive restructuring, employing destructive strategies, and actively coping. Approximately half of all the participated children have experienced this form of trauma.

Within the trauma checklist scale, there was an unmentioned sort of trauma that was addressed through an open-ended inquiry. Children experienced many forms of trauma, such as frequent changes in their living and educational environments, their parents' separation or divorce, the death of a friend, and being subjected to bullying. These traumatic experiences have a profound effect on the coping mechanisms of children, including the physical release of emotions, support for action, distraction strategy, and support seeking strategy.

4.1.5. Trauma from COVID-19 Outbreak

Children who have experienced trauma from COVID-19 outbreak demonstrated changes in most of their coping strategies. Problem focus coping was the most used coping to deal with the trauma from COVID-19, which is also have reported through other study (Nguyen-Phuoc et al., 2022) when children have their favorite person infected from COVID-19, they cope through cognitive decision making, direct problem solving, seeking understanding, positivity, control, optimism, distracting action, support for action, problem focus coping, positive cognitive restructuring, distraction strategy, active coping, support seeking strategies. Children who have undergone trauma due to risk of own infection of COVID-19 employ various coping mechanisms such as cognitive decision-making, direct problem-solving, seeking understanding, maintaining a positive mindset, exerting control, fostering optimism, engaging in distracting activities, seeking support, focusing on problem-solving, implementing positive cognitive restructuring, employing distraction strategies, and actively coping with the situation. Children who have experienced trauma as a result of a close person's serious health problem or death utilize different coping mechanisms, such as cognitive decision-making, direct problem-solving, seeking understanding, maintaining a positive outlook, exerting control, engaging in distracting actions, support for action, problem focus coping, positive cognitive restructuring, employing distraction strategies, actively coping with the situation, and support seeking strategies.

Children used a variety of coping mechanism to cope with trauma from COVID-19. Similar to the present study, researchers have reported children’s use of cognitive coping strategies such as seeking information and engaging in cognitive decision-making in COVID-19 pandemic contexts (Zainel et al., 2021). Although research has indicated that engaging in physical activities during childhood and adolescence can assist young

individuals in managing challenges (Jiao et al., 2020), this coping was not in use for coping with trauma related to COVID-19. This lack of connection demonstrated in the present study also aligns with the published study findings (Zainel et al.; 2021).

4.2. Predictors of Coping Behaviors

Children employs different type of coping behaviors when they face any adverse situation and these coping behaviors varies according to exposure to trauma as well as other psychosocial and socio-demographic characteristics. The first objective of the present research explored the impact of trauma exposure on coping behavior. The second objective dealt with identification of significant predictors of coping behaviors so that the relative role of trauma on coping in comparison to other factors can be ascertained. A total of fifteen predictors namely, trauma total, trauma intensity, PTSD symptoms, family conflict, child age, gender, monthly family income, education level of mother, education level of child, attachment style, birth order, number of siblings, number of family members, place of residence, and prosocial behavior were used in the regression model for each coping behavior.

The present study utilized the five-factor model proposed by Ayers and Sandler (1999) to conceptualize coping strategies used by children. The thirteen coping strategies have been classified into five primary categories: problem-focused coping, positive cognitive restructuring, avoidance strategy, distraction strategy, and support-seeking strategy (Ayers and Sandler, 1999). Additionally, problem-focused coping and positive cognitive restructuring are combined together into a broader category named active coping. These five factors' models of copings proved its superiority over previous coping models (Boo & Wicherts, 2009). However, the three coping styles under the avoidance strategies category were found to have poor internal consistency and hence not used in the current

analysis. It may be noted that other studies also reported poor consistency for avoidance strategies category (Camisasca et al., 2012). Nonetheless, the results concerning four key coping strategies and their respective predictors are further detailed in the subsequent discussion of this study.

4.2.1. Problem Focus Coping

Analysis to identify the overall predictors of problem focus coping indicated eight significant contributors namely PTSD symptoms, Pro-social behavior, trauma total, rural residence, family conflict, sibling, mother's level of education, number of family members, and age of children were found to be a significant predictor of problem focus coping. Except for the rural residence and family conflict all the other predictors were positively connected with problem focus coping.

PTSD symptoms was the strongest and positively related predictor of problem focus coping. In contrast to the present findings, other studies indicated negative relation of PTSD symptoms with problem-focus coping (Khanis, 2015 & Huijts et. al, 2012). Contextual differences might contribute to this finding. Similar to the present findings, other research also indicated that children with higher pro-social behavior uses problem focus coping (Carlo et. al, 2012). Children that undergo higher numbers of trauma experiences are more inclined to employ problem-focused coping strategies. Children who grow up rural areas and with conflict in family are less inclined to utilize problem focus coping. Older children employ a greater amount of problem-focused coping strategies, which is a consistent with other literature (see Punamäki & Puhakka, 1997; Hoffner & Haefner, 1993). A larger number of siblings, small family, and a higher level of mother's education were all significant predictors in predicting problem-focused coping.

For the specific coping types under problem focus coping, similar set of predictors were found. In case of cognitive decision making pro-social behavior, PTSD symptoms, and family conflict were the three strongest predictors. While for direct problem-solving PTSD symptoms, Pro-social behavior, and number sibling were the strongest predictors. For seeking understanding**,** PTSD symptoms, Pro-social behavior, and trauma total were the strongest predictors.

A salient feature in the problem focus coping and the three coping styles under this category is that, PTSD symptoms and pro-social behavior are the strongest predictors for all of them. Although not the strongest, child age and rural residence was also strongly associated with these coping strategies. These two predictors are seemingly unique to the problem focus coping and its sub categories as these were not found to be significant predictors with any other copping strategies.

4.2.2. Positive Cognitive Restructuring

The analysis revealed six significant predictors of positive cognitive restructuring which were pro-social behavior, mother's level of education, intensity of trauma, number of siblings, monthly family income, and trauma total. All predictors, except monthly family income were positively associated with positive cognitive restructuring.

Prosocial behavior was the strongest predictor of positive cognitive restructuring. Similar to the present findings, other research also indicated that the strongest correlations for prosocial behavior were with the coping through positive cognitive restructuring (Boo & Wicherts, 2007). The predictor of positive cognitive restructuring includes a higher level of the mother's education, a higher intensity of trauma, a larger number of siblings, a higher overall number of traumatic events, and a low family income. In contrast to other coping strategies, intensity of trauma was found to be a positively connected predictor only to

positive cognitive restructuring suggesting that individual with higher intensity of trauma uses more of positive cognitive restructuring.

Some common factors were identified for the specific coping types within positive cognitive restructuring. The three strongest predictors for positivity were mother's education, number of siblings, and pro-social behavior. In case of coping through control, the three strongest predictors were trauma total, intensity of trauma and prosocial behavior. While for coping through optimism, prosocial behavior, PTSD symptoms, and child's education were the strongest predictors.

For Positive cognitive restructuring and the three coping types under this category, prosocial behavior was found to be a prominent predictor. Low monthly family income, mother's education level and trauma total were also strongly associated with this coping strategies. An interesting finding from this group is that insecure attachment style showed predictability of coping through optimism only. No other coping strategies showed any significant connection with attachment style.

4.2.3 Distraction Strategies

Analysis identified that overall predictors of distraction strategy were five significant contributors namely intensity of trauma, mother's level of education trauma total, monthly family income, and gender of child were found to be a significant predictor of distraction strategy. Except for the trauma total and mother's level of education, all the other predictors were negatively connected with distraction strategy.

Low family income was the most common predictor of distraction strategies (see Lever, 2008). Higher level of mother's education and higher number of trauma total were more likely to predict distraction strategies. Boys used distraction strategies more

frequently, current study finding also supported by other published literature (Hampel & Petermann, 2005). Some similar types of variables were identified for the specific coping types within distraction strategy. In case of distracting actions mother's education, monthly family income, and child's education were the three strongest predictors. For the physical release of emotion, intensity of trauma, trauma total, and gender of child were the strongest predictors.

Distraction strategy and the two coping styles under this category showed that monthly family income was the common predictor for all of them. PTSD symptoms were missing in these coping strategies, though it was a common predictor of almost all other categories, recent study have found the similar finding from other published literature (Woodward et.al, 2020). A unique feature of this coping strategies was boys/ males are more likely to use this coping,

4.2.4. Support Seeking Strategies

This study findings revealed that the overall predictors of support seeking strategy were prosocial behavior, trauma total, intensity of trauma, gender of child, and mother's level of education, among them gender of child and mother's level of education were found non-significant. Intensity of trauma was the only predictor which was negatively correlated among all other predictors.

The most significant predictor of this coping is prosocial behavior. Children with higher number of trauma exposer is more likely to predict support seeking strategies. This coping can be predicted by higher PTSD symptoms of children. Girls employed this coping more frequently, other research findings, confirming recent results (Causey & Dubow, 1992; Donaldson et al., 2000; Tamres et al.,2002).

All of the fifteen predictors used in regression analysis have been found to contribute to one or more coping strategies. The top five predictors were prosocial behavior (contributing to 13 coping strategies), PTSD symptoms (contributing to 12 coping strategies), trauma total (contributing to 11 coping strategies), mother's education (contributing to 10 coping strategies), and intensity of trauma (contributing to 9 coping strategies). Prosocial behavior was found act as a predictor to all the coping strategies which has also been reported in published literature (Boo & Wicherts, 2007).

This study discovered that trauma exerts a profoundly influential effect on the development of coping mechanisms. The findings revealed a correlation between some factors associated to coping, such as PTSD symptoms, a higher frequency of traumatic experiences, and mother's higher level of education, also lower intensity of trauma. Children inevitably encounter trauma in their lives, resulting in loss and sorrow. However, a positive effect is that they have the opportunity to develop and mature as a result of these challenging circumstances. They actively strive to cope with the challenges they confront, both cognitively and behaviorally. While a portion of individuals may respond unfavorably, a significant number of people demonstrate resilience and adaptability.

4.3. Limitations of the Study

Despite a sincere effort to conduct a comprehensive study, the present research observed a few limitations which are discussed below.

Firstly, there was a disproportionate representation of children from different geographical part of Bangladesh. This study could not employ data from north-central and north-eastern part of Bangladesh.

Secondly, children with severe neurological and psychiatric disorder, severe developmental disability and severe intellectual disability were excluded for clarity of interpretation. However, it is understandable that these children also undergo trauma experience which should be studied.

Thirdly, due to absence of suitable instrument in Bangla, a few tools need to be translated for the use in this study. However, through process of cultural validation could not be carried out due to resource limitation.

Fourthly, COVID-19 pandemic inserted an additional variable (i.e., trauma) in the present study, which is a unique but rare situation. The opportunity for an afresh understanding of the more common and usual forms of trauma was missed (at least to some extent) due to the influence of COVID-19 trauma.

Finally, This research included a thorough analysis of the correlation between a particular type of trauma and several coping mechanisms. It has been demonstrated that certain coping mechanisms are frequently associated with various types of traumas. However, the underlying reasons for this correlation remain unclear. The available published research does not give any definitive data on this connection. This question poses an intriguing topic for further investigation.

4.4. Strength of the Study

Despite the limitations discussed above, the present study represents a major work in an important but neglected research area. It should be noted that the children (aged below 18 years) represent 31.12% of the total population in Bangladesh (UNICEF, 2023) and 85% of them have exposure to at least one traumatic event (Deeba & Rapee, 2015). A few of the major strengths of the present research are discussed below,

Firstly, this study examined the coping behaviors of children in response to distinct traumatic experiences and explored the factors that are associated with these coping behaviors of children. Which has never been studied before in Bangladesh.

Secondly, This research collected data from a wide range of the geographical areas in Bangladesh, attaining a relatively acceptable representation of the child population of the country.

Thirdly, Data was collected from a community setting, providing a comprehensive view of the traumatic experiences and coping mechanisms of children in Bangladesh.

Fourthly, in the process of carrying out the study, the present researchers translated and adapted two research instruments namely the Attachment of Children (AQ-C) and Children's Coping Strategies Checklist Revision 1(CCSC-R1). Adaptation of these instruments created opportunity for future researchers to carry out assessment of attachment and coping strategies in line with international standards in Bangladesh.

Finally, the present researchers developed to instruments. One was a scale to measure family conflict in children, and the other was a checklist to assess children's experiences of trauma. Both are likely to encourage future research activities on children using these topics.

CHAPTER 5

CONCLUSION AND RECOMMENDATIONS

Conclusion and Recommendations

This study is one of its kind that employed a thorough exploration of connection and direction of factors related to childhood trauma and coping behavior of children. The study aimed to find out impact of trauma on coping behavior among children and the correlates of coping behavior of children.

This research employed a quantitative, cross-sectional approach to see the connection of coping strategies among children with and without a history of trauma, analyzing the effect of diverse trauma exposures on children's coping strategies. It also explored the predictors of coping behavior of children.

A new 21-item trauma experience checklist and 3-item family conflict checklist were developed for use on child population. Expert evaluation established face validity of the items for each instrument. The newly developed instrument went through a rigorous process psychometric assessment and was proved to be a reliable and valid instrument to measure childhood trauma experience and family conflict situation among children in Bangladesh. The development of children and adolescent's trauma checklist was contribution of the present study. Other measures were translated and evaluated by researcher and Main authors. Children's coping strategies checklist-revision1 gone thorough back translation process and cultural adaptation for 3 items. CCSC-R1 questionnaire can assess 13 types of coping, 3 types of coping were finally excluded from analysis due to lacking internal consistency. Analysis of variance and multiple regressions were used in data analyses. Findings indicated different type of traumas impacted on children's coping mechanisms. The result also indicated that development of different coping mechanism of children depends on many demographic and psychological factors of children.

This research was able to conclude through both correlational and regression analyses that experience of childhood trauma experiences have significant correlation with different coping behavior of children and some predictors such as, prosocial behavior of children, PTSD symptoms, multiple trauma experience and the intensity of pain for trauma, mother's education, child's education, age, monthly family income, family conflict, place of residence, number of family number, number of sibling and birth order of the child played predictor role of different coping behavior of children.

This research findings reveal the importance of realizing the fact that almost every child is going through many types of trauma experiences. To cope with the specific trauma experience they employed different coping strategies, though they have their own coping techniques, this study showed that, coping strategies changes over trauma experiences. However, it may change through type of trauma she/ he is going through and there are some predictors of the coping techniques they are adopting.

Children from Bangladesh reported the highest number of trauma cases related to animal attacks in this study. Children who have been attacked by animals such as street dogs, cats, cows, and snakes tend to feel significant trauma. In these situations, they typically rely solely on physical release of emotion to cope with the feelings they are experiencing. Other than COVID-19 related trauma, the highest number of copings used in trauma from death of a close person. The children utilized diverse coping strategies to manage the trauma they encountered following the demise of a close member. Most used coping was problem focus coping in this study.

Children primarily utilize physical release of emotions to cope with intense traumatic situations, particularly those that are sudden in nature. Contrary to our belief, children who have experienced sexual abuse did not utilize physical release of emotion.

Problem focus coping was the highest number of copings used employed in man-made trauma. Trauma from natural events also employed more problem focus coping. Trauma from accidental incidents showed significant correlation with physical release of emotion as distraction strategy. Children used only distraction strategy to cope through accidental trauma. Children employ problem-focused coping strategies primarily in response to natural events and Man-made trauma.

The study identified prosocial behavior as the most influential factor in predicting the coping behaviors of children. Prosocial behavior showed its predictability for almost all the coping mentioned here except physical release of emotion. Subsequently, post-traumatic stress symptoms of a more severe nature emerged as one of the primary factors influencing coping mechanisms. The children utilized diverse coping strategies to manage the trauma they encountered following the demise of a close member. Children who had suffered from multiple traumas concurrently or simultaneously, a mother with a higher level of education, and had also low intensity trauma emerged as a significant predictor of the children's coping mechanisms. Trauma from the experience of COVID-19 has the greater impact on coping through problem focus coping and positive cognitive restructuring. Almost every child has experienced different type of childhood trauma. Among 398 children 392 have reported at least one type of traumatic experience.

Policy makers, mental health professionals, researchers and those who work with child and adolescent may use this finding for developing and enhancing strategies to support children to overcome trauma reaction and become more resilient.

Recommendations from the Present Study

1. According to this study, 392 out of 398 children had encountered traumatic experiences. Given the high incidence of trauma among the participants, more emphasis must be paid to childhood trauma research in order to fully comprehend and address this significant issue.
2. Children exhibiting profound neurological and psychiatric disorders, severe developmental disabilities, and severe intellectual impairments were excluded from the present study to ensure clear interpretation. These children also encounter trauma, which they may not accurately describe. There should be research done in this area.
3. Children utilize a range of coping mechanisms to successfully cope with various traumatic events. The coping mechanisms that children develop are essential components of their well- being. To promote a more resilient population, more study must be done on comprehending and encouraging these behaviors

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APPENDICES

Appendix A

Ethical Approval Form

ডিন অফিস
জীববিজ্ঞান অনুষদ
ঢাকা বিশ্ববিদ্যালয়, ঢাকা-১০০০, বাংলাদেশ

Tel : 58613243
PABX : 9661900-59/4355, 7545
Fax : 880-2-865583
E-mail : deanblo@du.ac.bd
mimdadul07@yahoo.com

Ref. No. 122/Biol. Scs. **February 04, 2021**

Ethical Review Committee

Professor Dr. Mahfuza Khanom
Department of Psychology
University of Dhaka

Sub: Ethical Clearance.

Dear Dr. Mahfuza Khanom,

With reference to your application on the above subject, this is to inform you that your research proposal entitled "Impact of childhood trauma on coping behavior of children" 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. Md. Imdadul Hoque
Dean, Faculty of Biological Sciences
University of Dhaka

Appendix B1

Exploratory Statement for Participants

ব্যাখ্যামুলক বিবৃতি

আমি ফায়েজা আহমেদ, ঢাকা বিশ্ববিদ্যালয়ের মনোবিজ্ঞান বিভাগের পি এইচ ডি এর একজন গবেষক । আমার গবেষণার বিষয় **" Impact of childhood trauma on coping behavior of children"** ।এই গবেষণাটি ঢাকা বিশ্ব বিদ্যালয়ের অধ্যাপক ডঃ মাহফুজা খানম এর তত্বাবধানে করছি । শিশুরা যখন কোন মানসিক আঘাতের সম্মুখিন হয় তখন তারা ঐ পরিস্থিতির সাথে খাপ খাইয়ে নিতে বিভিন্ন ধরনের আচরন করে । এই গবেষণা দ্বারা মানসিক আঘাতের ফলে পরিস্থিতির সাথে খাপ খাওয়ানোর প্রক্রিয়ায়ে শিশুদের সাধারণত যে পরিবর্তন হয় তা দেখা হবে । আমরা মুলত এই গবেষণার দ্বারা মানসিক আঘাতের কারনে শিশুদের আচরনে যে প্রভাব পরে তা বোঝার চেষ্টা করবো । এই গবেষণার তথ্য সংগ্রহের জন্য আমি আপনার অনুমতি চাইছি, যেন আপনার সন্তানের কাছ থেকে তথ্য সংগ্রহ করতে পারি ।

গবেষণার লক্ষ্য ঃ মানসিক আঘাতের কারনে শিশুদের পরিস্থিতির সাথে খাপ খাওয়ানোর প্রক্রিয়ায় যে প্রভাব পরে তা বোঝা ।

গবেষণায় যা করা হবে ঃ আপনার এবং আপনার শিশুর সন্মতি নিয়ে, নাম ঠিকানা জানার পর শিশুদের পারিবারিক বিরোধ পরিস্থিতি, Attachment, শিশুদের মানসিক আঘাতের অভিজ্ঞতা, শিশুদের মানসিক আঘাতের প্রভাব, শিশুদের মানসিক আঘাতের পরিস্থিতির সাথে খাপ খাইয়ে চলার প্রক্রিয়ার এবং prosocial behavior এর স্কেল ব্যবহার করে এ সম্পর্কে তথ্য নেয়া হবে । যেসকল শিশুদের মানসিক আঘাতের স্কেলে স্কোর বেশী হবে তাদের মানসিক আঘাত পাওয়া শিশু হিসেবে বিবেচনা করা হবে । মানসিক আঘাত পাওয়া শিশু এবং অন্য শিশুদের পরিস্থিতির সাথে খাপ খাওয়ানোর আচরনের মধ্যে তুলনা করা হবে ।

গবেষণায় অংশগ্রহনের জন্য সময় ঃ শিশুর এই তথ্যগুলি দিতে আনুমানিক ১ ঘন্টা সময় প্রয়োজন হবে ।

গবেশনায় অংশগ্রহনের সম্ভাব্য অসুবিধা ঃ এই গবেষণায় মানসিক চাপের স্কেলে যে প্রশ্নগুলি করা হবে, তাতে কোন শিশুর ক্ষেত্রে তার জীবনে ঘটে যাওয়া কোন একটি খুব কষ্টকর স্মৃতি মনে হয়ে, কষ্টের অনুভূতি তৈরি হতে পারে । এক্ষেত্রে একজন প্রশিক্ষণ প্রাপ্ত সাইকোলজিস্ট তথ্য সংগ্রহ করবেন বিধায়, তিনি শিশুকে উদ্ভুত পরিস্থিতিতে সহায়তা প্রদান করা হয় এমন যথোপযুক্ত জায়গায় রেফার করবেন ।

গবেশনায় অংশগ্রহনের সম্ভাব্য সুবিধা ঃ এই গবেষণার ফলাফল দ্বারা মানসিক আঘাত পাওয়া শিশুদের আচরনের পরিবর্তন সম্পর্কে ধারনা পাওয়া যাবে ।

গোপনীয়তা ঃ এই গবেষণায় আপনার এবং আপনার সন্তানের এমন কোন তথ্য,যেমন- নাম, ঠিকানা, ইত্যাদি প্রকাশ করা হবে না , যা থেকে আপনাকে চিহ্নিত করা সম্ভব । আপনাদের ব্যাক্তিগত তথ্য যেমনঃ নাম , ঠিকানা, এবং অন্যান্য তথ্য একটি সাংকেতিক চিহ্নের মাধ্যমে একত্র করা হবে এবং সেটি আমি ছাড়া কেউ জানবে না ।

গবেশনায় অংশগ্রহন প্রত্যাহার ঃ এই গবেষণায় অংশগ্রহন করার সিধান্ত সম্পূর্ণ ভাবে আপনার ও আপনার সন্তানের উপর নির্ভর করছে । আপনারা গবেষণার যেকোনো সময় অংশগ্রহন প্রত্যাহার করতে পারেন, যার জন্য আপনাদের কোন প্রশ্ন বা ক্ষতির সন্মুখিন হতে হবে না ।

আপনার সহায়তার জন্য ধন্যবাদ ।

....

ফায়েজা আহমেদ **তারিখ**

Appendix B2

Consent form for Parents

সন্মতি পত্র

আমি ... ... ঢাকা বিশ্ববিদ্যালয়ের উপড়োল্লিখিত গবেষণায়ে আমার শিশুর অংশগ্রহনে সন্মতি দিচ্ছি। আমাকে গবেষণা প্রকল্পটি সম্পর্কে বিস্তারিত বুঝিয়ে বলা হয়েছে এবং ব্যাখ্যামূলক বিবৃতি দেয়া হয়েছে, যা আমি পরেছি (বা আমাকে পড়ে শোনানো হয়েছে। আমি নিশ্চিত করছি,

আমি স্বেচ্ছায় এই প্রকল্পে আমার শিশুর অংশগ্রহনে রাজি হয়েছি ☐ হ্যাঁ ☐ না

আমি, আমার এবং আমার শিশুর পূরণ করা সন্মতি পত্র, এবং প্রশ্নমালা গবেষণার রেকর্ড হিসেবে ☐ হ্যাঁ ☐ না

ঢাকা বিশ্ববিদ্যালয়ের গবেষকদের কাছে জমা রাখতে সন্মতি দিচ্ছি।

এবং,

আমাকে প্রকল্প এবং আমার শিশুর অংশগ্রহন করার ব্যাপারে ও প্রশ্ন করার সুযোগ দেয়া হয়েছে। আমি বুঝতে পারছি আমাদের ব্যাক্তিগত তথ্যেও গোপনীয়তা রক্ষা করা হবে এবং এমন কোন তথ্য প্রকাশ করা হবে না যা থেকে আমাদের চেনা সম্ভব। আমি আরও বুঝতে পারছি, আমি ইচ্ছা করলে প্রকল্পে অংশগ্রহন থেকে বিরত থাকতে পারি, যার জন্য আমাকে এবং আমার শিশুকে কোন ভাবেই ক্ষতিগ্রস্থ বা প্রশ্নের সম্মুখীন হতে হবে না।

অংশগ্রহনকারীর নামঃ .....

অংশগ্রহনকারীর স্বাক্ষরঃ .....**অথবা,টিপসই ঃ**.....**তারিখঃ** .....

Appendix B3

Ascent form from Child

সন্মতি পত্র

আমি ... ... ঢাকা বিশ্ববিদ্যালয়ের উপড়োল্লিখিত গবেষণায়ে অংশগ্রহনে সন্মতি দিচ্ছি। আমাকে গবেষণা প্রকল্পটি সম্পর্কে বিস্তারিত বুঝিয়ে বলা হয়েছে এবং ব্যাখ্যামূলক বিবৃতি দেয়া হয়েছে, যা আমি পরেছি (বা আমাকে পড়ে শোনানো হয়েছে। আমি নিশ্চিত করছি,

আমি স্বেচ্ছায় এই প্রকল্পে অংশগ্রহনে রাজি হয়েছি ☐ হ্যাঁ ☐ না

আমি, আমার পূরণ করা সন্মতি পত্র, এবং প্রশ্নমালা গবেষণার রেকর্ড হিসেবে ☐ হ্যাঁ ☐ না

ঢাকা বিশ্ববিদ্যালয়ের গবেষকদের কাছে জমা রাখতে সন্মতি দিচ্ছি ।

এবং,

আমাকে প্রকল্প এবং আমার অংশগ্রহন করার ব্যাপারে ও প্রশ্ন করার সুযোগ দেয়া হয়েছে । আমি বুঝতে পারছি আমার ব্যাক্তিগত তথ্যেও গোপনীয়তা রক্ষা করা হবে এবং এমন কোন তথ্য প্রকাশ করা হবে না যা থেকে আমাকে চেনা সম্ভব । আমি আরও বুঝতে পারছি, আমি ইচ্ছা করলে প্রকল্পে অংশগ্রহন থেকে বিরত থাকতে পারি, যার জন্য আমাকে কোন ভাবেই ক্ষতিগ্রস্থ বা প্রশ্নের সম্মুখীন হতে হবে না ।

অংশগ্রহনকারীর নামঃ .....

অংশগ্রহনকারীর স্বাক্ষরঃ..... **অথবা,টিপসই ঃ** .....**তারিখঃ**.....

Appendix B4

Oath of Confidentiality

Oath of Confidentiality of the Research Assistant

I know that Fayaza Ahmed is doing her PhD research at University of Dhaka on coping behavior of children. I have been explained about the nature of research. I have been explained about the nature of the research in details before I agreed to take part in it as a research assistant to work with her.

I understand that in the course of my work with Fayaza Ahmed I will come in contact with sensitive, personal information of the respondents taking part in the research. I understand that all the information shared by the respondents is considered confidential and I pledge to protect these. I will maintain the confidentiality by not discussing or disclosing the respondents' identity, personal information and/or experience to anyone.

I realize that disclosure of any information about any respondents could jeopardize wellbeing of the respondents and will be detrimental to the genuineness of the researcher who is vowed to maintain the confidentiality.

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Name of the Research Assistant Signature of Research Assistant

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Name of Witness Signature of Witness

Appendix C1

Data Collection tools used in Study

গবেষণা প্রশ্নমালাঃ

ID	
Name	

Section : A
Demographic Information

A.1 Child Age: ☐ **A.2. SEX:** ☐ 1 Male ☐ 2 Female ☐ 3 Others

A.3 Place of Res: ☐ 1 Urban, ☐ 2 Rural ☐ 3 Sub-urban ☐ 4 Urban-Slum

A.4 Child's Education: ☐ 1 Home based, ☐ 2 Pre-School/day care, ☐ 3 Primary, ☐ 4 Secondary ☐ 5 Others: Specify. . . . . .

A.5 Mother`s Education: ☐ 1 Illiterate ☐ 2 Up to Primary ☐ 3 up to SSC ☐ 4 up to HSC ☐ 5 Graduation ☐ 6 Post-graduation ☐ 7 Others: (Specify. . . . . .

A.6 Father`s Education: ☐ 1 Illiterate ☐ 2 Up to Primary ☐ 3 up to SSC ☐ 4 up to HSC ☐ 5 Graduation ☐ 6 Post-graduation ☐ 7 Others: Specify. . . . . .

A.7 Monthly Family Income: ☐ **A.8 Family Members:** ☐

A.9 Number of Sibling: ☐ **A.10 Birth Order:** ☐

A.11 Family Structure: ☐ 1 Nuclear ☐ 2 Joint ☐ 3 Foster care

A.12 Parenting status: ☐ 1 No Parent ☐ 2 Single Parent ☐ 3 Both Parent ☐ 4 Step Parent

A.13 Psychiatric history in family: ☐ 1 No ☐ 2 Yes ☐ 3 Specify: . . . . . .

A.14	**Any Mental health condition:**	1	No	2	Yes	3	Specify: . . . . .

Section: B

শিশু - কিশোরদের পারিবারিক বিরোধ/ সংঘাত পরিস্থিতি মুল্যায়ন

আমাদের পরিবারে অনেক সময়ই বেশ কিছু বিরোধ দেখা যায় এবং মূলত পরিবারের সদস্যদের মধ্যেই বিরোধমূলক পরিস্থিতি থাকে,তোমার পরিবারে এরকম বিরোধ পরিস্থিতি আছে কিনা তা জানার জন্য নিচে কিছু বাক্য আছে। গত ছয় মাস ধরে তোমার পরিবারে এমন পরিস্থিতি আছে কিনা তা নির্দেশ করতে, অনুগ্রহ করে নিচের পরিস্থিতি থেকে ডান পাশের ঘরে টিক চিনহ দাও

	পদসমূহ	কখনোই না	মাঝে মধ্যে	প্রায়ই	প্রায় সবসময়
B.1.	তোমার বাবা- মায়ের সাথে ঝগড়া হয়।	0	1	2	3
B.2.	তোমার বাবা-মা নিজেরা ঝগড়া করে।	0	1	2	3
B.3.	তোমার পরিবারের সদস্যদের মধ্যে ঝগড়াঝাটি হয়।	0	1	2	3

Section: C
Attachment Questionnaire-Children (AQ-C)

নিচের বর্ণনাগুলো থেকে এমন একটি বেছে নাও যা তোমার সাথে সবচেয়ে বেশি মিলে যায়। মনে রাখতে হবে যে শুধুমাত্র একটি বর্ণনাই বেছে নিতে পারবে। (অনুগ্রহ করে ডানের ঘরে টিক চিহ্ন দাও)

C.1	আমি সহজেই অন্যদের সাথে বন্ধুত্ব করতে পারি। আমি তাদের বিশ্বাস করি এবং সহজেই তাদের উপর নির্ভর করতে পারি। আমি বন্ধু হারানোর অথবা কারও সাথে বেশি ঘনিষ্ঠ বন্ধু হবার ভয় করিনা।	1
C.2	আমি অন্য শিশুদের সাথে ঘনিষ্ঠ হতে অসস্থি বোধ করি। অন্য কারও উপর পুরোপুরি বিশ্বাস করা এবং নির্ভর করা আমার জন্য কঠিন। অন্য কোন শিশু আমার ঘনিষ্ঠ বন্ধু হতে চাইলে আমি নার্ভাস হয়ে যাই। আমার বন্ধুরা প্রায়ই আমি যতটা না চাই তার থেকেও বেশি ঘনিষ্ঠ হয়ে যায়।	2
C.3	প্রায়ই খেয়াল করি যে, আমি অন্য শিশুদের সাথে যতটা ঘনিষ্ঠ হতে চাই, তারা ততোটা চায়না। আমার প্রায়ই মনে হয় আমার কাছের বন্ধু/ বেস্ট ফ্রেন্ড আমাকে ভালবাসেনা এবং আমাদের বন্ধুত্ব রাখতে চায় না। আমি আমার কাছের বন্ধু /বেস্ট ফ্রেন্ড এর সাথে সব কাজ একসাথে করতে পছন্দ করি। কিন্তু এটা মাঝে মাঝে ওদের ভয় পাইয়ে দূরে সরিয়ে দেয়।	3

Section: D

শিশু-কিশোরদের মানসিক আঘাতের অভিজ্ঞতার স্কেল

মানুষের জীবনে অনেক সময়ই বেশ কিছু ভীষণ কষ্টকর এবং দুঃখজনক ঘটনা ঘটে । তোমার ক্ষেত্রে নিচের কোন ঘটনা বা ঘটনাগুলো ঘটেছিল, তা অনুগ্রহ করে নিচের বিষয় গুলোর মধ্যে থেকে নির্দেশ করো । যে ঘটনা বা ঘটনাগুলো তোমার সাথে ঘটেছে তা ডানের ঘরে নির্দেশ করো ।

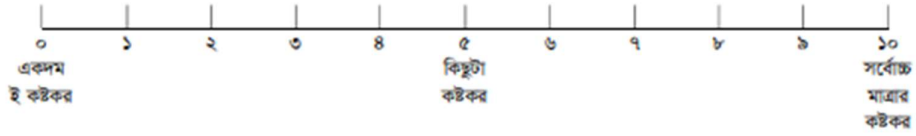
	পদসমূহ	না	হ্যাঁ	কতবার ঘটেছে?
D.1.	তুমি এমন ভূমিকম্পের মধ্যে পড়েছিলে যে তুমি যে বাসায় অবস্থান করছিলে তা ভয়াবহ ক্ষতিগ্রস্ত হয়েছিল	0	1	
D.2.	আগুন, টর্নেডো, বন্যা, সাইক্লোন, বজ্রপাত ও নদীভাঙ্গন বা এধরনের কোনো দুর্যোগের মধ্যে পড়েছিলে	0	1	
D.3.	ভয়াবহ দূর্ঘটনায় পড়েছিলে -যেমন মারাত্মক গাড়ি দূর্ঘটনা	0	1	
D.4.	তুমি এমন পরিস্থিতিতে ছিলে যেখানে যুদ্ধ, দাঙ্গা চলছিল বা মানুষকে তাদের বাসা থেকে বের করে দেয়া হচ্ছিল	0	1	
D.5.	বাস্তবে কখনো মৃতদেহ দেখেছো (জানাজা, অন্ত্যেষ্টিক্রিয়া বা শবযাত্রায় নয়)	0	1	
D.6.	গুরুতর অসুস্থতা বা আঘাতজনিত কারণে হাসপাতালে তোমার কখনো খুব কষ্টকর কিংবা ভীতিকর চিকিৎসা হয়েছিল	0	1	
D.7.	তোমাকে কি কখনো তোমার মা-বাবা অথবা পরিবার থেকে অনেক দিনের জন্য দূরে কোথাও যেতে বাধ্য করা হয়েছিলে	0	1	
D.8	কেউ তোমাকে কখনো গলা চেপে, ছুরি দিয়ে, বা বন্দুক ধরে আঘাত বা ক্ষতি করেছিল বা করার চেষ্টা করেছিল? অথবা কেউ তোমাকে লাঠি, বেল্ট অন্যকিছু দিয়ে এমন ভাবে মেরেছে যার জন্য তোমাকে ডাক্তারের কাছে বা হাসপাতালে যেতে হয়েছিল	0	1	
D.9.	তোমাকে কি কেউ কখনও বলেছিল বা এমন ভাব করেছিলে যে সে তোমাকে সাংঘাতিক ভাবে মারবে বা মারতে যাচ্ছে	0	1	
D.10.	তুমি কখনও ছিনতাইকারীর কবলে পরেছিলে বা তোমাকে আটকে ধরে তোমার জিনিস নেয়ার চেষ্টা করেছিলে? অথবা তোমার সামনেই তোমার পরিবারের কোন সদস্য বা কাছের বন্ধুর ছিনতাই হয়েছিল	0	1	
D.11.	তোমাকে, তোমার পরিবারের কাউকে, বা কাছের কোনো বন্ধুকে কি কখনো অপহরন করা হয়েছিল	0	1	
D.12.	কুকুর বা অন্য কোনো প্রাণী কি কখনও তোমাকে আক্রমন করেছিলে	0	1	
D.13.	বাড়িতে কেউ তোমাকে আঘাত পাওয়ার মতোন জোরে ঘুষি বা লাথি মেরেছে (ভাই বোনের মধ্যে সাধারন মারামারি এর অন্তর্ভুক্ত নয়)	0	1	
D.14.	প্রচন্ড মার খাওয়া, ছুরি দিয়ে আঘাত, অথবা ভয়ানক মার খাবার হুমকি পেয়েছিলে	0	1	
D.15.	বাস্তব জীবনে কাউকে প্রচন্ড মার খেতে, ছুরি বা গুলিতে আহত হতে, মেরে ফেলতে বা মরনাপন্ন হতে দেখেছিলে	0	1	
D.16.	তোমার পছন্দের কারো নির্মম মৃত্যু বা গুরুতর আহত হওয়ার খবর শুনেছিলে	0	1	

D.17.	তোমার অনিচ্ছায় প্রাপ্তবয়স্ক বা বয়সে অনেক বড় এমন কেউ কি তোমার শরীরের ব্যক্তিগত অংশ বা যৌনাঙ্গ স্পর্শ করেছিল বা জোরপূর্বক যৌন সম্পর্ক করার চেষ্টা করেছিল	0	1	
D.18.	তোমার পছন্দের কারও করোনা হয়েছে?	0	1	
D.19.	তোমার কাছের কারও করোনা হবার কারনে কি তোমার করোনা হয়েছে বা হবার মত পরিস্থিতে ছিলে?	0	1	
D.20.	তোমার পরিবারের বা খুব পছন্দের কারও করোনা হবার কারনে মরণাপন্ন হয়েছে বা মৃত্যুবরন করেছে?	0	1	

D.19 এই সব গুলোর মধ্যে সবচেয়ে কষ্টকর কোনটি?

D.20 ঐ সময় তোমার বয়স কত ছিল

D.21 এটি কতটা কষ্টকর ছিল? (০-১০ স্কেলে: ০ একদম ই কষ্টকর নয়, ১০ এতটাই কষ্টের যে এর বেশী আর সম্ভব নয়/ সর্বোচ্চ মাত্রার কষ্টকর)



D.22 সবচেয়ে কষ্টকর অভিজ্ঞতা কি ধরনের ছিল?

(1) ব্যাক্তি কতৃক সঙ্ঘটিত

1.1 পরিবারের সদস্যঃ----------

1.2 আত্মীয় ঃ----------

1.3 খুব ঘনিষ্ঠ জনঃ----------

1.4 পরিচিত ব্যাক্তিঃ ----------

1.5 অপরিচিত ব্যাক্তিঃ----------

(2) সংঘবদ্ধ দল/সংস্থা/ কতৃক সঙ্ঘটিত:

(3) প্রাকৃতিক/দৈবক্রমে/ ঘটিতঃ

Section: E

Children's Revised Impact of Event Scale -13-Bangla (CRIES-13 –Bangla)

জীবনে খুব দু:খজনক ঘটনা ঘটে থাকলে অনেকসময় নীচের তালিকার কথাগুলো মানুষের মনে আসে। অনুগ্রহ করে তোমার নিজের ক্ষেত্রে এই কথাগুলো গত সাতদিনের জন্য কতখানি সত্য মনে হয় তা ডান পাশের ঘরে টিক (√) চিহ্ন দিয়ে নির্দেশ করো। যদি এগুলো গত সাতদিনে তোমার মনে না এসে থাকে তাহলে "একদম না" ঘরে টিক (√) দাও।

	পদসমূহ	কখনোই না	মাঝেমধ্যে	প্রায়ই	প্রায় সবসময়
F.8.	তুমি নিজেই নিজেকে বল যে, সব ঠিক হয়ে যাবে।	0	1	2	3
F.9.	তুমি গান শোন ।	0	1	2	3
F.10.	অন্য শিশুদের তুলনায় তুমি যে অনেক ভালো অবস্থায় আছো, তা নিজেকে মনে করিয়ে দাও ।	0	1	2	3
F.11.	তুমি কল্পনা কর, যে সবকিছু ঠিক হয়ে গেছে।	0	1	2	3
F.12.	তুমি সাইকেল চালাতে যাও।	0	1	2	3
F.13.	তুমি তোমার অনুভূতিগুলো এমন কাউকে বল, যে তোমাকে সত্যিকারে বুঝতে পারে।	0	1	2	3
F.14.	অন্যরা তোমার জন্য কি করতে পারে তা তাদের জানাও।	0	1	2	3
F.15.	তোমার মন থেকে বিষয়টি দূরে সরিয়ে রাখতে চেষ্টা কর।	0	1	2	3
F.16.	কি করবে সিদ্ধান্ত নেয়ার আগে তার ফল কি হবে তা ভাবো।	0	1	2	3
F.17.	তুমি নিজেকে নিজে শোনাও যে, এটা ঠিক হয়ে যাবে।	0	1	2	3
F.18.	কি থেকে তোমার এমন লাগে তৈরী হল অন্যদের বুঝিয়ে বল।	0	1	2	3
F.19.	তুমি নিজেকে নিজে শোনাও যে, এই সমস্যার সমাধান তুমি করতে পারবে।	0	1	2	3
F.20.	তুমি হাঁটাহাঁটি করতে যাও।	0	1	2	3
F.21.	যেসব জিনিস তোমার মন খারাপ করে দেয় তা থেকে তুমি দূরে থাকার চেষ্টা কর।	0	1	2	3
F.22.	কিভাবে সমস্যার সমাধান করতে চাও তা তুমি অন্যদের বল।	0	1	2	3
F.23.	সমস্যা সমাধানের চেষ্টায় তুমি তোমার নিজের আচরনের পরিবর্তন কর।	0	1	2	3
F.24.	তুমি নিজেকে শোনাও যে তুমি আগেও এমন সমস্যা সমাধান করেছ।	0	1	2	3
F.25.	তুমি খেলাধূলা কর। তুমি খেলতে যাও।	0	1	2	3
F.26.	কেন এমন ঘটল তুমি তা নিয়ে ভাবো।	0	1	2	3
F.27.	তুমি এটা নিয়ে চিন্তাই করনা।	0	1	2	3
F.28.	তোমার কেমন লাগে তা অন্যদের জানাও।	0	1	2	3
F.29.	তুমি নিজেকে বল, যাই ঘটুক না কেন তা তুমি সামলে নিতে পারবে।	0	1	2	3
F.30.	কি হলে ভাল হয় বলে মনে কর, তা তুমি অন্যদের বল।	0	1	2	3
F.31.	তুমি নিজেকে বল যে, শেষ পর্যন্ত সবকিছু ভালোভাবে শেষ হবে।	0	1	2	3
F.32.	তুমি বই অথবা পত্রিকা পর।	0	1	2	3
F.33.	বিষয় গুলো কেমন হলে ভাল হয় তা নিয়ে তুমি কল্পনা কর ।	0	1	2	3
F.34.	তুমি নিজেকে মনে করিয়ে দাও,যে তুমি জানো কি করতে হবে।	0	1	2	3

	পদসমূহ	কখনোই না	মাঝেমধ্যে	প্রায়ই	প্রায় সবসময়
F.35.	কিভাবে সমস্যার সবচেয়ে ভালভাবে মোকাবেলা করতে হয় সে সম্পর্কে তুমি চিন্তা কর।	0	1	2	3
F.36.	তুমি এটা একদমই ভুলে যাও।	0	1	2	3
F.37.	তুমি নিজেকে শোনাও যে, এটা ঠিক হয়ে যাবে।	0	1	2	3
F.38.	তোমাকে সমস্যা সমাধানে সাহায্য করতে পারে এমন কারও সঙ্গে আলোচনা কর।	0	1	2	3
F.39.	তুমি বন্ধুদের সাথে বাইরে খেলতে যাও।	0	1	2	3
F.40.	যাদের দেখলে তোমার খারাপ লাগে তাদের তুমি এড়িয়ে যাও।	0	1	2	3
F.41.	তুমি নিজেকে মনে করিয়ে দাও যে, সব মিলিয়ে যা হচ্ছে তা তোমার জন্য যথেষ্ট ভাল।	0	1	2	3
F.42.	তুমি মোবাইলে/কম্পিউটারে গেমেস খেল অথবা কোন শখের কাজ কর।	0	1	2	3
F.43.	তুমি সমস্যা সমাধানের জন্য কিছু না কিছু কর।	0	1	2	3
F.44.	বিষয়টি বোঝার জন্য আরও বেশি বেশি চিন্তা কর।	0	1	2	3
F.45.	তোমার মধ্যে ভাল কি কি আছে তা মনে করার চেষ্টা কর।	0	1	2	3
F.46.	তুমি আশা কর যেন খারাপ কিছু না ঘটে।	0	1	2	3
F.47.	সমস্যা সমাধান করার জন্য কি কি জানতে হবে তুমি তা নিয়ে ভাবো।	0	1	2	3
F.48.	বিষয়টা এড়াতে তুমি নিজের ঘরে চলে যাও।	0	1	2	3
F.49.	তুমি এমন কিছু কর যেন ওই পরিস্থিতির মধ্যেও সবচেয়ে ভাল কিছু একটা বের করা যায়।	0	1	2	3
F.50.	সমস্যাটি থেকে তোমার কি শেখার আছে, তা নিয়ে তুমি ভাবো	0	1	2	3
F.51.	তুমি আশা কর সবকিছু যদি আরও ভাল হত।	0	1	2	3
F.52.	তুমি টিভি দেখো।	0	1	2	3
F.53.	তুমি ব্যায়াম করো।	0	1	2	3
F.54.	কেন এমন হয় তা বোঝার চেষ্টা করো।	0	1	2	3

Section: G
Pro-social Behaviour (SDQ) (Parent report)

	পদসমূহ	কখনোই না	মাঝে মধ্যে	প্রায়ই	প্রায় সবসময়
G.1.	অন্যদের অনুভূতিকে মূল্য দেয়	0	1	2	3
G.2.	অন্য ছেলেমেয়েদের সাথে খাবার , খেলনা , পেন্সিল ইত্যাদি সহজেই ভাগাভাগি করে নেয়	0	1	2	3
G.3.	সাধারণভাবে অন্য ছেলেমেয়েরা তাকে পছন্দ করে	0	1	2	3
G.4.	অপরকে সাহায্য করতে প্রায়ই এগিয়ে যায় (বাবা-মা , শিক্ষক , অন্য ছেলেমেয়েদের)	0	1	2	3
G.5.	কেউ ব্যথা পেলে , মন খারাপ করলে বা অসুস্থবোধ করলে সাহায্য করে	0	1	2	3

Appendix C2

Permission from Author of CCSC-R1

Gmail

Fayaza Ahmed <fayaza181@gmail.com>

Permission of using CCSC-R1

Irwin Sandler <irwin.sandler@asu.edu> Tue, Mar 10, 2020 at 1:04 AM
To: Fayaza Ahmed <fayaza181@gmail.com>, "tim.ayers@iname.com" <tim.ayers@iname.com>

Fayaza – You have my permission to use this scale and to validate in Bangla…..You should also get permission from Dr. Ayers.

Best of luck with your research.

Irwin Sandler

[Quoted text hidden]

Appendix C3

Feedback on Back Translation from the Author of CCSC-R1

Irwin Sandler <irwin.sandler@asu.edu>

to me ▾

Fayaza,

Congratulations on the translation and back translation of the scale. I went over the times and marked the few items where I think there was a discrepancy in meaning.

But – overall very nice job. Good luck on your dissertation.

Best,

Irwin

Appendix C4

Feedback from the Author of AQ-C

Muris, Peter (PSYCHOLOGY) <peter.muris@maastrichtuniversity.nl>
to me

Dear Fayaza
I have read the back translations and think they are acceptable and cover the original descriptions.
All the best Peter

Appendix D1

Detailed tables from analysis of data

Please note that the order of the constructs presented here (Appendix D1) may not match with the order used in chapter content.

Table 1. Means, Standard Deviations and Analyses of Variance for Earthquake on Different type of Coping

Earthquake	No		Yes		F	Sig.
	Mean	SD	Mean	SD		
Cognitive Decision Making	1.35	0.69	1.35	0.44	0.00	0.96
Direct Problem solving	1.25	0.63	1.26	0.40	0.00	0.96
Seeking Understanding	1.14	0.63	1.08	0.52	0.41	0.52
Positivity	1.25	0.62	1.20	0.40	0.27	0.61
Control	1.05	0.69	1.23	0.49	2.57	0.11
Optimism	1.32	0.70	1.37	0.49	0.19	0.66
Distracting Action	1.22	0.64	1.27	0.52	0.24	0.63
Physical Release of Emotion	1.03	0.71	1.31	0.47	6.35*	0.01
Support for Action	1.05	0.64	1.18	0.46	1.62	0.20
Support for Feeling	1.03	0.67	1.09	0.46	0.33	0.57
Problem Focus Coping	1.25	0.56	1.23	0.34	0.06	0.81
Positive Cognitive Restructuring	1.21	0.55	1.27	0.33	0.44	0.51
Distraction Strategies	1.12	0.59	1.29	0.34	3.19	0.08
Active Coping	1.23	0.51	1.25	0.26	0.05	0.83
Support Seeking Strategies	1.04	0.61	1.14	0.41	0.98	0.32

$p < .05$

***Earthquake:** Physical release of emotions (PRE)

Table 2. Means, Standard Deviations and Analyses of Variance for Natural Disaster on Different type of Coping

Natural Disaster	No		Yes		F	Sig.
	Mean	SD	Mean	SD		
Cognitive Decision Making	1.32	0.68	1.45	0.60	2.43	0.12
Direct Problem solving	1.22	0.62	1.40	0.55	6.39*	0.01
Seeking Understanding	1.10	0.62	1.26	0.61	4.07*	0.04
Positivity	1.22	0.63	1.33	0.50	2.02	0.16
Control	1.04	0.68	1.20	0.63	4.07*	0.04
Optimism	1.32	0.69	1.35	0.65	0.11	0.74
Distracting Action	1.21	0.64	1.27	0.58	0.56	0.45
Physical Release of Emotion	1.04	0.71	1.13	0.65	1.15	0.28
Support for Action	1.04	0.65	1.16	0.52	2.47	0.12
Support for Feeling	1.05	0.68	1.01	0.57	0.19	0.67
Problem Focus Coping	1.21	0.55	1.37	0.50	5.59*	0.02
Positive Cognitive Restructuring	1.19	0.54	1.29	0.48	2.34	0.13
Distraction Strategies	1.12	0.59	1.20	0.53	1.12	0.29
Active Coping	1.20	0.50	1.33	0.44	4.54*	0.03
Support Seeking Strategies	1.04	0.61	1.09	0.51	0.35	0.56

$p < .05$

***Natural Disaster:** Direct problem solving (DPS), Support Understanding (SU), Control (CON), Problem focus coping (ProbFC), Active Coping (ActiveC).

Table 3. Means, Standard Deviations and Analyses of Variance for Accident on Different type of Coping

Accident	No		Yes		F	Sig.
	Mean	SD	Mean	SD		
Cognitive Decision Making	1.32	0.65	1.46	0.71	3.26	0.07
Direct Problem solving	1.22	0.60	1.35	0.65	3.20	0.07
Seeking Understanding	1.11	0.60	1.22	0.67	2.12	0.15
Positivity	1.23	0.61	1.28	0.61	0.55	0.46
Control	1.04	0.67	1.16	0.70	2.18	0.14
Optimism	1.32	0.68	1.33	0.67	0.01	0.93
Distracting Action	1.19	0.64	1.32	0.61	2.68	0.10
Physical Release of Emotion	1.00	0.68	1.23	0.70	8.21*	0.00
Support for Action	1.03	0.60	1.19	0.70	4.85*	0.03
Support for Feeling	1.02	0.63	1.11	0.72	1.47	0.23
Problem Focus Coping	1.22	0.52	1.34	0.59	3.88*	0.05
Positive Cognitive Restructuring	1.20	0.53	1.26	0.54	0.88	0.35
Distraction Strategies	1.10	0.58	1.27	0.55	6.93*	0.01
Active Coping	1.21	0.48	1.30	0.53	2.54	0.11
Support Seeking Strategies	1.02	0.56	1.15	0.67	3.36	0.07

$p < .05$

*Accident: Physical release of emotions (PRE), Support for Actions (SUPA), Problem Focus Coping , Destraction Strategies (DisST)

Table 4. Means, Standard Deviations and Analyses of Variance for War, Riot on Different type of Coping

War, Riot	No		Yes		F	Sig.
	Mean	SD	Mean	SD		
Cognitive Decision Making	1.35	0.67	1.39	0.68	0.11	0.74
Direct Problem solving	1.25	0.62	1.35	0.46	0.75	0.39
Seeking Understanding	1.13	0.63	1.22	0.59	0.56	0.46
Positivity	1.24	0.62	1.24	0.40	0.00	0.98
Control	1.06	0.68	1.28	0.58	2.79	0.10
Optimism	1.32	0.68	1.45	0.70	0.96	0.33
Distracting Action	1.20	0.64	1.44	0.47	3.73*	0.05
Physical Release of Emotion	1.04	0.69	1.30	0.71	3.68	0.06
Support for Action	1.05	0.63	1.21	0.58	1.56	0.21
Support for Feeling	1.04	0.65	1.01	0.68	0.06	0.81
Problem Focus Coping	1.24	0.55	1.32	0.46	0.55	0.46
Positive Cognitive Restructuring	1.21	0.54	1.32	0.46	1.23	0.27
Distraction Strategies	1.12	0.58	1.37	0.52	4.94*	0.03

War, Riot	No		Yes		F	Sig.
	Mean	SD	Mean	SD		
Active Coping	1.22	0.50	1.32	0.43	1.02	0.31
Support Seeking Strategies	1.05	0.59	1.11	0.59	0.27	0.60

$p < .05$

***War, Riot:** Distracting Action (DA), Distraction Strategies (DisST)

Table 5. Means, Standard Deviations and Analyses of Variance for Seeing Dead body on Different type of Coping

Seeing Dead body	No		Yes		F	Sig.
	Mean	SD	Mean	SD		
Cognitive Decision Making	1.32	0.68	1.39	0.65	1.08	0.30
Direct Problem solving	1.22	0.63	1.29	0.58	1.10	0.29
Seeking Understanding	1.09	0.64	1.19	0.60	2.96	0.09
Positivity	1.22	0.65	1.27	0.55	0.84	0.36
Control	1.07	0.71	1.07	0.63	0.01	0.94
Optimism	1.34	0.70	1.31	0.66	0.24	0.63
Distracting Action	1.25	0.65	1.19	0.61	1.04	0.31
Physical Release of Emotion	1.08	0.69	1.03	0.70	0.36	0.55
Support for Action	1.02	0.63	1.11	0.61	2.01	0.16
Support for Feeling	0.99	0.64	1.10	0.67	2.77	0.10
Problem Focus Coping	1.21	0.56	1.29	0.52	2.19	0.14

Seeing Dead body	No		Yes		F	Sig.
	Mean	SD	Mean	SD		
Positive Cognitive Restructuring	1.21	0.57	1.22	0.49	0.01	0.92
Distraction Strategies	1.16	0.57	1.11	0.58	0.85	0.36
Active Coping	1.21	0.52	1.25	0.46	0.76	0.38
Support Seeking Strategies	1.01	0.59	1.10	0.59	2.80	0.10

$p < .05$

Table 6. Means, Standard Deviations and Analyses of Variance for Painful Medical Procedure on Different type of Coping

Painful Medical Procedure	No		Yes		F	Sig.
	Mean	SD	Mean	SD		
Cognitive Decision Making	1.33	0.65	1.40	0.70	0.92	0.34
Direct Problem solving	1.24	0.60	1.29	0.64	0.45	0.50
Seeking Understanding	1.12	0.61	1.19	0.66	1.11	0.29
Positivity	1.22	0.58	1.30	0.66	1.36	0.24
Control	1.05	0.65	1.13	0.72	1.28	0.26
Optimism	1.34	0.68	1.28	0.69	0.67	0.41
Distracting Action	1.24	0.63	1.17	0.64	1.23	0.27
Physical Release of Emotion	1.07	0.69	1.03	0.70	0.20	0.65
Support for Action	1.04	0.61	1.12	0.65	1.20	0.27
Support for Feeling	1.03	0.65	1.07	0.66	0.42	0.52
Problem Focus Coping	1.23	0.53	1.29	0.58	1.10	0.29
Positive Cognitive Restructuring	1.20	0.51	1.24	0.58	0.32	0.57

Painful Medical Procedure	No		Yes		F	Sig.
	Mean	SD	Mean	SD		
Distracting Strategies	1.15	0.58	1.10	0.57	0.78	0.38
Active Coping	1.22	0.48	1.27	0.54	0.79	0.38
Support Seeking Strategies	1.03	0.58	1.10	0.61	0.88	0.35

$p < .05$

Table 7. Means, Standard Deviations and Analyses of Variance for Apart from Family on Different type of Coping

Apart from Family	No		Yes		F	Sig.
	Mean	SD	Mean	SD		
Cognitive Decision Making	1.35	0.68	1.36	0.57	0.00	0.94
Direct Problem solving	1.26	0.62	1.20	0.53	0.31	0.58
Seeking Understanding	1.14	0.63	1.14	0.53	0.00	0.99
Positivity	1.24	0.61	1.27	0.56	0.08	0.78
Control	1.05	0.65	1.28	0.82	4.39	0.04
Optimism	1.32	0.68	1.40	0.66	0.55	0.46
Distraction Action	1.22	0.64	1.18	0.55	0.17	0.68
Physical Release of Emotion	1.07	0.71	0.92	0.48	1.61	0.20
Support for Action	1.05	0.62	1.24	0.60	3.45	0.06
Support for Feeling	1.03	0.66	1.14	0.58	0.99	0.32
Problem Focus Coping	1.25	0.56	1.23	0.42	0.03	0.86
Positive Cognitive Restructuring	1.20	0.53	1.32	0.55	1.70	0.19
Destructing Strategies	1.15	0.59	1.05	0.42	0.98	0.32

Apart from Family	No		Yes		F	Sig.
	Mean	SD	Mean	SD		
Active Coping	1.23	0.50	1.28	0.45	0.37	0.54
Support Seeking Strategies	1.04	0.60	1.19	0.53	2.34	0.13

$p < .05$

Table 8. Means, Standard Deviations and Analyses of Variance for Physical Assault on Different type of Coping

Physical Assault	No		Yes		F	Sig.
	Mean	SD	Mean	SD		
Cognitive Decision Making	1.35	0.67	1.31	0.67	0.16	0.69
Direct Problem solving	1.25	0.63	1.32	0.44	0.59	0.44
Seeking Understanding	1.13	0.63	1.21	0.57	0.71	0.40
Positivity	1.25	0.60	1.21	0.65	0.12	0.73
Control	1.10	0.67	0.84	0.71	5.88*	0.02
Optimism	1.34	0.68	1.20	0.72	1.55	0.21
Distraction Action	1.23	0.63	1.11	0.62	1.44	0.23
Physical Release of Emotion	1.07	0.69	0.91	0.72	2.21	0.14
Support for Action	1.08	0.64	0.91	0.48	2.95	0.09
Support for Feeling	1.06	0.65	0.89	0.65	2.48	0.12
Problem Focus Coping	1.24	0.55	1.28	0.48	0.20	0.65
Positive Cognitive Restructuring	1.23	0.53	1.09	0.57	2.84	0.09
Destructing Strategies	1.15	0.58	1.01	0.56	2.43	0.12
Active Coping	1.24	0.50	1.18	0.46	0.44	0.51
Support Seeking Strategies	1.07	0.59	0.90	0.53	3.17	0.08

p < .05

***Physical Abuse:** Control (CON)

Table 9. Means, Standard Deviations and Analyses of Variance for Threat of Physical Abuse on Different type of Coping

Threat Of Physical Abuse	No		Yes		F	Sig.
	Mean	SD	Mean	SD		
Cognitive Decision Making	1.35	0.65	1.37	0.75	0.05	0.82
Direct Problem solving	1.24	0.59	1.33	0.72	0.93	0.34
Seeking Understanding	1.12	0.60	1.22	0.74	1.08	0.30
Positivity	1.24	0.58	1.25	0.76	0.01	0.91
Control	1.07	0.66	1.11	0.74	0.19	0.67
Optimism	1.32	0.66	1.40	0.81	0.61	0.44
Distracting Action	1.22	0.62	1.21	0.74	0.02	0.89
Physical Release of Emotion	1.06	0.68	1.05	0.81	0.01	0.92
Support for Action	1.08	0.62	0.98	0.66	1.05	0.31
Support for Feeling	1.06	0.64	0.90	0.74	2.66	0.10
Problem Focus Coping	1.24	0.52	1.31	0.65	0.73	0.39
Positive Cognitive Restructuring	1.21	0.52	1.25	0.65	0.31	0.58
Distraction Strategies	1.14	0.56	1.13	0.68	0.02	0.89
Active Coping	1.22	0.48	1.28	0.60	0.60	0.44
Support Seeking Strategies	1.07	0.58	0.94	0.65	2.09	0.15

p < .05

Table 10. Means, Standard Deviations and Analyses of Variance for Hijack on Different type of Coping

Hijack	No		Yes		F	Sig.
	Mean	SD	Mean	SD		
Cognitive Decision Making	1.33	0.65	1.60	0.79	4.15*	0.04
Direct Problem solving	1.24	0.60	1.49	0.76	4.67*	0.03
Seeking Understanding	1.11	0.61	1.53	0.62	12.22*	0.00
Positivity	1.23	0.60	1.49	0.57	5.14*	0.02
Control	1.06	0.66	1.22	0.81	1.50	0.22
Optimism	1.31	0.67	1.52	0.84	2.58	0.11
Distracting Action	1.21	0.62	1.33	0.75	0.91	0.34
Physical Release of Emotion	1.07	0.68	0.79	0.81	4.42*	0.04
Support for Action	1.06	0.62	1.17	0.66	0.82	0.36
Support for Feeling	1.04	0.66	0.95	0.64	0.50	0.48
Problem Focus Coping	1.23	0.53	1.54	0.63	8.92*	0.00
Positive Cognitive Restructuring	1.20	0.52	1.41	0.63	4.25*	0.04
Destructing Strategies	1.14	0.56	1.06	0.71	0.55	0.46
Active Coping	1.21	0.48	1.48	0.58	7.62*	0.01
Support Seeking Strategies	1.05	0.59	1.06	0.60	0.01	0.93

$p < .05$

***Hijack:** Cognitive Decision Making (CDM), Direct Problem Solving (DPS), Support Understanding (SU), Positivity (POS), Physical release of emotions (PRE), Problem Focus Coping (ProbFC), Positive Cognitive Restructuring (PosCR), Active Coping (Active Coping)

Table 11. Means, Standard Deviations and Analyses of Variance for Kidnap on Different type of Coping

Kidnap	No		Yes		F	Sig.
	Mean	SD	Mean	SD		
Cognitive Decision Making	1.34	0.67	1.51	0.66	1.20	0.27
Direct Problem solving	1.25	0.62	1.28	0.49	0.02	0.88
Seeking Understanding	1.14	0.63	1.12	0.56	0.02	0.90
Positivity	1.25	0.61	1.11	0.58	0.99	0.32
Control	1.09	0.66	0.67	0.79	7.16*	0.01
Optimism	1.34	0.66	1.01	0.92	4.22*	0.04
Distracting Action	1.22	0.64	1.20	0.51	0.02	0.88
Physical Release of Emotion	1.06	0.69	1.03	0.74	0.04	0.85
Support for Action	1.06	0.61	1.08	0.83	0.02	0.89
Support for Feeling	1.04	0.64	0.95	0.93	0.38	0.54
Problem Focus Coping	1.24	0.55	1.30	0.46	0.21	0.65
Positive Cognitive Restructuring	1.23	0.52	0.93	0.67	5.69*	0.02
Distraction Strategies	1.14	0.58	1.11	0.57	0.04	0.84
Active Coping	1.24	0.49	1.12	0.52	1.06	0.30
Support Seeking Strategies	1.05	0.58	1.02	0.85	0.07	0.79

$p < .05$

* **Kidnap:** Control (Con), Optimization (OPT) Positive Cognitive Restructuring (PosCR)

Table 12. Means, Standard Deviations and Analyses of Variance for Animal Attack on Different type of Coping

Animal Attack	No		Yes		F	Sig.
	Mean	SD	Mean	SD		
Cognitive Decision Making	1.36	0.66	1.34	0.67	0.04	0.84
Direct Problem solving	1.21	0.60	1.30	0.62	2.39	0.12
Seeking Understanding	1.09	0.65	1.18	0.60	2.38	0.12
Positivity	1.20	0.61	1.29	0.60	2.04	0.15
Control	1.06	0.68	1.08	0.67	0.13	0.72
Optimism	1.31	0.69	1.34	0.68	0.33	0.57
Distracting Action	1.21	0.61	1.24	0.65	0.22	0.64
Physical Release of Emotion	0.98	0.68	1.13	0.70	5.32*	0.02
Support for Action	1.04	0.62	1.09	0.63	0.89	0.35
Support for Feeling	1.00	0.63	1.07	0.67	1.17	0.28
Problem Focus Coping	1.22	0.55	1.28	0.54	1.18	0.28
Positive Cognitive Restructuring	1.19	0.55	1.24	0.52	0.88	0.35
Distraction Strategies	1.09	0.55	1.19	0.60	2.71	0.10
Active Coping	1.20	0.50	1.26	0.48	1.23	0.27
Support Seeking Strategies	1.02	0.59	1.08	0.59	1.20	0.27

$p < .05$

*** Animal Attack:** Physical release of emotions (PRE)

able 13. Means, Standard Deviations and Analyses of Variance for Physical Abuse by Family Member on Different type of Coping

Physical Abuse by Family Member	No		Yes		F	Sig.
	Mean	SD	Mean	SD		
Cognitive Decision Making	1.36	0.66	1.32	0.69	0.15	0.70
Direct Problem solving	1.24	0.62	1.30	0.59	0.59	0.44
Seeking Understanding	1.13	0.60	1.14	0.68	0.01	0.94
Positivity	1.23	0.58	1.29	0.68	0.54	0.46
Control	1.08	0.66	1.03	0.71	0.34	0.56
Optimism	1.35	0.67	1.25	0.73	1.53	0.22
Distracting Action	1.25	0.62	1.11	0.66	3.57	0.06
Physical Release of Emotion	1.11	0.69	0.88	0.67	8.29*	0.00
Support for Action	1.06	0.62	1.06	0.64	0.00	0.99
Support for Feeling	1.03	0.63	1.06	0.74	0.18	0.67
Problem Focus Coping	1.24	0.54	1.25	0.54	0.02	0.88
Positive Cognitive Restructuring	1.22	0.52	1.19	0.57	0.25	0.62
Distraction Strategies	1.18	0.57	0.99	0.56	7.73*	0.01
Active Coping	1.23	0.49	1.22	0.51	0.03	0.86
Support Seeking Strategies	1.05	0.57	1.06	0.65	0.06	0.81

$p < .05$

***Physical Abuse by Family Member:** Physical release of emotions (PRE), Distraction Strategies (DisST)

Table 14. Means, Standard Deviations and Analyses of Variance for Threat of Physical abuse on Different type of Coping

Threat of Physical abuse	No		Yes		F	Sig.
	Mean	SD	Mean	SD		
Cognitive Decision Making	1.35	0.66	1.30	0.70	0.18	0.67
Direct Problem solving	1.27	0.60	1.06	0.71	3.29	0.07
Seeking Understanding	1.15	0.61	1.01	0.78	1.42	0.23
Positivity	1.24	0.59	1.25	0.76	0.01	0.93
Control	1.08	0.67	1.03	0.73	0.13	0.72
Optimism	1.31	0.67	1.50	0.80	2.29	0.13
Distracting Action	1.23	0.62	1.13	0.78	0.72	0.40
Physical Release of Emotion	1.05	0.69	1.07	0.78	0.02	0.89
Support for Action	1.09	0.61	0.83	0.73	5.02*	0.03
Support for Feeling	1.06	0.64	0.81	0.74	4.15*	0.04
Problem Focus Coping	1.26	0.53	1.12	0.62	1.71	0.19
Positive Cognitive Restructuring	1.21	0.52	1.26	0.65	0.27	0.60
Distraction Strategies	1.14	0.57	1.10	0.68	0.14	0.70
Active Coping	1.23	0.48	1.19	0.61	0.19	0.66
Support Seeking Strategies	1.07	0.58	0.82	0.71	5.36*	0.02

$p < .05$

***Threat of Physical abuse:** Support for Action (SUPA), Support for Feeling (SUPF), Support Seeking Strategies (SUPSS).

Table 15. Means, Standard Deviations and Analyses of Variance for Witness of Physical abuse on Different type of Coping

Witness of Physical Abuse	No		Yes		F	Sig.
	Mean	SD	Mean	SD		
Cognitive Decision Making	1.34	0.65	1.39	0.76	0.20	0.65
Direct Problem solving	1.24	0.60	1.36	0.69	1.93	0.17
Seeking Understanding	1.12	0.62	1.23	0.66	1.57	0.21
Positivity	1.23	0.59	1.31	0.67	0.83	0.36
Control	1.05	0.66	1.18	0.74	1.63	0.20
Optimism	1.32	0.68	1.34	0.67	0.03	0.85
Distracting Action	1.23	0.62	1.16	0.69	0.60	0.44
Physical Release of Emotion	1.07	0.69	0.94	0.71	1.84	0.18
Support for Action	1.06	0.62	1.09	0.62	0.10	0.76
Support for Feeling	1.03	0.65	1.10	0.70	0.63	0.43
Problem Focus Coping	1.23	0.53	1.33	0.62	1.40	0.24
Positive Cognitive Restructuring	1.20	0.52	1.28	0.58	0.93	0.34
Distraction Strategies	1.15	0.56	1.05	0.65	1.55	0.21
Active Coping	1.22	0.48	1.30	0.55	1.38	0.24
Support Seeking Strategies	1.04	0.59	1.10	0.61	0.36	0.55

$p < .05$

Table 16. Means, Standard Deviations and Analyses of Variance for Death of Close person on Different type of Coping

Death of Close person	No		Yes		F	Sig.
	Mean	SD	Mean	SD		
Cognitive Decision Making	1.28	0.64	1.47	0.69	7.08*	0.01
Direct Problem solving	1.20	0.60	1.36	0.62	6.40*	0.01
Seeking Understanding	1.08	0.62	1.23	0.62	5.51*	0.02
Positivity	1.17	0.61	1.38	0.57	11.75*	0.00
Control	1.02	0.65	1.16	0.70	3.98*	0.05
Optimism	1.29	0.69	1.38	0.66	1.64	0.20
Distracting Action	1.25	0.64	1.17	0.62	1.32	0.25
Physical Release of Emotion	1.17	0.71	0.85	0.63	19.36*	0.00
Support for Action	1.03	0.63	1.12	0.62	1.82	0.18
Support for Feeling	1.00	0.64	1.10	0.68	2.23	0.14
Problem Focus Coping	1.19	0.53	1.35	0.56	8.69*	0.00
Positive Cognitive Restructuring	1.16	0.53	1.31	0.52	7.22*	0.01
Distraction Strategies	1.21	0.58	1.01	0.54	10.69*	0.00
Active Coping	1.17	0.49	1.33	0.48	9.46*	0.00
Support Seeking Strategies	1.02	0.58	1.11	0.60	2.38	0.12

$p < .05$

* **Death Of Close person:** Cognitive Decision Making (CDM), Direct Problem Solving (DPS), Support Understanding (SU), Positivity (POS), Control (CON) Physical release of emotions (PRE), Problem Focus Coping (ProbFC), Positive Cognitive Restructuring (PosCR), Distraction Strategies (DisST), Active Coping (Active Coping).

Table 17. Means, Standard Deviations and Analyses of Variance for Sexual Abuse on Different type of Coping

Sexual Abuse	No		Yes		F	Sig.
	Mean	SD	Mean	SD		
Cognitive Decision Making	1.33	0.65	1.49	0.78	2.62	0.11
Direct Problem solving	1.24	0.61	1.37	0.64	1.85	0.17
Seeking Understanding	1.11	0.61	1.34	0.68	6.15*	0.01
Positivity	1.24	0.60	1.29	0.66	0.34	0.56
Control	1.06	0.66	1.16	0.77	1.00	0.32
Optimism	1.32	0.67	1.37	0.76	0.25	0.62
Distracting Action	1.20	0.62	1.41	0.72	4.81*	0.03
Physical Release of Emotion	1.04	0.69	1.14	0.76	0.90	0.34
Support for Action	1.05	0.60	1.20	0.78	2.79	0.10
Support for Feeling	1.01	0.63	1.28	0.76	7.67*	0.01
Problem Focus Coping	1.23	0.53	1.40	0.64	4.50*	0.03
Positive Cognitive Restructuring	1.21	0.52	1.28	0.60	0.74	0.39
Distraction Strategies	1.12	0.56	1.27	0.67	3.16	0.08
Active Coping	1.22	0.48	1.34	0.57	2.66	0.10
Support Seeking Strategies	1.03	0.56	1.24	0.73	5.84*	0.02

$p < .05$

* **Sexual Abuse:** Seeking Understanding (SU), Distraction Action (DA), Support Seeking Strategies (SUPSS), Problem Focus Coping (ProbFC), Support for Feeling (SUPF).

Table 18. Means, Standard Deviations and Analyses of Variance for Favorite Person Covid-19 Infected on Different type of Coping

Favorite Person Covid-19 Infected	No		Yes		F	Sig.
	Mean	SD	Mean	SD		
Cognitive Decision Making	1.25	0.62	1.69	0.70	31.34*	0.00
Direct Problem solving	1.16	0.59	1.58	0.58	33.57*	0.00
Seeking Understanding	1.04	0.60	1.47	0.58	34.73*	0.00
Positivity	1.16	0.57	1.53	0.65	26.41*	0.00
Control	0.99	0.64	1.36	0.70	21.67*	0.00
Optimism	1.27	0.65	1.54	0.74	10.98*	0.00
Distracting Action	1.16	0.63	1.44	0.59	13.20*	0.00
Physical Release of Emotion	1.02	0.69	1.17	0.71	2.86	0.09
Support for Action	1.02	0.62	1.24	0.60	9.07*	0.00
Support for Feeling	1.01	0.66	1.14	0.64	2.69	0.10
Problem Focus Coping	1.15	0.51	1.58	0.53	46.63*	0.00
Positive Cognitive Restructuring	1.14	0.50	1.48	0.56	28.91*	0.00
Distraction Strategies	1.09	0.58	1.30	0.54	9.09*	0.00
Active Coping	1.15	0.45	1.53	0.51	45.10*	0.00
Support Seeking Strategies	1.01	0.59	1.19	0.58	6.24*	0.01

$p < .05$

***Favouritre Person Covid-19 Infected:** Cognitive Decision Making (CDM),Direct Problem Solving(DPS),Support Understanding(SU), Positivity (POS), Control (CON), Optimization (OPT), Distracting Action (DA), Support for Action (SUPA), Problem Focus

Coping (ProbFC), Positive Cognitive Restructuring (PosCR), Distraction Strategy(DisST), Active Coping (Active Coping),Support Seeking Strategies (SUPSS).

Table 19. Means, Standard Deviations and Analyses of Variance for Risk of Covid-19 Infection on Different type of Coping

Risk of Covid-19 Infection	No		Yes		F	Sig.
	Mean	SD	Mean	SD		
Cognitive Decision Making	1.31	0.66	1.67	0.62	11.78*	0.00
Direct Problem solving	1.23	0.61	1.47	0.60	6.16*	0.01
Seeking Understanding	1.10	0.61	1.39	0.64	8.56*	0.00
Positivity	1.21	0.59	1.48	0.66	8.08*	0.00
Control	1.03	0.66	1.39	0.72	11.36*	0.00
Optimism	1.30	0.67	1.54	0.76	5.32*	0.02
Distracting Action	1.18	0.63	1.52	0.58	11.64*	0.00
Physical Release of Emotion	1.04	0.70	1.16	0.68	1.17	0.28
Support for Action	1.04	0.62	1.29	0.62	6.62*	0.01
Support for Feeling	1.03	0.65	1.12	0.68	0.83	0.36
Problem Focus Coping	1.21	0.54	1.51	0.52	12.04*	0.00
Positive Cognitive Restructuring	1.18	0.52	1.47	0.58	12.23*	0.00
Distraction Strategy	1.11	0.58	1.34	0.50	6.35*	0.01
Active Coping	1.20	0.48	1.49	0.52	14.54*	0.00
Support Seeking Strategies	1.03	0.58	1.21	0.63	3.47	0.06

$p < .05$

Risk Of Covid-19 Infection: Cognitive Decision Making (CDM), Direct Problem Solving (DPS),Support Understanding(SU), Positivity (POS), Control (CON), Optimization (OPT),

Distracting Action (DA), Support for Action (SUPA), Problem Focus Coping (ProbFC), Positive Cognitive Restructuring (PosCR), Distraction Strategy(DisST), Active Coping (Active Coping).

Table 20. Means, Standard Deviations and Analyses of Variance for Close person was severely sick or died due to Covid-19 on Different type of Coping

Close person was severely sick or died due to Covid-19	No		Yes		F	Sig.
	Mean	SD	Mean	SD		
Cognitive Decision Making	1.33	0.65	1.62	0.75	6.04*	0.01
Direct Problem solving	1.23	0.61	1.57	0.57	9.66*	0.00
Seeking Understanding	1.10	0.61	1.53	0.68	14.98*	0.00
Positivity	1.21	0.59	1.64	0.62	15.69*	0.00
Control	1.04	0.67	1.41	0.68	9.31*	0.00
Optimism	1.31	0.67	1.45	0.77	1.20	0.27
Distracting Action	1.20	0.63	1.44	0.56	4.20*	0.04
Physical Release of Emotion	1.04	0.70	1.19	0.66	1.33	0.25
Support for Action	1.04	0.61	1.40	0.71	10.63*	0.00
Support for Feeling	1.02	0.64	1.23	0.76	3.01	0.08
Problem Focus Coping	1.22	0.53	1.57	0.60	13.44*	0.00
Positive Cognitive Restructuring	1.19	0.52	1.50	0.58	10.59*	0.00
Distraction Strategy	1.12	0.58	1.31	0.51	3.33	0.07
Active Coping	1.20	0.48	1.54	0.57	14.35*	0.00
Support Seeking Strategies	1.03	0.57	1.31	0.72	7.20*	0.01

$p < .05$

***Close person was severely sick or died due to Covid-19:** Cognitive Decision Making (CDM), Direct Problem Solving (DPS), Support Understanding (SU), Positivity (POS), Control (CON), Distracting Action (DA), Support for Action (SUPA), Problem Focus Coping (ProbFC), Positive Cognitive Restructuring (PosCR), Distraction Strategy (DisST), Active Coping (Active Coping).

Table 21. Means, Standard Deviations and Analyses of Variance for Other type of Different type of Coping

Others	No		Yes		F	Sig.
	Mean	SD	Mean	SD		
Cognitive Decision Making	1.34	0.65	1.43	0.85	0.39	0.54
Direct Problem solving	1.26	0.61	1.17	0.67	0.52	0.47
Seeking Understanding	1.13	0.62	1.15	0.72	0.02	0.88
Positivity	1.25	0.58	1.22	0.87	0.04	0.84
Control	1.08	0.67	0.89	0.74	1.95	0.16
Optimism	1.34	0.65	1.16	1.03	1.57	0.21
Distracting Action	1.23	0.63	1.14	0.67	0.49	0.49
Physical Release of Emotion	1.09	0.69	0.58	0.54	12.89*	0.00
Support for Action	1.09	0.62	0.73	0.66	7.95*	0.01
Support for Feeling	1.05	0.65	0.85	0.70	2.21	0.14
Problem Focus Coping	1.25	0.54	1.25	0.58	0.00	0.97
Positive Cognitive Restructuring	1.22	0.51	1.09	0.78	1.44	0.23
Distraction Strategies	1.16	0.57	0.86	0.53	6.44*	0.01
Active Coping	1.23	0.48	1.17	0.64	0.39	0.53
Support Seeking Strategies	1.07	0.58	0.79	0.63	5.35*	0.02

$p < .05$

***Others:** Physical release of emotions (PRE), Support for Action (SUPA), Distraction Strategy (DisST),Support Seeking Strategies (SUPSS).

Appendix D2

List of experts in the back translation process

List of experts in the back translation process

	Name and details	Role
1	**Ujjal Yaman Chowdhury** (Bilingual reviewer) Assistant Professor of World University of Bangladesh.	Back translation from Bangla to English for ▪ Children's Coping Strategies Checklist Revision 1(CCSC-R1). and ▪ Attachment Questionnaire of Children
2	**Irwin Sandler** (Original Author of CCSC-R1) Research Professor of Psychology and Emeritus Professor, Arizona State University.	Checking consistency between Back-translation and original version of Children's Coping Strategies Checklist Revision 1(CCSC-R1).
3	**Peter Muris** (Original Author of AQ-C) Chair and Professor of Maastricht University	Checking consistency between Back-translation and original version of Attachment Questionnaire of Children (AQ-C)

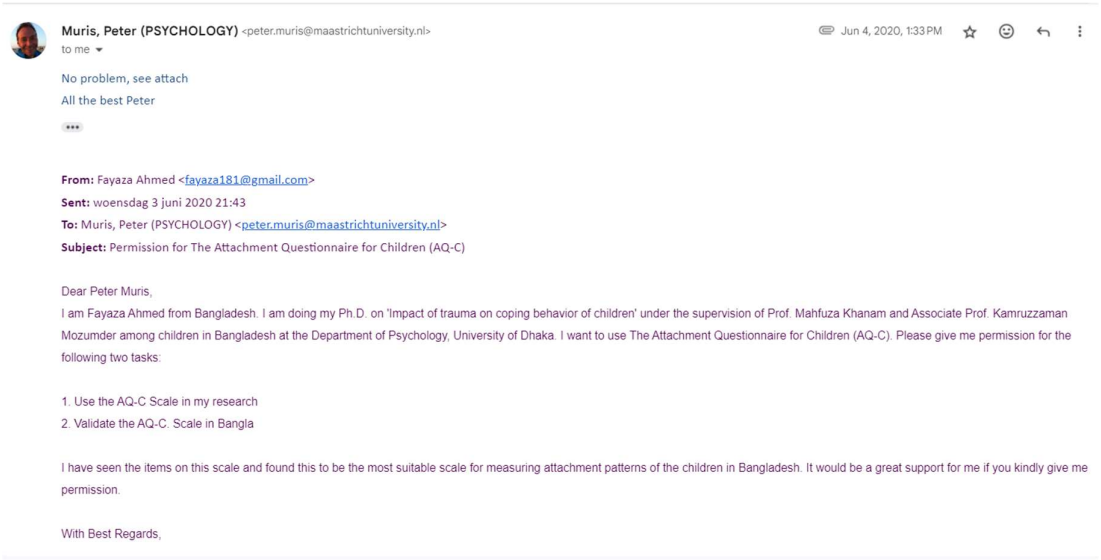
Appendix D3

List of Judges

No.	Name of the Judge	Institution and Designation
1.	Hamida Akhtar Begum	Pro-Vice Chancellor, IUBAT
2.	Shahin Islam	Professor, University of Dhaka
3.	Shelina Fatema Binte Shahid	Asst. Professor of Clinical Psychology, BSMMU
4.	Ismat Jahan	Clinical Psychologist and Head, National Trauma Counseling Centre, Ministry of Women and Children Affairs
5.	Azharul Islam	Assistant Professor, University of Dhaka
6.	Naima Nigar	Assistant Professor, University of Dhaka
7.	Dr. Shahana Parveen	Assistant Professor, Psychiatry, National Institute of Mental Health, Dhaka.
8.	Md. Zahir Uddin	Assistant Professor of Clinical Psychology, National Institute of Mental Health
9.	Sumaia Ali Raisa	Lecturer of Psychology, University of Dhaka, Lecturer
10.	Dr Shoebur Reza Choudhury	Sir Salimullah Medical College
11.	Tarun Kanti Gayen	Part-time faculty of Clinical Psychology, University of Dhaka,
12.	Nafisa Sultana	Clinical Psychologist, National Trauma Counseling Centre.
13.	Sabrina Mahmood	Educational Psychologist, Dhaka University
14.	Nuzhat E Rahman	Educational Psychologist, Promises medical lt.
15.	Irfana Samia	Senior Student Counselor, Scholastica School.

Appendix D4

Permission from Author of AQ-C



Muris, Peter (PSYCHOLOGY) <peter.muris@maastrichtuniversity.nl>
to me

Jun 4, 2020, 1:33 PM

No problem, see attach
All the best Peter

From: Fayaza Ahmed <fayaza181@gmail.com>
Sent: woensdag 3 juni 2020 21:43
To: Muris, Peter (PSYCHOLOGY) <peter.muris@maastrichtuniversity.nl>
Subject: Permission for The Attachment Questionnaire for Children (AQ-C)

Dear Peter Muris,
I am Fayaza Ahmed from Bangladesh. I am doing my Ph.D. on 'Impact of trauma on coping behavior of children' under the supervision of Prof. Mahfuza Khanam and Associate Prof. Kamruzzaman Mozumder among children in Bangladesh at the Department of Psychology, University of Dhaka. I want to use The Attachment Questionnaire for Children (AQ-C). Please give me permission for the following two tasks:

1. Use the AQ-C Scale in my research
2. Validate the AQ-C. Scale in Bangla

I have seen the items on this scale and found this to be the most suitable scale for measuring attachment patterns of the children in Bangladesh. It would be a great support for me if you kindly give me permission.

With Best Regards,