

The Role of Parental Factors in the Mental  
Health Problems Experienced  
by Refugee Children

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*by*

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## **Abstract**

### *The role of parental factors in the mental health problems experienced by refugee children*

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Refugee children have high rates of complex mental health needs and a range of associated risk factors. There has been, however, limited research on the role of family-related factors and the impact of family-oriented interventions. This thesis comprises two interlinked studies to address this knowledge gap. Study I aimed to establish the role of parental factors in the development of mental health problems among Syrian refugee children residing in Turkey. A cross-sectional design involved 322 children aged 8-18 years and 263 parents in Istanbul. Children completed questionnaires on traumatic experiences (SLE), mental health problems (CRIES-8; SDQ), perceived attachment relationships (SS) and parenting styles (EMBU-C); whilst parents reported on their psychopathology (GHQ-12). The results revealed that parenting variables increased the risk of children having PTSD and general mental health problems (GMHP) after the controlling for the effects of pre-migratory trauma. The perceived lower availability of, and higher dependency on, the attachment figure uniquely explained both PTSD and GMHP. Lack of perceived warm and rejecting parenting styles predicted PTSD, whereas parental psychopathology explained GMHP. Study II aimed to evaluate the feasibility of an attachment-focussed intervention, Group Theraplay. Thirty children with possible reactive attachment disorder (RAD) and their mothers were randomly allocated to Group Theraplay or a control group. Five feasibility criteria were assessed using the same measures as in Study I at the pre- and post-intervention stages. In addition, parenting style was assessed by parents and children (PPI), RAD symptoms by parents (RPQ), and feasibility by all participants through open-ended questions. Group Theraplay was, overall, found to be feasible for application with refugee children, showing significant improvement in RPQ scores, although there was limited parental engagement. The findings have implications for practice and service development, in engaging refugee families and integrating child- and parent-focussed interventions. Future research should actively involve parents before designing a substantive evaluation.

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I also wish to thank to my sidekick Kubra Okuyucu for not letting me feel alone during all these years that I have spent away from home and my dearest friends/colleagues Nurdan, Husna, Mehtap, Noaf, Chatwiboon and Ewen for being like a family to me in UK.

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Finally, my biggest thanks to the Al-mighty, for surrounding me with all these great people which helped me complete this thesis.

## **Dedication**

This thesis is dedicated to the precious souls that we lost during the course of this study; my beloved grandfather, Kâmil Yıldız who was a member of a refugee family himself, and the three years old Aylan Kurdi, who was found dead on the coast of Mediterranean Sea as a precedent of all refugee children...

## The Publications

Following research has been published throughout the course of this study:

Eruyar, S., Huemer, J., & Vostanis, P. (2017). How should child mental health services respond to the refugee crisis?. *Child and Adolescent Mental Health*.  
<https://onlinelibrary.wiley.com/doi/pdf/10.1111/camh.12252>

Eruyar, S., Maltby, J., & Vostanis, P. (2018). Mental health problems of Syrian refugee children: the role of parental factors. *European Child & Adolescent Psychiatry*, 27(4), 401-409. <https://link.springer.com/article/10.1007/s00787-017-1101-0>

Eruyar, S., Maltby, J., & Vostanis, P. (in revision). The role of perceived parenting styles and attachment relationships on the mental health of war-torn Syrian refugee children. *Journal of Child: Care, Health and Development*.

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# Chapter I

## General Introduction

Trauma is defined as the direct exposure to or witnessing of actual or threatened death, severe injury or sexual assault (American Psychiatric Association [APA], 2013). Exposure to traumatic events such as experiencing war conflict, e.g. persecution, shelling, loss of a loved one; or other vulnerabilities such as physical assault, sexual abuse, neglect and domestic violence, may result in lasting adverse impact on individuals' psychological functioning. Children exposed to traumatic events are at high risk of developing a range of mental health and developmental problems (Bronstein & Montgomery, 2011). Refugee children are acknowledged as being among the most vulnerable groups in this regard, as they have generally been exposed to war-related trauma in their home country, and often experience further stressful events during and after displacement. These adversities include poverty, language barriers, discrimination, lack of school attainment and cultural adaptation, and limited access to services (Huemer & Vostanis, 2010). Refugee children are thus extremely vulnerable to the development of mental health problems such as post-traumatic stress, depression, anxiety and behavioural problems (Reed, Fazel, Jones, Panter-Brick & Stein, 2012).

Various risk and protective factors contributing to refugee children's mental health have been evidenced in the literature (Erucar, Huemer & Vostanis, 2017), where such research is increasingly informing the development and implementation of means of psychosocial intervention (Tyrer & Fazel, 2014). The majority of early studies, however, adopted a dual categorization by classifying risk and protective factors in pre- and post-migratory settings, mostly highlighting the effect of exposure to pre-migratory trauma (Fazel & Stein, 2002). This has resulted in the predominance of trauma-focussed interventions with children (Ehnholt & Yule, 2006), whereas other domains evidenced in the general literature as also playing an integral role in child mental health have essentially been neglected.

In recent years, however, a broader range of interventions has emerged that target different levels of the child's environment, which in turn have had a noticeable impact on practice and services for refugee children. Many of these studies have been underpinned by the ecological systems framework (Bronfenbrenner, 1979), which has been adapted to meet refugee children's psychosocial needs (Williams, 2010). This framework proposes that child trauma can be better understood by considering the dynamic relationships between different layers of the child's environment (Bronfenbrenner, 2005). Based on

this framework, emerging evidence in the refugee literature has begun to consider risk and protective factors in the context of individual, family and community domains (Fazel, Reed, Panter-Brick & Stein, 2012).

Of all the domains in these ecological systems, as yet there is relatively limited evidence as to the role of family-based factors in a refugee context. In particular, there is a dearth of evidence dealing with the impact of attachment relationships, parenting styles and, to a lesser extent, parental mental health on refugee children's mental health. This is surprising considering the growing influence of attachment theory in the field of child trauma, the broader literature indicating the importance of adaptive parenting styles, and well-established evidence as to the association between parents' and children's mental health (Cook et al., 2017). This scarcity of material to consider parenting-related factors is reflected by an associated gap in the development and evaluation of interventions for refugee parents and families (Slobodin & de Jong, 2015).

The majority of studies in the literature have been carried out for refugee children resettled in high-income countries (HIC), despite the fact that the greatest proportion of refugees are resettled in low- and middle-income countries (LMIC) (Erucar et al., 2017). Likewise, there is emerging evidence about the mental health of Syrian refugees who have resettled in Western countries (Javanbakht, Rosenberg, Haddad & Arfken, 2018), whereas the literature is still lacking in term of the approximately 90% of Syrian refugees hosted by their neighbouring countries (United Nations High Commissioner for Refugees [UNHCR], 2018). Thus, further research is needed to explore the role of different parental factors on refugee child mental health in order to inform the development and implementation of parenting and family interventions, especially in LMIC.

### **1.1. Research aims**

This thesis consists of two interlinked studies, which address the following two aims:

- 1) Establishment of the role of parental factors in the development of mental health problems among Syrian refugee children residing in Turkey.
- 2) Evaluation of the feasibility of a psychosocial intervention to address these emerging parental risk factors.

A cross-sectional study was carried out with refugee children and their parents to address the first aim, whilst an experimental study was designed to address the second aim by investigating the feasibility of attachment-based intervention within the same population.

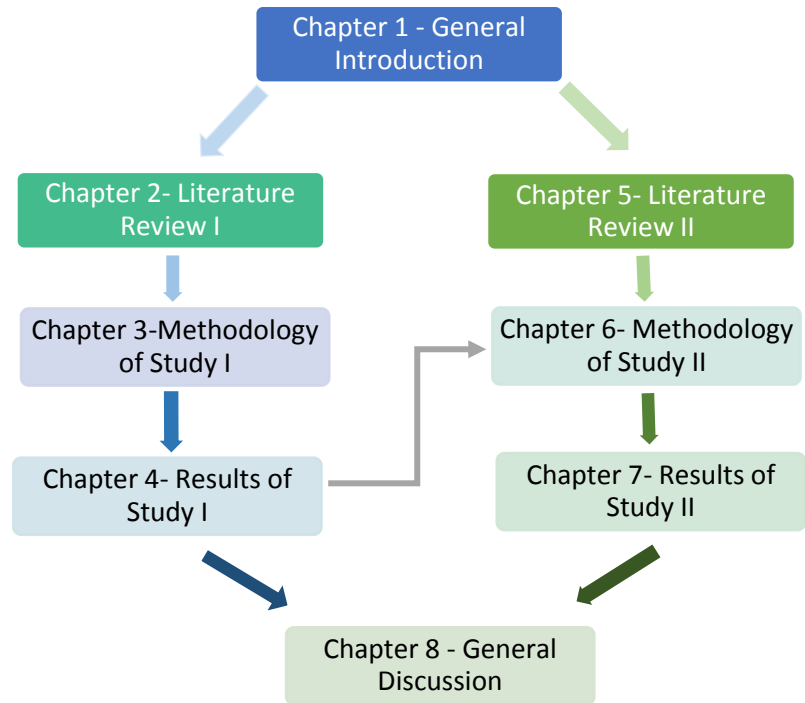
## **1.2. Thesis outline**

The outline of the thesis and the links between the two studies are presented in Figure 1.1. Briefly, the contents of each chapter are as follows:

- Chapter I presents the general introduction and the overarching research aims.
- Chapter II includes the first literature review on risk factors in the development and continuation of child refugee mental health problems.
- Chapter III consists of the methodology of the first study, which investigates the association between parental risk factors and child mental health problems.
- Chapter IV presents the results of this study.
- Chapter V presents the second literature review on psychosocial interventions for refugee children, with a particular focus on parenting interventions.
- Chapter VI describes the methodology of the second study, in which the feasibility of Group Theraplay intervention was investigated.
- Chapter VII presents the results of the second study.
- Chapter VIII concludes with the integrated discussion of the findings from the above two studies in the context of the literature, research and practice implications.

**Figure 1.1**

**Thesis outline**





## Chapter II

Predictors of refugee children's mental health:

Literature review I

## **2.1. Introduction**

This chapter presents a literature review which has the primary objective of understanding the effects of multi-level risk factors on the mental health of refugee children, especially the role of key parental components. This necessitates a consideration of the scope of the problem, nature and extent of common mental health problems in the targeted population, and the mechanisms of the multi-level risk and protective factors involved. Therefore, a general background on refugees is first given, including definitions and international refugee policies. These are discussed chronologically, beginning from the 1951 Convention, followed by the 1967 Protocol, and Turkey's current refugee law. Current trends are supported by statistics on refugee populations worldwide, and the consequences of forced displacement such as mortality and diseases are considered. The following section presents evidence on the most common mental health problems among refugee children, i.e., post-traumatic stress disorders (PTSD), depression, anxiety and behavioural problems. The impact of a range of multi-level risk factors on refugee children's mental health is discussed in an individual, family and community context, as based on ecological systems theory. As the primary focus of the present review, the evidence on parent-related factors, namely parental mental health, parenting styles and attachment relationships, is considered in detail.

### **2.1.1. Research framework**

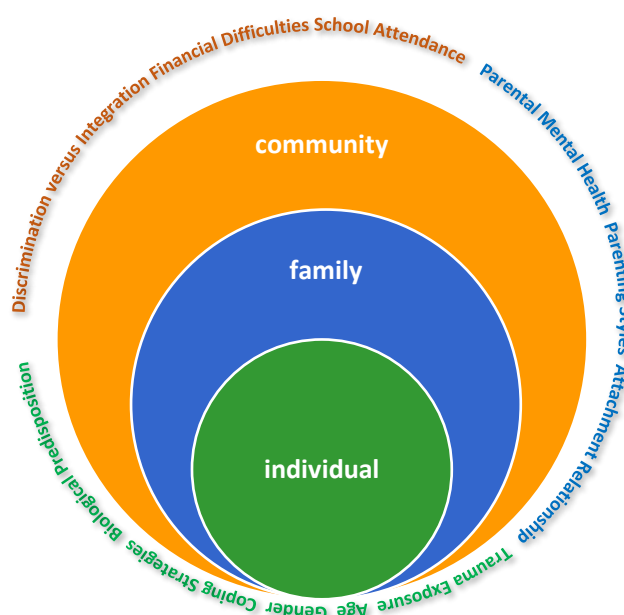
A wealth of refugee research has been conducted in recent years to explore the effects of risk and protective factors on refugee children's mental health. This has often grouped these factors according to their occurrence during the child's pre- or post-migration journey (Pacione, Measham & Rousseau, 2013). Exposure to political violence and a number of related traumatic events such as experiencing or witnessing persecution, killings, bombings or loss of loved ones, for instance, represent the established pre-migratory predictors of future mental health problems. Social supports, language learning, economic status, living arrangements and adaptation to the new culture similarly represent the principal post-migratory factors (Bronstein, Montgomery & Ott, 2013; Hodes, Jagdev, Chandra & Cunniff, 2008; Tingvold, Hauff, Allen & Middelthon, 2012).

Although this categorization is helpful in providing a degree of understanding as to the nature of traumatic experiences and their specific effects on subsequent mental health problems, it also falls short of facilitating a more comprehensive perspective for refugee

research. Accordingly, a growing body of refugee research has started to adopt the ecological systems framework developed by Urie Bronfenbrenner (1979), which allows studying child development in a wider environmental context. The ecological framework thus proposed is that children’s development, and consequently their mental well-being, cannot be completely conceived without due consideration of the micro-environment formed by their relationship with their parents, friends and teachers, as well as their connections with macro systems consisting of social, cultural, and community influences. Besides the linear impact of children’s traumatic experiences on their mental health, the interaction between ecological systems is also important to an understanding of what makes children vulnerable and what protects them from adversity, with this knowledge ultimately informing the development of appropriate interventions.

In this review, predictors of mental health problems will hence be comprehensively considered by employing the ecological framework. Factors related to children’s mental well-being are illustrated as interlaced rings (Figure 2.2). Each ring of individual, family and community-related factors represents an ecological layer, i.e., individual, micro- and macro systems, and will be discussed in the light of related evidence. Beside this, predictors will also be acknowledged according to the pre/post-migratory model, where available in the literature, as each factor may operate at different levels (Reed et al., 2012).

**Figure 2.2 Multi-level risk factors for refugee children’s mental health**



### **2.1.2. Search strategy**

A strategy with predefined criteria was adopted in order to search the related literature. PsycINFO, PsycARTICLE, PsycEXTRA, Scopus, PILOTS (Published International Literature on Traumatic Stress) and Google Scholar were the primary databases used in the present review to search for studies on risk and protective factors. References from the selected sources were searched as a further ‘snowball’ strategy. Journal articles, books, dissertations and conference papers published between 1993 and 2018, which used quantitative, qualitative or mixed methods and were written in English or Turkish, were included in the review. EndNote was used to store all references to be retrieved in the bibliography of the thesis.

Searches combined similar terms such as ‘refugee’, ‘internally displaced person’, ‘asylum-seeker’, ‘unaccompanied minor’; or ‘children’, ‘minor’, ‘adolescent’, ‘youth’, ‘teenager’; or ‘mental health’, ‘mental disorder’, ‘psychological adjustment’, ‘well-being’; or ‘risk factor’, ‘protective factor’, ‘resilience factor’, ‘individual factor’, ‘family factor’, ‘community factor’; or ‘attachment relationship’, ‘attachment security’, ‘attachment pattern’, ‘attachment style’; or ‘parenting style’, ‘parenting behaviour’, ‘child rearing style’, ‘parenting practices’; or ‘parental psychopathology’, ‘parental mental health’. More specific terminology, e.g. ‘rejecting parenting style’, was used to search for further resources.

## **2.2. General background**

### **2.2.1 Refugee definitions**

The term ‘refugee’ originally emerged in France in the 17<sup>th</sup> century as ‘réfugié’ (Oxford English Dictionary, 2018) to define the French Huguenots who migrated to seek sanctuary after the revocation of the Edict of Nantes (Harper, 2007). However, a structured and internationally recognized definition was later formulated. Since the increase in collective migration after each of the two World Wars, a comprehensive definition to acknowledge the legal presence and to address the fundamental rights of these forcibly displaced people in the host countries was urgently required. Thus, the first international definition was placed through the Convention Relating to the Status of Refugees which was held in Geneva (UN General Assembly, 1951), as “...owing to well-founded fear of being persecuted for reasons of race, religion, nationality, membership of

a particular social group or political opinion, is outside the country of his nationality and is unable or, owing to such fear, is unwilling to avail himself of the protection of that country; or who, not having a nationality and being outside the country of his former habitual residence as a result of such events, is unable or, owing to such fear, is unwilling to return to it” (*Article 1A(2)*, page 14).

There is a debate on the potential overlap with the term ‘immigrant’. The aforementioned term ‘refugee’ is used to describe people who have been forcibly displaced from their homelands because of the fear of persecution or being killed, whereas the term ‘immigrant’ is used to define a person moving for economic reasons such as ‘guest workers’ or for education purposes. As indicated in an article of the UNHCR, it ‘does matter’ to distinguish between those two terms (Edwards, 2016). Whilst homecoming is impossible for refugees due to the ongoing conflicts and their governments not being able to meet their legal obligation of ensuring citizens’ safety, migrants are free to return to their countries and seek sanctuary from their governments if they so choose.

Other terms related to refugee status, such as ‘asylum-seeker’, ‘unaccompanied minor’ and ‘internally displaced’ person, which are described by International Organisation for Migration (IOM) are presented in Table 2.1 (“Glossary on Migration N°25”, 2011). Children who are referred to under any of these terms will be included in this chapter, as they all closely relate to the characteristics of the population that form the focus of this thesis. Also, the distinction between these groups is often not possible in the research literature, as children’s legal status is subject to constant change.

**Table 2.1 Other terms used related to refugee status**

<b>Asylum-seeker</b>	<i>“A person who seeks safety from persecution or serious harm in a country other than his or her own and awaits a decision on the application for refugee status under relevant international and national instruments”</i>
<b>Internally displaced persons (IDPs)</b>	<i>“Persons or groups of persons who have been forced or obliged to flee or to leave their homes or places of habitual residence, in particular as a result of or in order to avoid the effects of armed conflict, situations of generalized violence, violations of human rights or natural or human-made disasters, and who have not crossed an internationally recognized State border”</i>
<b>Unaccompanied minors (UAM)</b>	<i>“Persons under the age of majority in a country other than that of their nationality who are not accompanied by a parent, guardian, or other adult who by law or custom is responsible for them”</i>

### **2.2.2. Policies for refugees**

Even though there have always been wars and internal political conflicts with their consequent population movements, there was no official ‘refugee problem’ before World War I, since states previously had open borders, as stated by John Hope Simpson (1938, page 607):

*“I travelled a great deal before the War all over the world, and I never needed a passport. But since the War, frontiers have been closed and nobody can cross them, not only without a passport, but without a visa on the passport from the representative of the country to which the traveller wishes to go. Thus, movements of populations have been checked”.*

In a parallel to Simpson’s reflection, Marrus (2001) observed that attitudes towards displaced people have changed over time, from being more humane and hospitable to becoming more sceptical and intolerant in terms of national policies. Recent underlying reasons have been linked to national security (Balamir-Coşkun, 2015). Besides economic burden (Jacobsen, 1996), cultural diversity, including religion and language (Ives, 2007), which are inflicted by aggregated inflow, may also arouse a host country’s concerns.

### ***2.2.2.1. The 1951 Convention Relating to the Status of Refugees***

Thus, the need for a universal contract emerged for the protection of refugees and the recognition of their rights. The 1951 Convention was the first structured attempt to establish an international refugee law, even if there had previously been regional tools for minorities (Conventions of 28 October 1933 and 10 February 1938). Twenty-six states from various regions such as Europe, the Middle East, Australia and North America participated in and signed the Convention Relating to the Status of Refugees held in Geneva (1951). The 1951 Convention remains a cornerstone in terms of establishing fundamental rights in a global context. The rights of refugees were stated along the lines of three principles in the 1951 Convention:

- *Non-discrimination:* Refugees cannot be discriminated against because of their religious choice, political opinion, gender, age, disability or sexuality.
- *Non-penalization:* People who passed the borders illegally cannot be penalized if there is a fear of persecution by their home country.
- *Non-refoulement:* These refugees cannot be returned to their country if they do not request to go back due to ongoing war and persecution.

Furthermore, the 1951 Convention articulated the basic rights of a refugee in all the agreed states, including access to their judicial system, education, employment and provision of documents, for example for travel purposes. This function of the Convention is essential because it provides for the key standards which must be implemented by a host country in conjunction with its specific legislation.

### ***2.2.2.2. The 1967 Protocol***

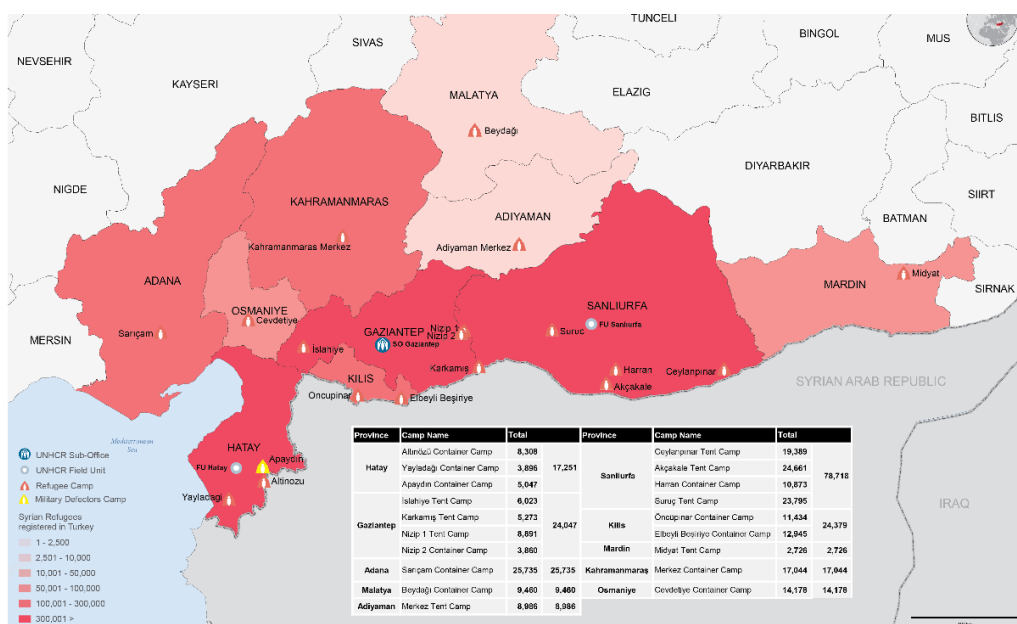
Although the 1951 Convention was of paramount importance in terms of providing international rights for displaced people, it proved inadequate to meet the needs of individuals who had fled non-European countries. Moreover, it was only issued for individuals escaping from events that occurred before 1st January 1951, and who were given the rights of refugees. Thus, the 1967 Protocol, which is an extension of the prior Convention, was subsequently established to address the geographical and time limitations of the 1951 Convention (UN General Assembly, 1967). So far, both the Convention and the Protocol are in effect across the globe, with 146 state parties, including Turkey.

### 2.2.2.4. Turkey's policy for refugees

As one of the neighbouring countries, Turkey has been carrying an excessive burden since the Syrian conflict began in 2011 due to its adoption of an open doors policy, which provides temporal protection, promotes *non-refoulement* and ensures humanitarian assistance for three and a half million Syrian civilians inside Turkish borders (İçduygu, 2015). Syrians living in Turkey have the right to access free health and education services and the labour market under the Temporary Protection Regulation (Açıkgöz & Arner, 2014). Moreover, the Regulation on Work Permits for Foreigners under Temporary Protection, which was adopted by the Turkish parliament in January 2016, protects the rights of refugee workers by prohibiting employees from being offered salaries of less than the national minimum wage (İçduygu & Şimşek, 2016).

Since 2011, 21 camps hosting nearly half a million Syrians have been set up across South East Turkey (Figure 2.3), in which refugees are provided with shelter, food, health and education services and social activities (Disaster and Emergency Management Authority [AFAD], 2017). In parallel, a high proportion of refugees reside alongside the community, where accessing these facilities provided by the related policies can be challenging for refugee families in many ways. Common barriers are language difficulties and registration with local authorities (European Commission, 2017), as well as discrimination, mistrust and past exposure to trauma.

**Figure 2.3 Syrian refugee camps and provincial breakdown of Syrian refugees registered in south-east Turkey as of April 2018 (UNHCR, 2018).**

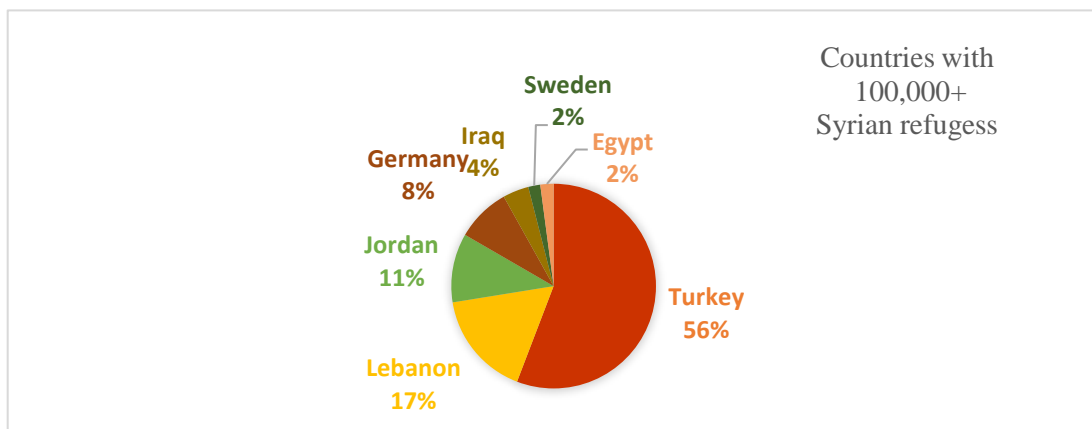




### 2.2.3. Statistics on refugees

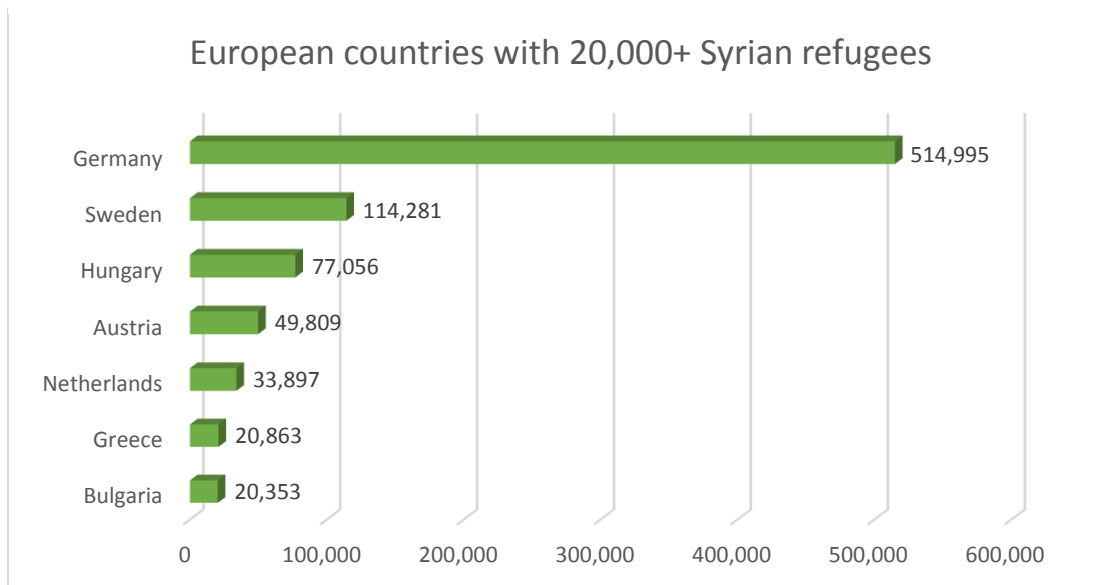
Over 65 million people worldwide had been forcibly displaced from their living spaces due to persecution and wars by the end of 2016 (UNHCR, 2016). One in four of these people were refugees who had crossed borders, whereas the remaining consisted of internally displaced persons and asylum seekers. The Syrian civil war, which started in 2011 and continues with increasing ferocity, had a disproportionate impact on these figures. Although the number of registered Syrian refugees is over five million (UNHCR, 2017b), their overall population, including asylum-seekers in Europe, is much larger. Recent figures indicated the top host countries for Syrian refugees as being Turkey, Lebanon, Jordan and Iraq (Figure 2.4). Turkey hosts more refugees than any other country worldwide at 3.9 million, of whom 3.5 million originate from Syria (UNHCR Turkey, 2018). Middle East countries account for nearly 90% of the Syrian refugee population (UNHCR, 2017b).

*Figure 2.4 Dispersion of Syrian refugees worldwide (adapted from UNHCR, 2017b)*



Europe has also faced a substantial refugee crisis and carried an excessive burden in recent years. The refugee influx peaked during 2015, when more than one million refugees fled to European countries as reported by IOM (“World Migration Report”, 2015). Nearly one million Syrians, moreover, applied to European countries for refugee status between the years of 2011 and 2017 (UNHCR, 2017). Germany is the top host country with half a million Syrian refugees, followed by Sweden (Figure 2.5).

**Figure 2.5 Dispersion of Syrian refugees across Europe (adapted from UNHCR, 2017)**



#### **2.2.4 Statistics on refugee children**

According to UNICEF (2009), approximately one billion children, or one-sixth of the world population, live in conflict-affected areas. Children constitute almost half of the refugee population, which aggregates to around twelve million (UNHCR, 2017). Approximately 300,000 of the displaced children are unaccompanied minors (UNICEF, 2016), more than half of whom applied for asylum within European countries between 2015 and 2016 (Eurostat, 2017). The numbers of Syrian refugee children are also worrisome. Six million Syrian children need humanitarian assistance, half of whom are considered to be refugees (UNICEF, 2017).

#### **2.2.5. Consequences of armed conflicts and subsequent mass influx**

Armed conflicts and subsequent forced displacement of civilians resulted in both visible (e.g., fatalities, disabilities, food deprivation), and invisible (e.g., impairment in mental health) consequences. According to the International Institute for Strategic Studies (IISS) (2017), more than 500,000 people were killed between 2014 and 2016 because of direct exposure to armed conflicts, most of whom were civilians who became the targets of the unlawful use of arms and explosives (Geneva Declaration Secretariat, 2015). In 2001, the one thousand daily fatalities largely consisted of children and women (Southall & O’Hare, 2002).

A mass influx of people escaping violence and persecution increases the chance of other risks such as diseases, food deprivation, and loss of education. High mortality rates amongst illegally migrating people using sea routes continuously captures the attention of the public and the media. According to the IOM report published in 2014, over 40,000 immigrants have lost their lives at sea since 2000 (“Fatal Journeys”, 2014). Most fatalities occurred in the Mediterranean Sea; for instance, more than 3,700 immigrants drowned in this region during 2015, while 411 people have lost their lives out of 84,000 who attempted to reach the Greek and Italian coasts since the beginning of 2016 (“Migrant Fatalities Worldwide”, 2016).

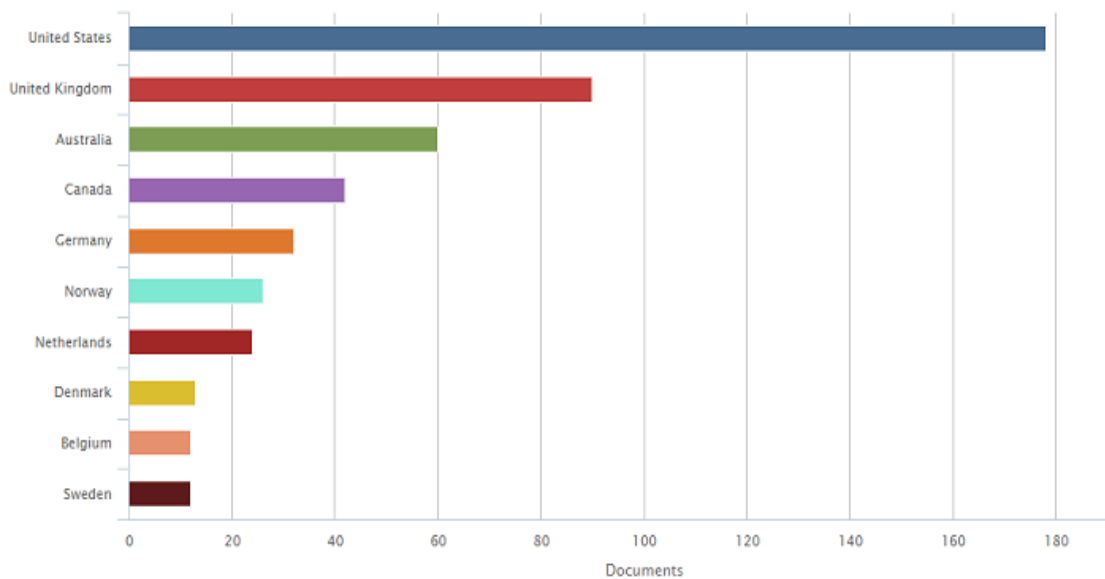
Moreover, people fleeing armed conflict are usually accommodated in overcrowded camps with unsanitary and unclean water that places refugees at serious risk of infectious diseases. According to UNICEF (2009), half a billion of people living in conflict-affected regions have to drink contaminated water, whilst approximately 1.5 billion are without access to sanitary facilities. Among the reported diseases, diarrheal infections, rubella and respiratory infections are the most common causes of death among refugees (Khan & Laaser, 2002). The number of children aged under five years who died due to armed conflict-related reasons, such as infectious diseases, starvation or prenatal diseases in camps, exceeded five million between 1998 and 2007 (UNICEF, 2009).

### **2.3. Mental health problems in refugee children**

Besides the more visible consequences of armed conflict and mass departure described above, refugees are at heightened risk of developing mental health problems. Children, especially unaccompanied minors, constitute the psychologically most vulnerable population (Bean, Derluyn, Eurelings-Bontekoe, Broekaert & Spinhoven, 2007). A wealth of evidence indicates varied mental health problems among refugee children. Post-traumatic stress disorder (PTSD) is the most frequent type of psychopathology, followed by other emotional problems such as depression and anxiety (Attanayake et al., 2009; Jensen, Fjermestad, Granly & Wilhelmsen, 2015) and, to a lesser extent, externalizing presentations such as conduct problems and hyperactivity (Bronstein & Montgomery, 2011). A recent systematic review of 47 studies with 24,686 refugee children and adolescents in Europe revealed that the median PTSD prevalence was 35.3% (ranging between 19% and 53%); 20.7% for depression (10.3%-32.8%), and 15% for anxiety disorders (8.7%-31.6%) (Kien et al., 2018).

Research evidence related to refugee mental health has extensively yielded from studies in high-income countries, despite the fact that the majority of refugees are hosted in low- and middle-income countries (LMICs) (Fazel, Reed & Stein, 2015). For example, a systematic review by the above research group on risk and protective factors for refugee children’s mental health problems identified 44 studies from high-income countries (Fazel et al., 2012) but only 27 from LMICs (Reed et al., 2012). Consistently, the top ten countries for studies into refugee children mental health were of high-income status, with the US and the UK providing most studies, as revealed in a Scopus search for the present review (Figure 2.6). As refugees residing in HIC and LMIC experience different types of post-migratory stressors, e.g. asylum-seeking process in HIC versus limited access to services in LMIC, this may result in different mental health needs (Reed et al., 2012). In particular, more evidence is needed on the mental health of refugee children in LMIC.

**Figure 2.6 Scopus search results as to refugee mental health research by country**



Mental health problems can present on a continuum, ranging from transient mild symptoms to fully diagnosed disorders. The previously mentioned common mental health problems, which are PTSD, depression, anxiety, conduct problems and attention deficit-hyperactivity disorders (ADHD), will be approached in the context of the two major classification systems, i.e., The Diagnostic and Statistical Manual of Mental Disorders (DSM–5) (APA, 2013) and The International Classification of Diseases (ICD-10) (World Health Organization [WHO], 1993). Their diagnostic criteria will be followed through prevalence rates and established psychosocial correlates.

### **2.3.1. Post-traumatic stress disorder (PTSD)**

DSM-5 defined post-traumatic stress disorder as a type of anxiety response by ‘some’ people after being exposed to, or having witnessed, one or more life-threatening events (APA, 2013). In the equivalent system of ICD-10 (WHO, 1993), PTSD was defined as a postponed reaction by ‘most’ people after being exposed to one or more life-threatening, stressful life events. Despite some minor differences, these definitions have essentially converged in recent years. The specific diagnostic criteria for PTSD are presented in Table 2.2.

**Table 2.2 Diagnostic criteria for PTSD in DSM-5 and ICD-10**

	DSM-5	ICD-10
Criteria		
A	Direct or indirect* exposure to actual or menace of death, serious injury or sexual violence.	Short or long-term exposure to threatening and devastating events, which is likely to cause extensive distress in almost anybody.
B	Constant re-experience of traumatic events by flashbacks, nightmares, unwelcome thoughts, emotional distress or physical reactivity following traumatic reminders.	Recalling and living over the stressor constantly by flashbacks, vivid memories, iterative dreams, or distress following trauma-reminder situations.
C	Avoidance of trauma reminders or trauma-specific thoughts and emotions following exposure to trauma.	Avoidance of trauma reminders or trauma-related situations following exposure to trauma.
D	Having two of the following items: a) Lack of remembering core elements of the traumatic events. b)Extremely unfavourable conjectures about self or the world. c) Extreme blame of self and others for trauma occurrence. d) Negative affect or difficulty in experiencing positive affect. e) Decreased attraction to activities. f) Isolation feeling.	Having either (1) or (2): 1. Lack of remembering some or all core elements of the traumatic events. 2. Persistent arousal symptoms represented by any two of: a) Sleep disturbance. b) Jitters or bursts of anger. c) Concentration difficulty. d) Hyper-vigilance. e) Excessive startle reaction.
E	Having two of following arousal symptoms: a) Irritability or aggression. b) Risky or destructive behaviour. c) Hyper-vigilance. d) Excessive startle response. e) Concentration difficulty. f) Sleeping difficulties.	Symptoms emerge following the traumatic event or within six months.
F	Symptoms proceed at least a month after the traumatic event.	
G	Symptoms cause impairment in functionality.	
H	Symptoms are free from medication, substance use and other illnesses.	

\* “Witnessing the trauma, learning that a relative or close friend was exposed to a trauma or indirect exposure to aversive details of the trauma, usually in the course of professional duties (e.g., first responders or medics)” (APA, 2013)

DSM-5 and ICD-10 include common symptoms such as intrusion, avoidance, hyperarousal and alterations in cognition, although they have different clustering systems. DSM-5 elaborates on symptoms of negative alterations in cognitions and mood specified in Criterion D, and expands on hyperarousal symptoms by adding risky and destructive behaviour in Criterion E, whilst these clusters are combined in ICD-10 (Criterion D). DSM-5 broadens the definitions related to avoidance situations by including avoidance of trauma-related thoughts and feelings, whilst ICD-10 defines more general avoidance situations such as trauma-related events. DSM-5 specifies the duration of symptoms to be at least one month, whilst ICD-10 defines the required time between traumatic events and the onset of symptoms to be six months.

Children and adolescents are continuously exposed to numerous kinds of trauma worldwide. A large general population survey conducted in the US with a representative sample of 4,503 adolescents reported that 21% had been exposed to some kind of maltreatment during the previous year, which included physical, emotional or sexual abuse and neglect, and this rate increased to 41% over their lifetime (Finkelhor, Turner, Shattuck, Hamby & Kracke, 2015). PTSD prevalence rates vary across studies, depending on the severity, duration and type of traumatic exposure (Spinazzola et al., 2017). The six-month prevalence of PTSD was reported as 3.7% in boys and 6.7% in girls in a community sample of 4,023 adolescents assessed according to DSM-IV criteria (Kilpatrick et al., 2003). This prevalence rose to 21% in children who had been physically or sexually abused (Romero et al., 2009).

Refugee children are among the highest-risk groups considering the complexity of exposure to trauma before, during and after displacement (Fazel et al., 2012). Consequently, PTSD has been consistently reported as the most common mental health problem. A systematic review, which included 17 studies that utilized both self-reports and clinical interviews with a total 7,920 refugee children, established an average prevalence of 47% (Attanayake et al., 2009), which is much larger than for other vulnerable groups (Kilpatrick et al., 2003). Overall, the PTSD prevalence varied from as low as 5% (Mace et al., 2014) to as high as 88% (Qouta, Punamäki & El Sarraj, 2003) due to various factors such as measurement differences, duration since exposure to war, and study location (Attanayake et al., 2009).

The methods used to assess PTSD symptoms among refugee children are manifold. Most studies used self-reports with relatively older children and adolescents (Derluyn, Broekaert, & Schuyten, 2008; Ellis et al., 2010; Hasanović, Sinanović, & Pavlović, 2005; Jakobsen, Demott, & Heir, 2014; McGregor, Melvin, & Newman, 2015), whilst parents and teachers were included as additional informants of younger children's mental health (Slone & Mann, 2016). Both methods have their advantages and their constraints. Parents add an important perspective, albeit more in recognizing externalizing problems, but are also prone to bias by over-reporting child mental health problems if suffering from ill mental health themselves (Fazel & Betancourt, 2017). In contrast, self-reports may be more subjective, but also make it easier to assess PTSD in large, highly mobile, linguistically and culturally diverse samples. Furthermore, most studies using self-reports utilized internationally validated, reliable diagnostic scales such as the Impact of Events Scale for Children (Horowitz, Wilner, & Alvarez, 1979). Only a few studies utilized more costly clinical interviews (Angel, Hjern, & Ingleby, 2001; Elbedour, Onwuegbuzie, Ghannam, Whitcome, & Hein, 2007).

The children's country of origin and circumstances also vary considerably in the literature. Most studies were conducted with children from regions experiencing protracted conflict such as Palestine (Thabet, Abed & Vostanis, 2004; Qouta, Punamäki, Montgomery & El-Sarraj, 2007), Somalia (Ellis et al., 2010), Cambodia (Sack et al., 1993), and Afghanistan (Bronstein et al., 2013), or following excessive violence and massacres such as in Bosnia (Hasanović et al., 2005). An earlier influential study utilized interviews to diagnose PTSD among Cambodian adolescent refugees, and established a prevalence of 48%, which appears to be the average established rate (Sack et al., 1993). Recent years have seen a growing body of literature on the mental health of Syrian children since the conflict started in 2011. Similar to Sack's findings, Özer and his colleagues (2016) reported that 45% of 311 Syrian refugee youths living in camps scored above the cut-off score for a likely PTSD diagnosis.

The study location, i.e., high-income versus low/middle-income countries and conflict context is another plausible factor that explains the inconsistent findings, as children have been included in epidemiological research at different stages of migration and when facing different needs. For example, refugee children residing in low-income countries



usually lack basic needs, whilst those resettled in high-income settings may face asylum-seeking stress, cultural and linguistic barriers, and discrimination (Reed et al., 2012). The average PTSD prevalence was estimated to be 11% by a systematic review of five studies with clinical assessments in Western countries (Fazel, Wheeler, & Danesh, 2005), which is much lower than the average rates in LMICs (Attanayake et al., 2009). However, a more recent systematic review of children resettled in Europe, and which only included studies with clinical assessments, established a higher prevalence of between 19% and 36% (Kien et al., 2018). The small sample size of the Fazel et al. (2005) study, or the risk of bias because of convenience sampling strategies in the Kien et al. study (2018), might explain the differences in PTSD prevalence rates established by these two reviews. Moreover, increasing atrocities worldwide and the consequent large-scale migration may reflect the increased prevalence of PTSD among refugee youth which has been captured by recent studies. What appears to be lacking, though, is knowledge on the differentiated impact of past experiences and current living circumstances, as well as of specific traumatic events, and a better understanding of the mechanisms that lead to the onset and continuation of PTSD symptoms.

### **2.3.2. Other emotional problems**

Besides PTSD, other emotional problems, predominantly depression and anxiety, are commonly experienced by forcibly displaced children. These may reach diagnostic criteria for major depressive episodes (MDE) and generalised anxiety disorder (GAD), although such emotional problems have often been studied in broader terms as a spectrum of internalizing problems. Related research in refugee children will thus be briefly discussed in the following sections.

#### **2.3.2.1. Depression**

A Major Depressive Episode (MDE) is characterized by core symptoms such as a depressed mood that includes intensive feelings of sadness and emptiness, irritability, fatigue, loss of interest in activities, and impaired social, cognitive and occupational functioning for at least two consecutive weeks. Thus, MDE criteria do not differ substantially between the two diagnostic manuals (Table 2.3). However, ICD-10 differs from DSM-V by defining the degree of depression as mild (four symptoms), moderate (five to six symptoms) and severe (seven or more symptoms).

*Table 2.3 Key symptoms of Major Depressive Episodes in DSM-5 and ICD-10*

DSM-5	ICD-10
Five or more of the following symptoms must be present: (symptom 1 or 2 should be one of five)	Four or more of the following symptoms must be present: (symptoms 1, 2 or 3 should be one of four)
1. Depressed or irritable (in children) mood.	1. Constant depressed mood.
2. Loss of interest and contentment in activities.	2. Loss of interest and contentment in activities.
3. Increased/decreased appetite and weight change.	3. Fatigue or low energy.
4. Inability to sleep or excessive sleepiness.	4. Loss of confidence/self-esteem.
5. Psychomotor agitation or slowing.	5. Blame of self and guilt.
6. Fatigue or low energy.	6. Recurrent thoughts of death or suicide.
7. Feeling worthless and guilt excessively.	7. Difficulty in concentrating and decision-making.
8. Difficulty in concentrating and decision-making.	8. Psychomotor agitation or slowing.
9. Recurrent thoughts of death or suicide.	9. Sleep disturbance.
	10. Increased/decreased appetite and weight change.

According to the National Survey on Drug Use and Health, in 2016 approximately 3.1 million adolescents were diagnosed with at least one MDE in the US, which accounted for 12.8% of the general child population (National Institute of Mental Health, 2017). Depression rates rise to an average of 43% for children exposed to war trauma (Attanayake et al., 2009), which makes depression the second-most common mental health problem among refugee children, often in comorbidity with PTSD (Thabet et al., 2004). A study conducted in a refugee camp in Turkey indicated that 44.3% of 311 Syrian refugee children met the diagnostic criteria of depression (Özer, Sirin & Oppedal, 2016); similar rates have been replicated by other studies. Elbedour and his research team (2007) and Papageorgiou and colleagues (2000), reported that 40% Palestinian and 47% Bosnian refugee children reported moderate to severe depressive symptoms, respectively.

Similar to PTSD, the prevalence of depression varies across studies depending on various factors, including the method of measurement, diagnostic approaches and environmental determinants. Self-reports such as the Beck Depression Inventory (Beck, Steer & Brown, 1996) and the Birleson Depression Self-Rating Scale (DSRS) (Birleson, 1981) are the most commonly used (Ellis, MacDonald, Lincoln & Cabral, 2008; Kia-Keating & Ellis, 2007), besides which some studies have also used clinical interviews. Environmental

factors such as socioeconomic status might also affect diagnosis, although this is more prominent for conduct problems, as economic hardship has been found to be a risk factor for impaired parenting, abuse and neglect (Green et al., 2005). In a study of Bosnian refugees, adolescents residing in Austria were compared with their internally displaced peers in terms of emotional problems. Those who were internally displaced within Bosnia reported lower parental education and family income, and correspondingly reported higher scores on the depression scale compared to those resettled in Austria (Sujoldžić, Peternel, Kulenović & Terzić, 2006). This indicated that the higher socioeconomic status and welfare of resettlement in HIC might offer a protective effect.

### 2.3.2.2. Anxiety disorders

Anxiety disorders are characterized by feeling worried and uneasy, the inability to control those worries, and apprehension about events or activities such as school and work which persevere for at least six months (APA, 2013). The key symptoms of Generalized Anxiety Disorder (GAD) in DSM-5 and ICD-10 are presented in Table 2.4. Similar to PTSD and depression, a child may not meet diagnostic criteria but still be impaired by experiencing distressing symptoms such as sleep difficulties.

**Table 2.4 Key symptoms of Generalized Anxiety Disorder in DSM-5 and ICD-10**

DSM-5	ICD-10
<p>One or more of the following symptoms being present in children:</p> <ol style="list-style-type: none"> <li>1. Restlessness, feeling on edge.</li> <li>2. Being easily exhausted.</li> <li>3. Difficulty in focusing.</li> <li>4. Irritability.</li> <li>5. Tension in muscles.</li> <li>6. Sleep disturbance.</li> </ol>	<p>Three or more of the following symptoms being present in children:</p> <ol style="list-style-type: none"> <li>1. Excessive concerns about performance in schoolwork, sports, and other regular activities</li> <li>2. Excessive concerns about getting sick.</li> <li>3. Excessive concerns in other areas (punctuality, disasters, etc.).</li> <li>4. Independent worry that is unrelated to specific situations.</li> <li>5. A frequent need for reassurance.</li> <li>6. Tension, inability to relax or to concentrate, nervousness, difficulty getting to sleep.</li> <li>7. Recurrent somatic complaints.</li> </ol>

The refugee literature has established a wide range of prevalence rates ranging from 15% (Goldin, Hägglöf, Levin & Persson, 2008) to as high as 95% (Elbedour et al., 2007), with the average being around 27% (Attanayake et al., 2009); this can be contrasted to 5.8% in the general population (Bittner et al., 2007). Anxiety symptoms are measured by self-

or parent-rated rating scales such as the widely used Revised Children's Manifest Anxiety Scale (RCMAS) (Reynolds, 1980), the Beck Anxiety Inventory (Alexander, David & Grills, 2013), and the Hopkins Symptoms Checklist (Bronstein et al., 2013), as well as by clinical interview (Lorek et al., 2009; Montgomery, 1998). The wide range of prevalence rates between studies is attributable to the factors previously mentioned, i.e., assessment method, study location, and sample characteristics. As with other types of psychopathology, anxiety rates are higher among unaccompanied minors. For instance, the average prevalence was established as 8.8% for accompanied refugee children, whilst this was more than double at 20.2% for unaccompanied minors (Derluyn, Mels & Broekaert, 2009).

### **2.3.3. Externalizing problems**

Behavioural or externalizing problems are also encountered in refugee children, although not as commonly as PTSD and emotional problems. Similar to the previous sections, DSM-5 and ICD-10 definitions and key symptoms of the most common types, which are the socially determined conduct disorders (CD) and the neurodevelopmental attention deficit-hyperactivity disorders (ADHD), are presented below, as followed by key epidemiological findings.

Commonly, though, a child does not necessarily meet full diagnostic criteria but rather exhibits some symptoms of disruptive behaviour. The Strengths and Difficulties Questionnaire (SDQ) is the most frequently used measure of overall mental health morbidity, and more specifically of behavioural problems, with a cut-off score for likely clinical diagnosis. In the refugee literature, problematic behaviour amongst children is often referred to as broad externalizing problems, instead of examining specific sub-types (Betancourt, Yudron, Wheaton & Smith-Fawzi, 2012; Pacione et al., 2013; Rousseau & Drapeau, 2003). Hence, studies using both the terms of behavioural and externalizing problems will be included in this section, independent of clinical diagnosis.

#### **2.3.3.1. Conduct disorders**

Conduct disorder (CD) is defined as “a repetitive and persistent pattern of behaviour in which the basic rights of others or major age appropriate societal norms or rules are violated” (APA, 2013). Key symptoms of CD in DSM-5 and ICD-10 are presented in Table 2.5. The two systems highlight 15 identical disruptive behaviours with similar wording, and require at least three such behaviours exhibited in the past year, and with

one such behaviour observed during the past six months. In DSM-5, however, impairment criteria specifically require a behaviour to cause “clinically significant impairment in social, academic, or social functioning” (APA, 2013).

**Table 2.5 Key symptoms of Conduct Disorder (CD) in DSM-5 and ICD-10**

DSM-5	ICD-10
<b><i>Aggression to People and Animals</i></b>	
1. Bullies, threatens or intimidates.	1. Often lies or breaks promises to obtain goods or favours.
2. Initiates physical fights.	2. Initiates physical fights (other than with siblings).
3. Uses weapons that can cause serious psychical harm.	3. Uses weapons that can cause serious physical harm.
4. Physical cruelty to people.	4. Often stays out after dark despite parenting prohibition (beginning before 13 years of age).
5. Physical cruelty to animals.	5. Physical cruelty to other people.
6. Stealing while confronting a victim (e.g., mugging, purse snatching).	6. Physical cruelty to animals.
7. Forcing someone into sexual activity.	
<b><i>Destruction of Property</i></b>	
8. Engaging in fire setting, with the intention of causing serious damage.	7. Deliberately destroying others’ property.
9. Deliberately destroying others’ property.	8. Setting fires deliberately.
<b><i>Deceitfulness or Theft</i></b>	
10. Breaking into others’ properties or cars.	9. Stealing without confronting the victim, either within the home or outside (e.g., shoplifting, burglary, and forgery).
11. Lying to obtain goods or favours or to avoid obligations.	
12. Stealing without confronting a victim (e.g., shoplifting).	
<b><i>Serious Violations of Rules</i></b>	
13. Staying out at night, beginning before age 13 years, despite parental prohibitions.	10. Truancing from school, beginning before 13 years of age.
14. Running away from home overnight at least twice, or once without returning for a lengthy period.	11. Running away from home at least twice or once for more than a single night (this does not include leaving to avoid physical or sexual abuse).
15. Truancing from school, beginning before age 13 years.	12. Committing a crime involving a victim (e.g., extortion, mugging).
	13. Forcing someone into sexual activity.
	14. Bullying (including intimidation, tormenting, or molestation).
	15. Breaking into others’ properties or cars.

Features of conduct disorders change with the child’s age; that is, younger children aged up to seven years usually present with disruptive or oppositional behaviours such as

physical aggression to siblings/peers and disobedience to instructions, whilst older children aged between 8 and 11 years often add more serious behaviour such as lying, swearing, bullying and stealing. More severe antisocial behaviour is exhibited in adolescence, usually outside the home, e.g., running away from home, vandalism, robbery with force, assault, and drug or alcohol abuse (National Institute for Health and Care Excellence [NICE], 2013). Although not necessarily every child with early symptoms will worsen with age, around 25% end up exhibiting serious antisocial behaviour during adolescence (Rowe, Maughan, Pickles, Costello & Angold, 2002). The prevalence of conduct disorders in the community has been established as 7% for boys and 3% for girls aged 5-10 years, which increase to 8% and 5%, respectively, between the ages of 11 and 16 years (NICE, 2013).

Refugee children are at slightly higher risk of developing CD. A systematic review pooled eight studies including 2,766 refugee children and established an average rate of externalizing problems of around 13% (Kien et al., 2018); this rate increased to 20% in unaccompanied minors (Bean et al., 2006). Refugee adolescents who experience post-migratory stressors in the family and the community are at particular risk of developing conduct problems. A qualitative study with Somalian youth showed that stressors like loss of family, exposure to police brutality and discrimination, as well as chronic impoverishment, can lead to gang involvement and desensitization to violence (Im, Caudill & Ferguson, 2016). This finding was supported by studies using quantitative designs (Durà-Vilà, Klasen, Makatini, Rahimi & Hodes, 2013; Jensen et al., 2015). For example, refugee children who witnessed violence in Denmark did not generally attend school and had a lower-educated mother were more likely to report externalizing problems (Montgomery, 2008). Thus, intervening at different ecological levels during post-migration is important in breaking such cycles as well as their continuity into adulthood, as will be discussed in detail in Chapter V.

### ***2.3.3.1. Attention Deficit-Hyperactivity Disorder (ADHD)***

Attention Deficit-Hyperactivity Disorder (ADHD), or Hyperkinetic Disorder as referred to in ICD-10, is characterized by excessive impulsivity, difficulty in paying attention and controlling one's behaviour, and which is observed for at least six months in two or more settings, e.g., home, school or clinic (APA, 2013; WHO, 1993). DSM-5 generally follows the ICD-10 key criteria, albeit with more diverse attention-related symptoms (Table 2.6).

These two diagnostic systems also differ in age onset, which is before the age of seven years for ICD-10 and 12 years for DSM-5.

**Table 2.6 ADHD key symptoms in DSM-5 and ICD-10**

DSM-5	ICD-10
<b><i>Inattention</i></b>	
<ol style="list-style-type: none"> <li>1. Fails to give close attention to detail or makes careless mistakes in school, at work, or during other activities.</li> <li>2. Has difficulty sustaining attention in tasks or play activities.</li> <li>3. Does not seem to listen when spoken to directly.</li> <li>4. Does not follow through on instructions and fails to finish schoolwork, chores, or duties in the workplace.</li> <li>5. Has difficulty organizing tasks and activities.</li> <li>6. Avoids, dislikes, or is reluctant to engage in tasks that require sustained mental effort.</li> <li>7. Loses things necessary for tasks or activities.</li> <li>8. Is easily distracted by extraneous stimuli.</li> <li>9. Is forgetful in daily activities.</li> </ol>	<ol style="list-style-type: none"> <li>1. Short duration of spontaneous activities.</li> <li>2. Leaving play activities unfinished.</li> <li>3. Over-frequent changes between activities.</li> <li>4. Undue lack of persistence at tasks set by adults.</li> <li>5. Unduly high distractibility during study, e.g., homework or reading assignment.</li> </ol>
<b><i>Hyperactivity/ Impulsivity</i></b>	
<ol style="list-style-type: none"> <li>1. Fidgets with or taps hands or feet or squirms in seat.</li> <li>2. Leaves seat in situations when remaining seated is expected.</li> <li>3. Unable to play or engage in leisure activities quietly.</li> <li>4. Is “on the go,” acting as if “driven by a motor”.</li> <li>5. Talks excessively.</li> <li>6. Blurts out an answer before a question has been completed.</li> <li>7. Has difficulty waiting his or her turn.</li> <li>8. Interrupts or intrudes on others.</li> </ol>	<ol style="list-style-type: none"> <li>1. Runs about or climbs excessively in situations where it is inappropriate; seems unable to remain still.</li> <li>2. Excessive fidgeting and wriggling during spontaneous activities.</li> <li>3. Excessive activity in situations expecting relative stillness.</li> <li>4. Leaves seat in classroom or other situations when remaining seated is expected.</li> <li>5. Has difficulty playing quietly.</li> <li>6. Has difficulty awaiting turns in games or group situations.</li> <li>7. Interrupts or intrudes on others.</li> <li>8. Blurts out answers to questions before questions have been completed.</li> </ol>

The prevalence of ADHD in the general population has been variously established across the world. In a large-scale study conducted in the U.S, 5.4% of children aged between 2 and 17 years fulfilled diagnostic criteria for ADHD (Danielson et al., 2018), whereas the equivalent rate in the UK nationally survey was estimated as 1.5% (Green, McGinnity, Meltzer, Ford & Goodman, 2005). This substantial variation between the two surveys reflects both differences in diagnostic criteria between DSM-5 versus ICD-10, and also the assessment methods used, i.e., parent-rated questionnaire versus interviews. However, there is a general consensus on the gender effect, with boys being more likely to be diagnosed with ADHD compared to girls in an approximate 4:1 ratio (Danielson et al., 2018; Green et al., 2005; Pastor, Reuben, Duran & Hawkins, 2015).

Different ADHD-related symptoms are seen across the developmental age span. ADHD is characterized by extreme, demanding activity in pre-school children, excessive movement in situations expecting relative stillness in school-age children, and more reserved external movement but inner restlessness in adolescents. Children presenting with ADHD symptoms are more likely to show lower academic achievement and comorbid conduct disorders, although most such individuals are likely to be relatively symptom-free in later life (Green et al., 2005; NICE, 2018).

A few studies have reported ADHD prevalence in refugee child populations (Daud & Rydelius, 2009; Sapmaz et al., 2017). A recent study using clinical interviews was carried out with 51 Syrian refugee children residing in Turkey of whom 33.3% met DSM-5 criteria for ADHD (Karadag, Gokcen, Dandil & Caliskan, 2018), which is much higher than the general population (Green et al., 2005; NICE, 2018). Parental trauma may contribute to the development of ADHD in refugee children by exacerbating neurodevelopmental risk factors. Daud and Rydelius (2009), for example, conducted a study with 80 refugee children residing in Sweden in which children of traumatized parents (TP) who were tortured before fleeing Sweden were compared with non-TP children. Among non-TP children, 7.5% reported possible ADHD, whilst this rate jumped up to 27.5% in TP children. It is important to note the superficial similarities between certain ADHD and PTSD symptoms, like physical restlessness and hypervigilance respectively, which can mask both diagnoses if children are not assessed thoroughly (Thabet et al., 2011).



Nevertheless, refugee children have not generally been found to differ in terms of behavioural problems from their indigenous peers in some studies (Möhrle, Dölitzsch, Fegert, & Keller, 2016). Derluyn and colleagues (2008), for instance, compared behavioural problems of 1,249 refugee adolescents from various backgrounds, such as Morocco and Ghana, with 602 of their Belgian peers. It was found that 5% and 7% of refugee youth were reported as having possible ADHD and CD, respectively, whilst these rates were established as 20% and 10% in their Belgian peers, respectively. Further studies are needed with more representative samples, especially with diagnostic rather than questionnaire-based assessments, to draw more rigorous conclusions on the prevalence of ADHD amongst refugee children.

#### **2.4. Risk and protective factors for refugee children's mental health**

Risk and protective factors related to aforementioned mental health problems have been extensively studied in the refugee literature to understand why some children develop mental health problems whilst others do not, despite being exposed to similar traumatic experiences. A *risk factor* refers to a constituent which increases the likelihood of problem occurrence (National Research Council, 2009). These children who sustain healthy psychological functioning in the face of adversity, or function better than expected over time and are capable of adapting to stressful situations, are often referred to as *resilient* (Panter-Brick et al., 2017). Consequently, the multi-level factors which contribute to their mental well-being are variably referred to as *resilience* or *protective factors*. An expansion of research has led to the conclusion that both risk and protective factors are core constructs of resilience (Luthar, 2015), meaning that resilience is initiated by facing, or as response to, the adversity and is built up through, and nurtured by, the protective factors. Both risk and protective factors which have been established in refugee children will be discussed in an individual, family and community context by adopting the ecological framework (Figure 2.1).

##### **2.4.1. Individual factors**

The most commonly studied individual factors in the refugee mental health literature include trauma exposure, age, gender, coping strategies and biological disposition. These will be summarized in the following section.

#### ***2.4.1.1. Trauma exposure***

Trauma exposure has been established as the most consociate risk factor for mental health problems amongst refugee children in the literature (Ehnholt & Yule, 2006). A large body of studies has evidenced numerous traumatic events that children may experience at different stages of their migration (Fazel & Stein, 2002). Most refugee children have been exposed to multiple traumatic events in their country of origin, usually through armed conflict and war such as physical assault, shelling, and loss of loved ones. During exile, they are likely to have suffered from food deprivation and disease, and to have experienced other stressful events such as language barriers, lack of schooling, and poverty (Lustig et al., 2004; Miller & Rasmussen, 2010).

Although the specific mechanisms in the relationship between different types of trauma and mental health problems of refugee children are yet to be clearly established, mainly because of limited research available into the multiple factors involved and their various interactions, a few studies have identified different pathways from past traumatic experiences leading to PTSD, whilst other emotional (depression and anxiety) and behavioural problems can be attributed to current life stressors (Heptinstall, Sethna & Taylor, 2004; Montgomery, 2008). In an influential comparative study with Khmer refugee youth living in a refugee camp in Thailand and residing in the US, PTSD rates of both groups were found to be similar, while depression rates were significantly higher among youth living in the refugee camp (Savin, Sack, Clarke, Meas & Richart, 1996). This study showed the direct effect of traumatic experiences on PTSD, whereas depression was associated with current stressors, such as poor condition in camps.

The effect of trauma exposure does not cease after the armed conflict. Longitudinal studies found that PTSD symptoms may last for years if untreated (Bean, Eurelings-Bontekoe, & Spinhoven, 2007; Sack, Him, & Dickason, 1999). In a systematic review which included 12,012 refugee children from 11 longitudinal studies, PTSD symptoms were found to be relatively stable over three, six and twelve years in nine of the selected articles (Tam, Houlihan & Melendez-Torres, 2015), while only two reported 'spontaneous remission' in participants who spent more time in the host country. Similarly, a retrospective study utilizing interviews with 502 participants who had been relocated as refugee children during World War II found that two-thirds of them still reported full or partial PTSD symptoms after more than 60 years (Muhtz et al., 2011).

#### **2.4.1.2. Age**

Although the predictive value of age has been widely studied, the associated findings are inconclusive for refugee children (Morgos, Worden & Gupta, 2008; Yurtbay, Alyanak, Abali, Kaynak & Durukan, 2003). These vary from older age being a risk factor for mental health problems (Hasanović et al., 2005), or, indeed, the exact opposite (Mels, Derluyn, Broekaert & Rosseel, 2010) to no age effect being established at all (Angel et al., 2001). In a study conducted with 239 Bosnian youth aged between 11 and 20, for instance, adolescents older than 16 years more frequently reported depression, anxiety and somatic symptoms than the younger group (Hasanović et al., 2005), which is consistent with trends in the general population (Green et al., 2005). Another study by Karam et al. (2014) similarly found that older age was one of the risk factors for mental health disorders. However, these findings could also be explained by the cumulative effect of traumatic events rather than age, *per se*. Traumatic experiences increase with age, for example teenagers taking a more active part in political demonstrations in the Palestinian conflict (Thabet et al., 2004). The prevalence of certain disorders, such as depression, increases with age, possibly because of a number of biochemical, hormonal and cognitive factors (Green et al., 2005).

Other studies suggested a differentiated effect of age on different mental health problems. Montgomery (2008), for example, revealed that younger children exhibited a greater number of externalizing symptoms than older ones. Likewise, in an earlier study conducted with Somalian children, younger age was the only established predictor of inattention, aggressive behaviour and social problems (Sourander, 1998). These studies indicated that younger age, as a risk factor, can be elucidated by the rudimentary cognitive capacities which make it difficult to develop adequate coping strategies in the face of traumatic experiences (Eschenbeck, Schmid, Schröder, Wasserfall & Kohlmann, 2018).

#### **2.4.1.3. Gender**

Gender can also mediate the association between exposure to war-related trauma and psychopathology. In most studies, both genders have been found to be risk/protective factors in terms of specific types of mental health problems among refugee children (Berthold, 2000; Morgos et al., 2008), although no gender effect was detected in other studies (Angel et al., 2001; Montgomery & Foldspang 2006). Overall, girls are more likely to experience or report more emotional (internalizing) problems such as depression

and anxiety (Derluyn & Broekaert, 2007; Morgos et al., 2008; Sujoldžić et al., 2006) and PTSD (Hodes et al., 2008), whilst boys are more consistently found as having risk factors for externalizing problems (Dapo, Kolenovic-Dapo, 2000; Mels et al., 2010). In a study by Thabet and Vostanis (2015) that considered 449 Palestinian children aged 7 to 18 years exposed to ongoing war trauma, being female was identified as a risk factor for developing depression. This sex-based pattern has been attributed to different coping strategies (Thabet & Vostanis, 2015), as well as girls' greater capacity to express feelings and admit to symptoms compared to boys (Morgos et al., 2008). Constitutional and sociological theories on gender differences have also been put forward in the general mental health literature (Bussey & Bandura, 1999).

#### ***2.4.1.4. Coping strategies***

Early studies underlined the importance of understanding coping strategies that people use to handle various kinds of stressful situations (Folkman & Lazarus, 1985). These led to different theories and classification systems for coping styles and strategies. Commonly used coping strategies among refugee children include praying, wishful thinking, taking an active role in war, resigning oneself to reality, seeking peer support, feeling guilty about the event, denying reality, and distraction. These are often grouped into emotion-focussed, problem-focussed and maladaptive coping strategies (Paardekooper, de-Jong & Hermanns, 1999; Pat-Horenczyk et al., 2009). Although there are various categorizations, emotion- and problem-focussed strategies, which can be defined as regulating and actively eliminating distress, respectively, are the most commonly identified among refugee children (Frydenberg et al., 2003; Khamis, 2015; Thabet & Vostanis, 2015).

Both the quality (adaptive/maladaptive coping) and quantity of coping strategies adopted by refugee children have been found to be important in relation to mental health problems. In a large study comparing Israeli and Palestinian adolescents' coping strategies, Palestinian adolescents were found to use more both adaptive (accepting the reality, religion) and maladaptive (distraction) coping strategies than Israeli adolescents, which was explained by their greater exposure to the adverse effects of war (Pat-Horenczyk et al., 2009). Similarly, another study compared Sudanese refugee children living in Uganda with Ugandan children who had not been exposed to war, and found that refugee children reported using a larger number of coping strategies, specifically emotion-inhibiting

strategies such as ‘keeping quiet’, wishful thinking such as ‘wishing things never happened’, and seeking advice from others, than their Ugandan peers (Paardekooper et al., 1999).

Both refugee groups in the previously mentioned studies, however, reported more mental health problems than the respective control groups, despite using a larger number of strategies (Paardekooper et al., 1999; Pat-Horenczyk et al., 2009), which indicated that the type of adaptive coping strategy is more important than the amount. Khamis (2015) found, for instance, that Palestinian children who used problem-focussed coping, such as seeking suggestions from others, reported fewer PTSD symptoms, whereas children who adopted more emotion-focussed coping strategies reported more PTSD and, indeed, other emotional and behavioural symptoms. This might be due to emotion-focussed coping strategies, including seeking emotional support, denial, avoidance, rumination or wishful thinking, might result in dwelling more on the stressors (Tamres, Janicki & Helgeson, 2002), which might preclude one from developing the solution-driven mind-set required to respond adaptively, and thus adequately, to the problem.

#### ***2.4.1.5. Biological predisposition***

The mental health status of refugee children may also depend on their biological constitution, which refers to “an increased likelihood of developing a particular disease based on a person’s genetic make-up” (National Institute of Health, 2018, para.1). It has been established in the neuropsychology literature that such factors can contribute to the development of emotional disorders, i.e., PTSD, depression and anxiety. For instance, asymmetric function between the right and left hemispheres has been implicated as a possible determinant of depression and anxiety amongst over 1,000 University students (Heller, Etienne & Miller, 1995). Likewise, a higher density in dopamine transporting genes was found in participants with PTSD than a trauma-exposed control group without PTSD (Hoexter et al., 2012). Biological predisposition related to the susceptibility of refugee children awaits further research. There are, of course, a number of practical, economic and ethical reasons for the limited evidence available in this field.

Although neurophysiological components are likely to play a role in the onset and continuation of mental health problems among refugee children, concentrating solely on biological predisposition theories may simplify research questions by splitting children

into ‘vulnerable’ and ‘strong’ categories. Moreover, developmental studies suggest that as a child grows up, environmental factors often outweigh biological/genetic predisposition in terms of cognitive and psychosocial development (Beiser, Armstrong, Ogilvie, Oxman-Martinez & Rummens, 2005). Social influences have thus been shown to interact with brain structure and function, with this interaction leading to changes in the plasticity of the brain (Davidson & McEwen, 2012). Advances in the understanding of the interplay between biological and psychosocial factors in other vulnerable groups, for example children who suffered abuse and neglect, offers a conceptual model for future research with refugee children.

#### **2.4.2. Family-related factors**

Exposure to armed conflict and subsequent forcible displacement inevitably affect family life in many ways. The ecological framework proposes that a child is nested within the family. Thus, besides the previously discussed individual factors, several factors related to family life have also been found to be important for children’s psychosocial development (Punamäki, Palosaari, Diab, Peltonen & Qouta, 2015; van Ommeren et al., 2001). An important qualitative study with Bosnian refugee families who had resettled in the US (Weine et al., 2004) revealed that trauma and displacement changed the role and responsibilities of family members, as well as their communication within the family unit; all these factors are likely affect children’s mental health. How family members are collectively affected by, and respond to, the trauma may compound this effect. For example, in a study with 1,000 children from East Jerusalem and the West Bank, perceived anxiety in the family environment was the only predictor of PTSD symptoms in the children (Khamis, 2005).

The literature on the effects of familial factors on refugee child’s mental health is still relatively scarce. A few studies have evidenced the role of family composition and bereavement, family functioning and parental support (Reed et al., 2012), whilst there is more evidence available describing the impact of parental mental health on refugee children. Research on family composition and bereavement indicated that the loss of a parent because of war was significantly associated with increased PTSD (Hasanović et al., 2005), whereas poor family connectedness was related to depression among children (Sujoldžić et al., 2006).

Conversely, despite the unfavourable conditions that refugee families experience, parents' supporting functions have been established as protective factors in terms of their children's mental well-being. A study with 144 Khmer adolescent-parent dyads showed that, after controlling for the effect of trauma exposure, adolescents who perceived themselves to be receiving support from their parents were less likely to report PTSD and depression (Berthold, 2000). This may also explain the consistent finding that unaccompanied refugee minors are more likely to exhibit mental health problems compared to refugee children having at least one parent with them (Kien et al., 2018).

The majority of refugee research has adopted a 'war-exposure model', according to which the main focus is on the direct effects of trauma, rather than on wider ecological factors. This may be the reason behind a dearth of early evidence as to the effects of parenting-related factors. Nevertheless, emerging studies have started to shift this paradigm and bring parenting-related factors onto the table (Miller & Jordans, 2016). A number of studies with parents who had been abused or neglected as children have shown that being exposed to trauma has a negative effect on caregivers' mental health, capacity to parent and shift practices, and availability and sensitivity to children's needs (Appleyard & Osofsky, 2003). Recent years, through the influence of positive psychology, have seen increasing interest in the roles of parental well-being, attachment security and positive parenting behaviour on the mental health of refugee children (Dalgaard, Todd, Daniel & Montgomery, 2016; Khamis, 2005; van Ee, Kleber, Jongmans, Mooren & Out, 2016). In the following sections, parental mental health, attachment relationships and parenting styles in refugee settings will thus be discussed extensively in the context of risk and protective factors for refugee children's mental health.

#### ***2.4.2.1 Parental mental health***

It has long been documented in children's mental health literature that children are at greater risk in terms of their social, emotional, behavioural and cognitive development if their parents suffer from psychiatric disorders (Downey & Coyne, 1990; Rutter & Quinton 1984; Smith, 2004; Vostanis et al., 2006). Maternal depression, for instance, has been established as a risk factor for children developing behavioural and emotional problems, impaired language development, social difficulties, disruptive parent-child relationships and insecure attachment (Smith, 2004). Various mechanisms can explain these findings, including genetic factors, interaction between genetic factors and

environment, and direct or indirect impact of parental psychopathology (Smith, 2004). Genetic factors are outside the remit of the present review, although it was acknowledged earlier that post-traumatic stress and depressive disorders have a genetic contribution. Children who are exposed to hostile attitudes, or are neglected and abused because of symptoms related to their mothers' mental illnesses are examples of direct effects (Rutter & Brown, 1966). More commonly, parental psychopathology indirectly affects children's growth and development through impairment of adults' ability to parent.

Compared to other parenting-related factors, a relatively greater amount of evidence exists as to the effects of parental mental health in refugee settings, where either both or one of the parent-child parties have been exposed to war-related traumatic events (East, Gahagan & Al-Delaimy, 2017; Dalgaard et al., 2016; Khamis, 2016; Sangalang, Jager, & Harachi, 2017; Qouta et al., 2005). In a longitudinal study, for example, PTSD symptoms amongst 240 Palestinian children were examined across three time points (Punamäki et al., 2015). It was found that children in the recovery group had parents with lower parental trauma exposure compared to children who fell in the increasing symptomatology group. Likewise, in their seminal paper with Cambodian refugee youth living in the US, Sack et al. (1995) showed that higher PTSD rates in both parents were strongly associated with higher PTSD in their children. Specifically, only 13% of children had PTSD if neither of their parents had PTSD, whilst this prevalence increased to 23% where one parent reported PTSD. In the case of both parents presenting with PTSD, children's PTSD rates jumped to 41%. Hence, the probability of traumatized children having PTSD was largely attributable to both parents themselves suffering from PTSD symptoms.

Parents can be re-traumatized by their children's trauma, whereas reciprocally non-exposed children may be affected by the manner of their parents' processing of their own experiences (Dalgaard et al., 2016; Krešić, Ćorić, Klarić, Petrov & Mihić, 2016). A recent longitudinal study with 327 Cambodian and Vietnamese refugee mothers and their third to sixth grade non-exposed children indicated that maternal PTSD had a negative effect on family functioning, which involved parent-child communication, parental warmth, family cohesion, parent-child conflict and parental involvement. These factors were in turn associated with childhood depression and antisocial behaviour (Sangalang et al., 2017). In a comparative study with 282 Iranian high school students, these were separated equally into two groups, i.e., those whose fathers were Isfahan war veterans with chronic



PTSD and those whose fathers were not war veterans (Ahmadzadeh & Malekian, 2004). The results showed higher levels of aggression and anxiety among veterans' children, which suggested the intergenerational effect of trauma, even if children had not been directly exposed to war trauma themselves. This finding, however, might also be attributed to various other factors such as altered parenting practices or family dynamics which could possibly be accentuated by parents suffering from PTSD (Bryant et al., 2018).

The nature of the relationship between children's and parents' mental health is complex, especially in refugee settings. Since in most cases, unlike the general literature, refugee families are collectively exposed to various kinds of traumatic events, parents and children may exacerbate the each other's symptoms. Scheeringa and Zeanah (2001) proposed a compound model for situations where a parent-child dyad has been exposed to trauma, and the symptoms of one result in the exacerbation of symptoms in the other. They identified three relational PTSD patterns to explain the compound model. Parents who experienced trauma may develop a withdrawn, unresponsive or unavailable pattern, through which they fail to function effectively as a parent as they avoid children's symptomatology which reminds them of their own trauma. Others may become over-protective or constricting towards their traumatized child, because they are preoccupied with the dread of the same events happening again. Lastly, traumatized parents may repeatedly ask questions to the child about the traumatic events, which falls into the re-enacting, endangering or frightening pattern. This compound model was derived from indirect exposure theory (Smith, 2004), suggesting that parental psychopathology may result in less sensitive parenting rearing styles, which in turn results in detrimental child mental health outcomes.

#### ***2.4.2.2. Parenting styles***

The importance of parenting has been recognised since the earliest reports of such in the literature (Taylor, 1825; Wells, 1866). However, ample evidence on parenting practices, which are defined as specific behaviours of parents towards their children, and their subsequent effects on children's cognitive and behavioural development, started to increase in the 1930s (Bakwin & Bakwin, 1940; Baumrind, 1966; Vollmer, 1937). Parenting style has a broader meaning, as referring to the general emotional ambience that is created by practices toward children (Darling & Steinberg, 2017). This has received

considerable attention over the last two decades (Baumrind, 1991; Chao, 1994; Spera, 2005). Adverse outcomes of the impact of negative parenting styles include children's emotional dysregulation and aggression (Chang, Schwartz, Dodge & McBride-Chang, 2003), internalizing and externalizing symptoms (Yahav, 2007), risky behaviours (Chan & Koo, 2010) and academic under-achievement (Hickman, Bartholomae & McKenry, 2000).

Early researchers conceptualized parenting along two dimensions: warmth and control (Lamborn, Mounts, Steinberg & Dornbusch, 1991; Maccoby and Martin, 1983; Baumrind, 1971). The most used typology included three parenting styles of authoritative, authoritarian and permissive parenting, according to Baumrind (1971). Parents who adopt an authoritative style are defined as “controlling and demanding; but they are also warm, rational, and receptive to the child's communication”, whereas authoritarian parents are also referred to as controlling but are less warm, and permissive parents are referred to as “non-controlling, non-demanding, and relatively warm” (Baumrind, 1970, p. 104). These are derived from the two aforementioned dimensions. Maccoby and Martin (1983) re-categorized these three parenting styles into demanding/undemanding, and added a fourth parenting style of being rejecting or uninvolved/neglectful. This referred to “low warmth and non-controlling parenting behaviours”.

Although there are other parenting styles and definitions such as over-protective, warm or harsh, these have originated from the previously mentioned typology. The literature is broadly agreed that positive parenting styles, e.g., warm or authoritative, have a protective role in terms of the child's mental health; in contrast with negative/maladaptive parenting styles, e.g., over-protective, rejecting or authoritarian, which pose the risk of poor psychological outcomes (Milevsky, Schlechter, Netter & Keehn, 2007). These may in turn be transferred into various mental health problems during young life and indeed adulthood (Titus, Rose & Roman, 2015). For example, in a longitudinal study, 1,230 mothers rated their parenting style as well as their child's mental health, school achievement, and competencies, whilst teachers reported maladaptive behaviours from first to fifth grade (Kaufmann et al., 2000). The results showed that authoritative parenting was negatively associated with parent-rated emotional and behavioural problems and teacher-rated maladaptive behaviours, thus suggesting that this parenting style can play a positive role, unlike authoritarian parenting.

Despite the relatively rich literature on parenting styles in other populations, there is limited research into the effects of parenting styles on the mental health of refugee children (Gewirtz, Forgatch & Wieling, 2008; Williams, 2010). By and large, an association has been established between negative parenting practices, i.e., rejection (Ajdukovic, 1998) and harsh discipline (Khamis, 2005), and PTSD among war-exposed children. Furthermore, punitive parenting was correlated with parent- and teacher-rated aggression among 640 Palestinian children, whereas the association between war-related trauma and children's aggression was moderated by supportive parenting practices such as negotiating parenting (Qouta, Punamäki, Miller & El-Sarraj, 2008). This pattern is not consistent, however, as a recent study with 335 Palestinian adolescents residing in refugee camps found no impact of parenting styles on children's mental health problems (Aitchison, Abu-Bader, Howell, Khalil & Elbedour, 2017).

Parenting styles in a refugee setting might change “through the process of becoming a refugee” (Williams, 2010, p. 36), as parents are exposed to trauma before and during exile, and indeed experience other stressors such as discrimination and economic hardship in the host country. Williams (2010) proposes that refugee parents encounter loss of autonomy and control over decision-making processes, and this mechanism can result in negative changes in their parenting styles. However, such periods of transition can have a positive impact on parenting as well. A qualitative study comprising interviews and focus groups noted such positive changes in parenting styles among Vietnamese refugee parents (Tingvold et al., 2012). Parents reported that they changed their parenting behaviours from being more controlling and harsh in their discipline to becoming more encouraging because they believed that their former parenting styles compromised their children's self-reliance. Due to cultural differences and confounding factors involved, further research is needed to understand the ‘refugee parenting style’, and its impact on children's mental health, in order to better inform parenting interventions in this context.

#### ***2.4.2.3. Attachment relationships***

Attachment theory has its origin in the seminal research and writings of John Bowlby (1907-1990) and his colleague Mary Ainsworth (1913-1999). Bowlby (1969) formulated attachment theory by combining evolutionary biology, ethology and developmental psychology with his own observations as a psychiatrist of young children's behaviour in

real-life situations. A child's attachment to a caregiver, as he described in *Attachment and Loss*, is "a strong disposition to seek proximity to and contact with a specific figure, and to do so in certain situations, notably when frightened, tired or ill" (Bowlby 1969, p. 371). Moreover, the child's exploratory behaviours are activated when he/she feels secure in the presence of an attachment figure, generally their mother, father or caregiver. Hence, this attachment figure serves as a 'safe haven' in times of distress, whereas it provides a 'secure base' from which the child can venture (Zeanah, Berlin & Boris, 2011).

Ainsworth enhanced the tenets of attachment theory by proposing an attachment classification system, which is still in use (Ainsworth, Blehar, Waters & Wall, 1978). She and her colleagues developed an observational assessment, the Strange Situation Procedure (SSP), which is referred to as the 'gold standard assessment' of attachment behaviours in infants (Ainsworth & Bell, 1970). Three patterns of attachment behaviours emerged: 1) insecure-avoidant attachment, which represents a child's avoidant or ignoring behaviour when the parent enters or leaves the room; 2) insecure-ambivalent attachment, which implies a child's anxiety even before the parent leaves, and difficulty in settling when the parent returns; and 3) secure attachment, which is the behaviour of a child who freely play with toys and, while using the parent as secure base, can engage with a stranger when the parent is present, sometimes shows discomfort when the parent leaves, and seems content when the parent returns (Ainsworth et al., 1978). The fourth category emerged later as disorganized attachment (Main & Solomon, 1986) for children with asymmetrical, incongruous and mistimed responses during the Strange Situation Procedure.

Although attachment theory and consequent attachment styles were established as based on studies with infants, attachment is not specific to that age group; rather, it is a continuum process as the quality of the attachment relationship in infancy is maintained into pre-school and school age, adolescence and even into adulthood (Ainsworth et al., 1978). In a salient longitudinal study, attachment styles of 50 adults were investigated 20 years after the first assessment, which had been carried out when they were 12 months old (Waters, Merrick, Treboux, Crowell & Albersheim, 2000). Findings indicated that 72% of participants presented the same secure versus insecure attachment patterns in their early adulthood as they had during infancy. According to the appropriate age though, expression of secure attachment was associated with effective self-regulation and peer-relationships in pre-school; social competence and making/sustaining friendships in

middle childhood; and identity, self-awareness and intimacy in adolescence (Sroufe, 2005). Therefore, rather than continuously seeking proximity to caregivers, early secure attachment serves as a foundation on which a child, and subsequently a young person, safely experiments in increasingly wider environments with the ultimate goal of functioning independently.

There is a wealth of evidence on the relationship between attachment security and child mental health, and the underpinning psychological processes (Rutter, 1985). Secure attachment is valuable in children's 'human adaption' and ongoing development (Masten & Coatsworth, 1998) as it comprises emotional self-regulation, assembling and operating information, problem-solving skills, developing healthy peer relationships, and creating steady schemas of self, others and the world (Abraham & Kerns, 2013; Cooper, Shaver & Collins, 1998; Morris, Silk, Steinberg, Myers & Robinson, 2007). In contrast, children who develop insecure attachment relationships with their caregivers are more likely to exhibit aggression as an expression of emotional dysregulation (Allen, Porter, McFarland, McElhaney & Marsh, 2007; Lyons-Ruth, 1996), and emotional problems such as depression and anxiety (Brumariu & Kerns, 2010). Other studies evidenced that early disorganized attachment is often associated with the development of more severe psychopathology such as conduct disorders (Leschied, Chiodo, Whitehead & Hurley, 2005), and later dissociate (Carlson, 1998) and borderline personality disorders (Carlson, Egeland & Sroufe, 2009). These are particularly prominent among children and young people who suffered abuse and neglect, and who were subsequently raised in care.

Both parental psychopathology and insensitive parenting styles are well-established risk factors for the development of insecure attachment relationships, although this association can be bidirectional (Carter, Garrity-Rokous, Chazan-Cohen, Little & Briggs-Gowan, 2001; Lyons-Ruth and Block 1996; Teti, Gelfand, Messinger & Isabella, 1995). In a comparison study with 130 depressed and 68 non-depressed mother-infant dyads, infants whose mothers had been diagnosed with a major depressive disorder were at greater risk of insecure attachment. Results showed that 56% of infants had secure attachment in the non-depressed, compared with only 19% in the depressed mothers group (Toth, Rogosch, Manly & Cicchetti, 2006). Another study during middle childhood and adolescence found that authoritative parenting was positively correlated with secure

attachment, whereas neglectful parenting was associated with insecure-ambivalent attachment (Karavasilis, Doyle & Markiewicz, 2003).

There is surprisingly limited empirical evidence as to the role of attachment quality on refugee children's mental health, despite the established findings showing potential breakdown in parental availability related to parental trauma in refugee settings. Moreover, refugee children are at risk of developing maladaptive attachment patterns as they are exposed to multiple traumatic experiences, including parental loss, serious physical disease in the family, and parental mental illness, all of which are established predictors of insecure attachment (Waters et al., 2000). In a study with 68 refugee parents and their infants, children's insecure and disorganized attachment, as assessed by the Strange Situation Procedure, was found to be associated with parental PTSD (van Ee et al., 2016). A mixed methods study carried out with Middle Eastern parents showed that children's attachment security was negatively associated with externalizing symptoms, whilst parents' modulated disclosure of their traumatic experiences, meaning that parents could process and share their past trauma with their children in a developmentally appropriate manner, was related to secure attachment (Dalgaard et al., 2016). Further understanding of this interplay is important to practitioners in determining whether to adopt behavioural or attachment-focussed strategies with refugee parents, depending on the underlying parenting deficits.

### **2.4.3. Community-related factors**

Similar to the manner in which the child is nested within their family, ecological theory suggests that the family is also nested within the community and wider society. The third pillar of ecological theory thus consists of community-related factors, which have received relatively greater attention in the literature of refugee children (Almqvist & Broberg, 1999; Ellis et al., 2008; Hodes et al., 2008; Montgomery, 2008). Resettling in a new country with a different culture, religion and language, especially under ongoing and immense economic burdens, is a challenge for families, which in turn affects children. Moreover, a lack of school attendance and belonging to a peer group deprives children of protective buffers. These factors, i.e., the effects of discrimination in the host country, adaptation to new culture, financial difficulties and school attendance, will be discussed in more detail in the following sections.

#### ***2.4.3.1. Discrimination versus integration***

Being or feeling discriminated against can compound the effect of pre-migratory trauma on children. Several studies have identified the experience of discrimination as an important risk factor in emotional problems among refugee children (Montgomery & Foldspang, 2007). Ellis and colleagues (2008), for example, found that discrimination was significantly correlated with PTSD and depressive symptoms among Somalian refugees living in the US. Likewise, Sujoldžić and his research team (2006) conducted a study with 1,282 internally and externally displaced Bosnian adolescents and established that perceived discrimination and exposure to violence were the strongest risk factors for depressive, anxiety and somatising symptoms.

Perceived discrimination is a major factor in integration, which is defined as adaptation to the host country's culture without becoming disconnected from the original culture (Berry, 1992). This social process is immensely important for children's continuous growth, and hence their mental well-being. For example, Kunama adolescents living in refugee camps in Ethiopia who felt disconnected from the community were more likely to exhibit aggressive behaviour (Betancourt et al., 2012). In contrast, positive attitudes towards both the host community and their own culture resulted in higher psychosocial adjustment among Yugoslavian refugee adolescents residing in Australia (Kovacev & Shute, 2004).

#### ***2.4.3.2. Financial difficulties***

Refugee families are faced with extreme financial hardship in the host country, as they usually have to leave all their possessions and jobs behind, when they encounter unemployment and limited economic opportunities following resettlement (Simich, Hamilton, & Baya, 2006). These post-migratory financial difficulties have cumulative effects on both parents and children (Fazel et al., 2012). Moreover, refugees who had higher socioeconomic status before migration have been shown to be at higher risk of adverse psychosocial outcomes (Porter & Haslam, 2005). Suicidal ideation among Bhutanese refugees resettled in the US was found to be related to unemployment (Ao et al., 2016). Similarly, adolescent depressive symptoms were associated with financial difficulties, and this relationship was mediated by parental stress and consequent negative parenting styles (Heptinstall et al., 2004). Refugee children often have to work, in many cases illegally, to provide additional income for their families, and this strain creates

additional risks in terms of their physical and mental well-being (Thabet, Matar, Carpintero, Bankart & Vostanis, 2011).

#### ***2.4.3.3. School attendance***

Accessing education is usually limited for refugee children throughout their migration, i.e., starting from the pre-migratory stage due to conflict and the collapse of their communities; during exile, because of inadequate resources in refugee camps; and after they have resettled in their final destination. In most situations there are not enough schooling opportunities for refugee children in host countries. Parents' attitudes toward a new education system can be an obstacle too, even if they reside in high-income countries (Graham, Minhas, & Paxton, 2016). Financial difficulties which result in child labour (Di Maio & Nandi, 2013) and limited access to schools due to inadequate policies and placements can limit school attendance in LMIC, whereas insecurity over asylum status or feeling discriminated against are major barriers in HIC (Sujoldžić et al., 2006).

Nevertheless, schools also offer a unique protective opportunity for refugee children, since they provide a safe haven for healthy development, connection to peers, and a sense of belonging and achievement (Fazel et al., 2012; Hjern, Angel & Jeppson, 1998; Kia-Keating & Ellis, 2007). School connectedness among Bosnian refugee adolescents was found to protect from somatic stress, depressive and anxiety symptoms; it was also positively associated with higher self-esteem (Sujoldžić et al., 2006). In contrast, a prolonged and unstable resettlement period can affect school attainment, with a knock-on effect on children's mental health. An eight-year longitudinal study revealed that the number of moves between different schools and low attendance predicted externalizing symptoms among refugee children residing in Denmark (Montgomery, 2008). As with parenting factors, more detailed knowledge regarding the protective impact of different school components, particularly emotional literacy, which has yet to be researched with refugee children, will provide the focus for interventions and services in the future. In particular, more evidence is needed in LMIC school settings (Reed et al., 2012).

### **2.5. Conclusion**

This chapter reviewed the relevant literature on refugee children's mental health, and the related risk and protective factors. Definitions, policies and statistics were, foremost, provided to understand the scope of the problem, which was followed by the diagnostic



criteria and prevalence of common mental health problems encountered among refugee children, namely PTSD, other emotional (depression and anxiety) and externalizing (conduct and hyperactivity) problems. The following section considered the evidence on a range of multi-level risk and protective factors within the ecological systems framework. The refugee literature was first critiqued in relation to the most studied individual factors, which are trauma exposure, age, gender, coping strategies and biological predisposition. The key family-related factors of parental psychopathology, parenting styles and attachment relationships were subsequently discussed by highlighting the current research gaps. Lastly, the role of the major community-related factors of discrimination versus integration, financial difficulties and school attendance, were summarized.

As a primary focus of the present review, the evidence regarding parental mental health, parenting styles and attachment relationships were discussed in detail under the section that discussed family-related risk factors. There is a dearth of evidence on these parental components, despite a significant number of studies in the general population and other vulnerable groups which has established that parental mental health, positive parenting styles and secure attachment are interlinked and serve protective functions for optimal growth and mental well-being amongst children, even in the face of adversity. This lack of parent-related evidence in the refugee literature was mostly due to the predominance of research focussing on individual trauma exposure, and to a lesser extent family- or community-related factors.

The three ecological components of child mental health, which are the individual, familial and community levels, are usually interlinked. Financial difficulties, for example, may trigger parenting stress, which can further result in negative parenting styles and insecure attachment relationships. The findings of a study conducted with 188 parent-child dyads in Rwanda, for example, indicated that exposure to war (individual), parents' ill mental health (familial) and low economic status (community) predicted child maltreatment, which was a major risk factor to children's mental health (Rieder & Elbert, 2013). Therefore, all those factors can directly, or indirectly, mediate or moderate children's responses to pre- and post-migration trauma. The development, implementation and evaluation of psychosocial interventions for refugees has been based on this theoretical

framework and the emerging knowledge. These evidence-based interventions for refugee children will thus be presented in Chapter V.

## Chapter III

# Exploring Parenting as a Nest for Explaining Refugee Children's Mental Health Problems: Methodology of Study I

### **3.1. Introduction**

Mental health problems and the associated vulnerabilities in refugee children were reviewed in Chapter II which highlighted the potential effects of parenting-related factors, including parental mental health, parenting styles and attachment relationships. A large body of evidence has established that exposure to war-related trauma is a significant risk in the development of mental health problems amongst refugee children, whilst emerging research is also examining the impact of family- and community-related factors as the other pillars of the ecological framework. Despite this, there appears to be only scant evidence about the parental components of refugee child mental health in the current literature.

This chapter documents the methodology used in Study I, which attempted to address this gap in the literature by establishing a parenting-oriented exploratory model of predicting refugee children's mental health problems. The methodological approach and rationale chosen to address the research aims, questions and subsequent hypotheses, as well as the sampling and research procedure, psychometric properties of the selected measures and intended data analysis, are presented within this chapter.

### **3.2. Research aims**

The overarching **Research Aim** of the present study was to establish the role of parental factors in the development of mental health problems among Syrian refugee children residing in Turkey. To achieve this, a cross-sectional study using self- and parent-reports was conducted to address the following **Research Question**:

Which parenting-related factors increase the possibility of a refugee child presenting with mental health problems after the effect of war trauma has been controlled?

This research question was addressed by the following specific **Research Aims** to investigate:

- 1) The effect of pre-migratory trauma on the mental health problems of refugee children.
- 2) The additional contribution of parenting-related factors after the effect of pre-migratory trauma exposure has been controlled for.

- 3) The differential effect of traumatic experiences on different types of child mental health problems.

Three **Research Hypotheses** were thus formulated, based on the research literature:

**Hypothesis One:** Pre-migratory trauma exposure will predict mental health problems among refugee children, after demographic variables, i.e., age, sex and family income, have been controlled for.

**Hypothesis Two:** Parenting-related factors, i.e., higher scores of parental psychopathology, perceived negative parenting (lower perception of warm parenting, and higher perception of rejecting and overprotective parenting), as well as perceived lower attachment security scores (lower availability of and dependency to the attachment figures) will predict mental health problems among refugee children after war-related trauma exposure has been controlled for.

**Hypothesis Three:** The specific contribution of traumatic experiences will be different for PTSD and general mental health (emotional and behavioural) problems.

### **3.2. Methodological approach**

A quantitative approach was adopted in this study. This methodological stance enables the researcher to examine the relationship between two or more variables, in order to provide information about a predefined hypothesis (Golafshani, 2003). It also allows for the collection of a large amount of data, hence the generalisability of the findings to similar populations. Within this approach, numerical data are collected and analysed to draw conclusions which could be applicable to similar contexts (Sale, Lohfeld & Brazil, 2002). An alternative or complementary approach would have been to adopt a qualitative framework, which is not based on *a priori* hypotheses, but instead highlights a constructed nature of reality. This provides more in-depth understanding of human experiences and perspectives, and can lead to unexpected answers, but does not allow for the generalisability of the findings but rather their transferability to similar sociocultural contexts. Both approaches are valuable and increasingly viewed as complementary. A quantitative approach was deemed appropriate in addressing the research aims and hypothesis of Study I.

### **3.3. Research design**

A questionnaire-based survey study was utilized in order to address the research aims and hypotheses. There are different delivery techniques in applying questionnaires, including self-administrated via hard-copies, web-based, or in a structured interview format, the latter enabling the researcher to ask survey questions face-to-face or by phone or videoconference, such as via Skype (Cook, Heath & Thompson, 2000). In the present study, children completed self-reports whilst their parents filled out rating scales in relation to both their children's and their own psychosocial functioning. All questionnaires were in hard-copy format.

There were multiple reasons for the selection of this design. First, it is cost-effective, as it allows the collection of a large amount of data in only a short period of time. Considering the target population of this study, which is hard-to-reach for both researchers and practitioners (Wahoush, 2009), this option was considered most advantageous. Second, this research strategy provides anonymity, which might encourage such participants to share information, considering their mistrust for authorities (Majumder, O'Reilly, Karim & Vostanis, 2015). Third, previously psychometrically validated questionnaires provide robust data in a standardized form (Kelley, Clark, Brown & Sitzia, 2003) which allows comparison with other studies and provides valuable information for future research.

### **3.4. Sampling strategy**

The sample was recruited between November 2015 and April 2016 through two Syrian schools located in Istanbul, Turkey. These were funded by non-governmental organisations (NGOs). According to their recent policy, Turkey encourages refugee children's attendance by providing free education in state schools. Since then, it has become compulsory for all refugee children to attend school settings, as the Ministry of National Education announced it was: "Promoting Integration of Syrian Children into the Turkish Education System" (PICTES) in October 2016. At the time of data collection, however, there were only NGO-funded schools or temporary, government-supported education centres providing primary and secondary education in Arabic by Syrian teachers using the Syrian curriculum. As the data collection preceded the recent policy of refugee children accessing free education, participants were recruited from these centres rather than from Turkish schools.

The eligibility criteria for children were:

1. Being aged between 8 and 18 years.
2. Having fled from Syria after the war started.
3. Being able to read and understand either Arabic or Turkish.

One child from each family was included in the study, to ensure the selection of unique child-parent units. Among all the 394 eligible children from the two schools, the parents of 322 of these children agreed to participate in the study, giving a response rate of 81.6%. All children who participated in the study (n=322) lived with at least one parent. Although an item on the 'loss of a loved one' is included in the pre-migratory trauma scale (SLE), parental loss was not specifically assessed by this measure. Of all parents, 263 parents returned the questionnaires. Handling of missing data will be discussed under the results section.

### **3.5. Research procedure**

Participants were recruited over a six-month period. Considering the possible – indeed, probable – suspicion and mistrust that might well be prevalent in trauma-exposed groups, engaging with their communities was essential. The research team thus initially contacted and obtained approval from the Syrian stakeholders who had established the two non-governmental schools for Syrian refugee children in Istanbul, Turkey (Appendix A). These stakeholders subsequently obtained verbal consent from the two head teachers. The ethics information and consent forms were then distributed to parents via the schools (Appendix C). Since English was not the participants' first language, all documents were translated into Arabic. Two information sheets were prepared for children (aged 8-12 years) and adolescents (aged 13-18 years), using a developmentally appropriate language (Appendices D and E, respectively). Prior to the data collection, the researcher introduced herself to the children and verbally informed them of the purpose and procedure of the study.

Participants completed the questionnaires in paper format. Children were administered the questionnaires in their classrooms during lesson time (55 minutes), whilst parent reports were distributed and collected via the children by the researcher. Teachers, who also originated from Syria, were present in the classroom during the data collection to

help the researcher overcome any difficulties that might arise such as interpreting and explaining questionnaire items. The study received ethical approval from the University of Leicester research ethics committee. There was no requirement for additional approval from a government body such as the Local Educational Authority in Istanbul because of the independent status of the two schools (Appendix T).

Since Study I aimed to investigate the role of trauma- and parent-related factors in the development of mental health problems in a young and vulnerable population, this inherently raised a number of sensitive ethics issues, all of which were taken into consideration. In particular, children were informed that they were free not to participate or to withdraw at any time, even if their parents had provided written informed consent. Children who did not wish to participate were encouraged to spend the data collection time drawing or completing their homework. An Arabic-speaking psychologist and the researcher, who has a Psychology background, were present in the classroom during the data collection in order to answer any questions, help the children in completing questionnaire items or, crucially, addressing any concerns or distress that might arise.

### **3.6. Measures**

The broad research question of the present study explored whether parenting-related factors increased the likelihood of a refugee child presenting with mental health problems after the effect of pre-migratory trauma exposure had been controlled for. The main parenting-related factors were established as parental mental health, parenting style, and attachment relationship between child and parent, after reviewing the related literature (see Chapter II). Children reported their own trauma exposure, post-traumatic stress disorder (PTSD), general mental health problems (GMHP), attachment security and perceived parenting styles; whilst parents reported on their children's GMHP and their own psychopathology. Both child- and parent-rated scales were presented in a bilingual format (Arabic/Turkish). Since there was limited evidence in the related field, this selection process posed several challenges.

First, the sample consisted of children and parents whose native language was Arabic, whilst the measurements used in the literature were predominantly available in English. Since the majority of refugee families who had arrived in Turkey a few years earlier could also read and understand Turkish, version of the questionnaire in both Turkish and Arabic



were required. Reliable measures that were validated in Arabic and Turkish were thus chosen where possible. The attachment scale, which had not been previously used with Arabic-speaking children, was translated by an Arabic-speaking translator and checked by a psychology PhD student whose native language was Arabic.

Second, a dearth of evidence on the perceived parenting factors was noted in the literature review (Chapter II), which led the researcher to utilize child reports on their own mental health problems, as well as on their perceptions of parenting styles and attachment relationships with their parents. As most previous studies had relied solely on refugee parent reports, it was considered particularly important to capture refugee children's views. Lastly, the length of completing measures was considered. It was hence decided to keep the measures as short and simple as possible without compromising their construct validity in order to increase participants' response rates. For this reason, it was important to avoid the use of long questionnaires, particularly as the sample consisted of children and their parents who lived in disadvantaged conditions, had communication difficulties and were difficult to engage with. These pragmatic challenges also constrained the number of constructs that could be measured by both children and parents, especially as refugee parents have been repeatedly found not to easily engage in research (Schottelkorb et al., 2012). These fully considered limitations are acknowledged in the following chapter.

### **3.6.1. Child-rated measures**

#### ***3.6.1.1. Pre-migratory trauma exposure***

The Stressful Life Events checklist (SLE) is a self-administered tool that was specifically designed to assess the multiple pre-migratory life experiences of unaccompanied refugee children (Bean, Eurelings-Bontekoe, Derluyn & Spinhoven, 2004). The checklist consists of traumatic events related to loss ("Has someone died in your life that you really cared about?"), war exposure ("Have you ever experienced a war or armed military conflict going on around you in your country of birth?"), violence ("Has someone ever hit, kicked, shot at or some other way tried to physically hurt you?"), accidents/diseases ("Have you had a life-threatening medical problem?"), and other life threats ("Did you experience any other very stressful life events where you thought that you were in great danger?"). The original checklist consists of 12 dichotomous (yes/no) items scored as 1 and 0, respectively. The SLE thus has a maximum total score of 12. As with other, similar

instruments in the literature, it does not include originally validated sub-scales of clusters of traumatic events.

#### **3.6.1.1.1. Psychometric properties and use of SLE in the present study**

The SLE is a cross-culturally validated instrument rating trauma exposure, which is the first criterion of both the DSM-5 (APA, 2013) and ICD-10 classification systems (WHO, 1993) for PTSD. It has been translated into various languages and applied with children from multiple backgrounds, including Albanian, Dutch, Russian, Portuguese, French, Arab and Turkish (Bean et al., 2007). The SLE has been widely used with refugee children (Derluyn et al., 2009; Jensen et al., 2015), including Syrian refugees in Turkey (Özer et al., 2016).

In their cross-sectional study, Özer et al. (2016) used the SLE with Syrian refugee children aged between 9 and 18 years residing in a refugee camp in Turkey. High rates were reported for all types of traumatic events, for example 74% of them had lost a loved one and 69% had experienced significant violence. The item that described sexual harassment was excluded from that study as the interpreters found that it was too religiously and culturally sensitive to be appropriate for Syrian refugee children. Consequently, the present study also used the 11-item version of the SLE due to the similar nature of the sample (Appendix H). Total trauma scores were used in the analysis, with a satisfactory internal consistency of  $\alpha = 0.67$ . As a rule of thumb, Cronbach's  $\alpha$  of  $>.70$  is set as a reasonable threshold for internal consistency; whilst  $.60$  is the lowest acceptable threshold (Nunnally, 1978). These followed the original use of the SLE in the literature. However, the effect of different types of traumatic events was also explored in order to address Research Hypothesis 3.

#### **3.6.1.2. Post-traumatic stress disorder (PTSD)**

Children's Revised Impact of Events Scale (CRIES-8) was used to assess PTSD symptoms among children. The original Impact of Events Scale was developed as a self-administered measure of PTSD symptoms in adults (Horowitz et al., 1979). This was later adapted for children, who were found to report similar scores when exposed to the same natural or human-induced disasters (Yule & Williams, 1990). Although this early 15-item version of the IES was successfully used in other studies with children aged 8 years and above (Yule & Udwin, 1991), it was found that some items could be misinterpreted by

the children. After two studies had examined the factor structure of the IES for children (Dyregrov, Kuterovac, & Barath, 1996; Yule, Ten Bruggencate, & Joseph, 1994), the 8-item Children's Revised Impact of Event Scale (CRIES) was thus developed, and has since been the measure of choice for children as young as 8 years old (Appendix I).

CRIES-8 items are rated on a four-point scale (0 = Not at all, 1 = Rarely, 3 = Sometimes, 5 = Often). It has two sub-scales of intrusion ("Do pictures about it pop into your mind?", "Do you think about it, even when you don't mean to?") and avoidance ("Do you stay away from reminders of it - e.g., places or situations/", "Do you try not to talk about it?"). Although a 13-item version of CRIES is available and includes arousal symptoms, CRIES-8 has been shown to perform equally well in predicting likely PTSD (Child Outcomes Research Consortium, 2017).

#### **3.6.1.2.1. Psychometric properties of CRIES-8**

CRIES-8 has been validated in various cultures and languages (Deeba, Rapee, & Prvan, 2014; Perrin, Meiser-Stedman, & Smith, 2005; Verlinden et al., 2014). It has been used with multiple trauma-exposed child groups including children exposed to natural disasters (Bhushan & Sathya Kumar, 2007), bullying (Idsoe, Dyregrov, & Idsoe, 2012), domestic violence (Georgsson, Almqvist, & Broberg, 2011), and armed conflict (Thabet, Thabet, & Vostanis, 2016). Perrin et al. (2005) estimated a cut-off score of 17 that was shown to correctly classify 80% of children with diagnosable PTSD. Total CRIES-8 scores were used in this study, with a relatively high internal consistency ( $\alpha = 0.71$ ).

#### **3.6.1.3. General mental health problems (GMHP)**

The Strengths and Difficulties Questionnaire (SDQ) was utilized to assess GMHP among refugee children. The SDQ was developed by Goodman (1997) primarily to establish rates of general psychiatric morbidity, as well as indicative rates of common mental health problems in children, i.e., this was not designed as a specific or diagnostic instrument. The applications of the SDQ are manifold, i.e., for screening in both clinical and research settings, in epidemiological research, as a measure of severity, and for establishment of outcomes. It has several versions that can be completed by adolescents aged 11 and above, parents and teachers. In the present study, both child- and parent-rated versions of SDQ were used (Appendices J and K).

Each item is rated on a Likert scale 0-2 (2 = Certainly True, 1 = Somewhat True, 0 = Not True). All versions of the SDQ include 25 items enquiring about 20 negative and five positive attributes. The 20 negative attributes items are grouped in four subscales, namely emotional, conduct, hyperactivity and peer relationship problems, whilst the five remaining strengths items constitute the prosocial subscale. Cut-off scores have been estimated for both total and subscales scores, and these originally led to grouping scores into three bands (normal-borderline-abnormal). This banding was established based on a large study amongst the general population that attempted to define cut-off scores which reported 80% of children as normal, 10% as borderline, and 10% as ‘abnormal’ (“Youth in Mind”, 2012). This original three-band grouping was used in the present thesis.

#### **3.6.1.3.1. Psychometric properties of the SDQ**

Both the parent- and self-rated SDQ versions have been validated in various languages including Arabic (Alyahri & Goodman, 2006; Emam, Hilal, Kazem, & Alkharousi, 2016) and Turkish (Güvenir et al., 2008; Yalın, Özbek, Güvenir, & Baydur, 2013). It has been used with vulnerable groups such as children in foster care (Lehmann, Heiervang, Havik, & Havik, 2014) and refugee children (Fazel, Doll, & Stein, 2009). Although the self-report version was originally developed only for adolescents, there is also evidence supporting its extended use with children aged between 7 and 10 years, as it has been found that reports by younger children are generally as reliable as those of older ones (Mellor, 2004). The present study found that the Cronbach  $\alpha$  was 0.68 for children aged between 7 and 10 years, whereas it was found as  $\alpha = 0.64$  for older children, which supported Mellor’s findings. Thus, SDQ data from all children was used in the analysis. Internal consistencies of  $\alpha = 0.71$  and  $\alpha = 0.65$  was established for parent- and child-rated total difficulties scores, respectively.

#### **3.6.1.4. Attachment security**

The Security Scale (Kerns, Klepac, & Cole, 1996), which was developed as a self-administered tool to assess children’s perceived attachment security to their parents, was used in the present study. It includes 30 items comprising 15 identical items assessing secure maternal and paternal attachment relationships as perceived by children (Appendix L). Items are rated on a four-point scale using Harter’s format (1982) of “Some kids . . . Other kids...”, e.g. “Some kids go to their moms when they are upset, BUT Other kids

do not go to their moms when they are upset”. Children are asked to choose to what degree this situation is similar to their own. Each item is accompanied by four responses: ‘sort of true’ and ‘really true’ for negative statements scoring 2 and 1, respectively, and ‘really true’ and ‘sort of true’ for positive statements scoring 4 and 3, respectively.

Lieberman et al. (1999) separated both the maternal and the paternal attachment security scales into two subscales of availability and dependency. These represent children’s perceptions of maternal and paternal availability and children’s reliance on them in times of stress, respectively. The dependency subscale comprises nine items assessing whether children require, e.g., “Some kids do not really need their mom/dad for much, but other kids need their mom/dad for a lot of things” or appraising parental help, e.g., “Some kids feel better when their mom/dad is around, but other kids do not feel better when their mom/dad is around”. The availability subscale includes six items exploring whether children perceive that their parents or caregivers are present either psychically at times of stress, e.g., “Some kids worry that their mom/dad might not be there when they need her/him, but other kids are sure their mom/dad will be there when they need her/him”, or emotionally “Some kids worry that their mom/dad doesn't really love them, but other kids are really sure that their mom/dad loves them”. Higher scores indicate greater dependency on parental help and higher availability of parental figures.

#### **3.6.1.4.1. Psychometric properties of Security Scale**

The Security Scale has been validated with fifth- and sixth-grade children (Kerns et al., 1996) and with adolescents aged 14 to 17 years (van Ryzin & Leve, 2012). It has been found to have high internal item consistency of  $\alpha = 0.94$ , and a high test-retest reliability. It has been used in children from various cultural backgrounds (Verma & Talebi, 2007), including Arab children (Scharf, Kerns, Rousseau, & Kivenson-Baron, 2016). Besides the general population, it has been used with children at risk, e.g., who have been sexually abused (Parent-Boursier & Hébert, 2015) or exposed to war trauma (Punamäki et al., 2015).

The Security Scale was translated into Arabic for this study by two independent translators. The Turkish version of the Security Scale was validated by Sümer and Sendag (2009) who found satisfactory psychometric properties in fifth- and sixth-grade children.

Internal consistency scores were found as  $\alpha = 0.84$  for maternal and  $\alpha = 0.88$  for paternal attachment security. Internal consistency in the present study was established as  $\alpha = 0.81$  for maternal and  $\alpha = 0.84$  for paternal attachment.

#### **3.6.1.5. Perceived parenting styles**

The Egena Minnen Beträffande Uppfostran for Children (EMBU-C) (Markus, Lindhout, Boer, Hoogendijk, & Arrindell, 2003) was used to assess perceived parenting styles among children. EMBU was originally developed in Sweden as a self-administered adult assessment of parents' rearing attitudes and behaviours (Perris, Jacobsson, Linndström, von Knorring & Perris, 1980). This was subsequently adapted for children aged 7 years and above to assess their perceptions of their parents' rearing styles (Castro, Toro, Van der Ende & Arrindell, 1993). The original 81-item EMBU-C was reduced to 52 items comprising various aspects of parenting styles such as being tolerant, stimulating, abusive, punitive or affectionate. Items are categorized into four subscales: Emotionally Warm Parenting (19 items), Rejecting Parenting (17 items), Overprotective Parenting (12 items), and Favouring Subject (four items). Each item ("Do your parents punish you for minor things?") is rated separately for the mother and father on a four-point scale (1 = Never, 2 = Rarely, 3 = Sometimes, 4 = Always). The EMBU-C provides a total score for each subscale, with higher scores indicating higher parental warmth, rejection, over-protection and favouring subject (Appendix M).

##### **3.6.1.5.1. Psychometric properties of the EMBU-C**

The Favouring Subject subscale was consequently excluded, as it has been shown in the literature that this is a culture-specific rather than universal subscale (Arrindel et al., 1994). Previous evidence suggested a three-factor structure as an acceptable fit to data, after removing the items of the Favouring Subject subscale (Penelo, Viladrich, & Domènech, 2010). The present study established high internal consistency, i.e., emotionally warm (mother,  $\alpha = 0.83$ ; father,  $\alpha = 0.84$ ), rejecting (mother,  $\alpha = 0.70$ ; father,  $\alpha = 0.71$ ) and over-protective parenting (mother,  $\alpha = 0.70$ ; father,  $\alpha = 0.71$ ).

#### **3.6.2. Parent-rated measures**

The parent-rated Strengths and Difficulties Questionnaire was described above.

### **3.6.2.1. Parental psychopathology**

The General Health Questionnaire 12-item (GHQ-12), which is a widely established measure of general psychiatric morbidity in adults, was completed by parents in the present study. It was originally developed to include 60 items (Goldberg & Blackwell, 1970), following which three validated shortened versions, including GHQ-30, GHQ-28 and GHQ-12, were also developed. Of these, GHQ-12 has been recommended for use in research interested in patterns of general, rather than specific, mental health problems or where the longer versions are impractical. Despite its smaller number of items, GHQ-12 has been found to have comparable psychometric properties to those of the longer versions (“GL Assessment”, n.d.). Each item is accompanied by four responses, i.e., ‘much more than usual’, ‘rather more than usual’, ‘no more than usual’ and ‘not at all’, being rated from 3 to 0, respectively. GHQ-12 provides a maximum total score of 36, with higher scores indicating greater psychiatric morbidity (Appendix N).

#### **3.6.2.1.1. Psychometric properties of GHQ-12**

GHQ-12 has been validated in various languages (Mari & Williams, 1985; Montazeri et al., 2003; Sánchez-López & Dresch, 2008), including Arabic (Daradkeh, Ghubash, & El-Rufaie, 2001). It has been used as a screening tool in general (Pevalin, 2000) as well as at-risk populations (Bartels et al., 2002), including refugees (Lindencrona, Ekblad, & Hauff, 2008). The previously established cut-off score of 11/12 was used in the present study (Martin & Newell, 2005). An internal consistency of  $\alpha = 0.76$  was established in this study, indicating satisfactory reliability.

### **3.7. Pilot study**

The measures were administered to a small group of children and their parents in order to pilot:

- Children’s and parents’ ability to read, understand and respond to the questions, either in Arabic or in Turkish, particularly as both their development and education had been disrupted because of the conflict and displacement.
- Participants’ potential difficulties in relating to specific mental health or parental concepts.
- Total time required to complete all measures.
- Participants’ engagement in this research.

### **3.7.1. Participants**

A convenience sample of five children aged 8 to 15 years and their five parents (all mothers) were recruited in a workshop arranged with the aim of integrating Syrian and Turkish children through play activities. Informed consent was obtained from parents and children, following which participants were asked to complete the measures after the workshop. Out of seven invited parents five agreed to participate, whilst the other two did not because of their illiteracy.

### **3.7.2. Pilot findings and modifications**

Participants were able to read and understand the measures in either Arabic (three children and four parents) or Turkish (two children and one parent). The average time taken to complete all the measures was 50 minutes (ranging between 40 and 60 minutes) for children and 15 minutes (10 to 20 minutes) for parents. All participants were able to read and understand the questions, although some children asked for clarification on how to score the items in Likert-type format, as they had never completed a self-report questionnaire before. Moreover, the youngest children, aged 8 years, needed help to answer some of the questions. In such instances, a Syrian volunteer rephrased the questions in Arabic for them. Consequently, it was decided to include a Syrian teacher in the data collection of the main study in anticipation of similar difficulties with any questions.

### **3.8. Data analysis**

The data was analysed using the Statistical Package for the Social Sciences, SPSS version 22.0 for Windows. The normality of the data was tested using the Shapiro-Wilk test, which showed that it was not normally distributed ( $p < 0.05$ ). Thus, non-parametric tests were used in further analysis. Prior to hypothesis-testing, exploratory analysis was conducted as follows: the agreement between child- and parent-rated SDQ scores were tested using Cohen's  $\kappa$ . Sensitivity Analysis was conducted to verify the missing parental data on the GHQ scale. The Mann-Whitney U Test for between-group differences and the Spearman's  $\rho$  for between-group correlations were used in the preliminary analysis to explore the associations between age, gender, mental health problems and parenting variables. After controlling for the effects of pre-migratory trauma, the contribution of



the parenting-related factors, i.e., parental psychopathology, each perceived parenting style (perceived emotionally warmth, rejecting, and over-protective parenting), and perceived attachment relationship (perceived availability of and dependency on to the attachment figure) in explaining likely PTSD or general and specific/common mental health symptoms in refugee minors was investigated via a series of Hierarchical Binary Logistic Regression models.

## Chapter IV

### Study I - Results

#### 4.1. Introduction

This chapter presents the findings of Study 1 in which the main aim was to establish the role of parental factors in the development of mental health problems among Syrian refugee children residing in Turkey. A questionnaire-based cross-sectional study was conducted with 322 refugee children and their 263 parents residing in Istanbul, Turkey. Demographic characteristics of the sample are presented, including participants' ages, sexes, family incomes, number of household members, parental education status, and time spent in Turkey. In the following section, descriptive statistics of pre-migratory trauma exposure (PTE), parental factors and child mental health problems are presented. Agreement on child mental health problems reported by parents and children is also investigated. A sensitivity analysis was carried out to test the effect of missing parental reports on the results. Preliminary analyses, including Mann-Whitney U tests and Spearman's rank correlations were utilised to investigate the association between trauma and parental variables. Finally, the research hypotheses formulated in the previous chapter are addressed via a series of Hierarchical Regression Analyses.

#### 4.2. Demographics

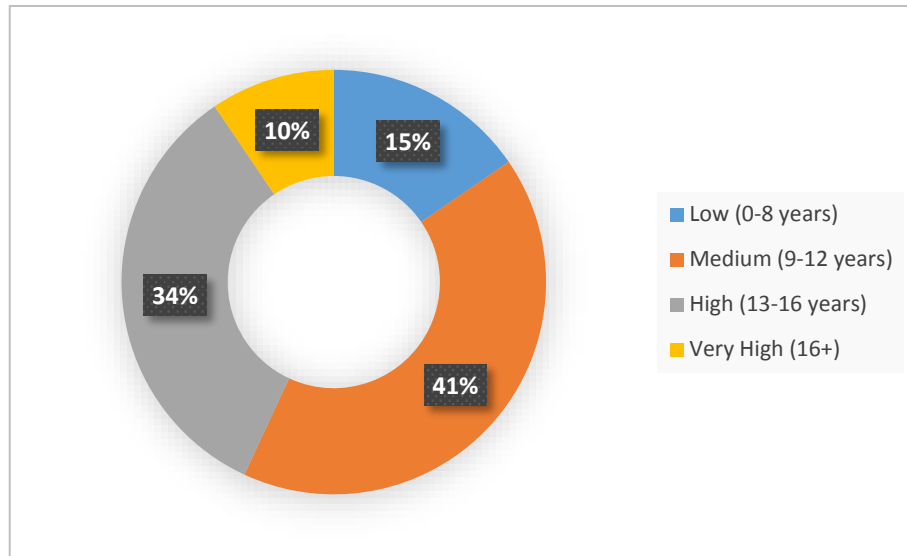
Of 322 children, 166 (52%) were girls and 156 (48%) were boys, with a mean age of 11.61 years (SD = 1.81). Of the participating parents, 82 (31%) were fathers and 183 (69%) were mothers. The parents' mean age was 42.18 years (SD = 8.2). Mean scores and standard deviations (SD) for each group are presented in Table 4.7.

**Table 4.7 Sample characteristics**

	Boys	Girls	Total	Mothers	Fathers	Total
<b>Count</b>	156	166	322	183	82	265
<b>Mean age</b>	11.42	11.78	11.61	42.11	42.43	42.18
<b>SD age</b>	1.68	1.94	1.81	8.43	7.83	8.24

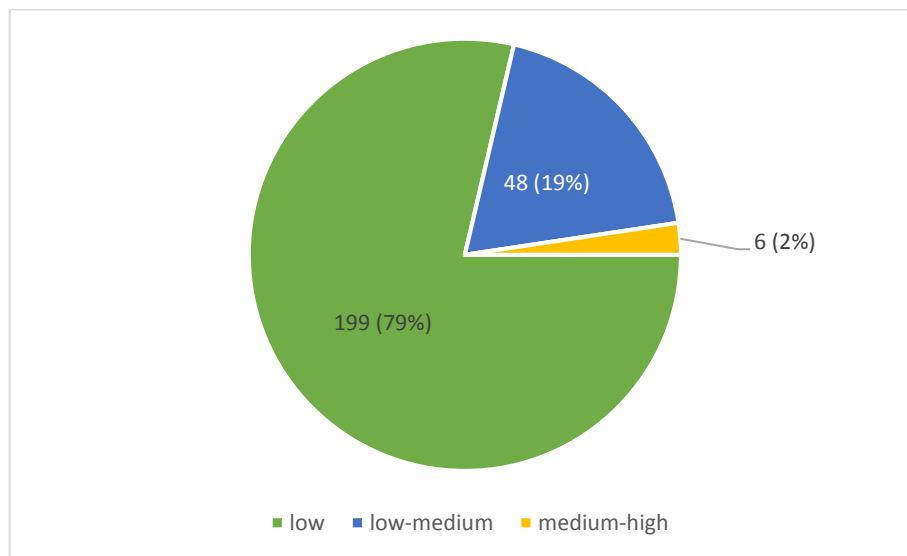
Among 263 parents who participated in the study, 39 (15.4%) had a low education level (0-8 years), 105 (41.5%) medium (9-12 years), 85 (33.6%) high (13-16 years), and 24 (9.5%) had a very high level of education (17+ years) (Figure 4.7).

**Figure 4.7 Parents' education level**



The majority of parents (n = 199, 79%) reported having a very low income (0-2000 Turkish Liras (TL), 48 (19%) a low-medium income (2000-4000 TL), and only 6 (2%) parents reported a medium-high income (4000+ TL) (Figure 4.8).<sup>1</sup>

**Figure 4.8 Family income (monthly)**



The mean household number was large, i.e., 6.14 (minimum 4 and maximum 14, SD = 1.41). The majority of children lived in families of 4-6 persons, whilst one in every three

<sup>1</sup> The income classification used in the present study was based on fixed National Minimum Wage (NMW) of €446.4 which is approximately equivalent to 2,000 TL per month (NMW, 2018). In this study, established NMW of 2,000 TL was used as the cut-off for the classification of 'very low', 'low-medium' and 'medium-high' income categories.

children was residing in a crowded (7-9 persons) house. The average duration that participants had been residing in Turkey was 2.09 years (range 0 months-6 years, SD = 1.01). These demographic variables obtained for 263 children whose parents returned the completed measures, are presented in Table 4.8.

**Table 4.8 Demographic characteristics of the sample**

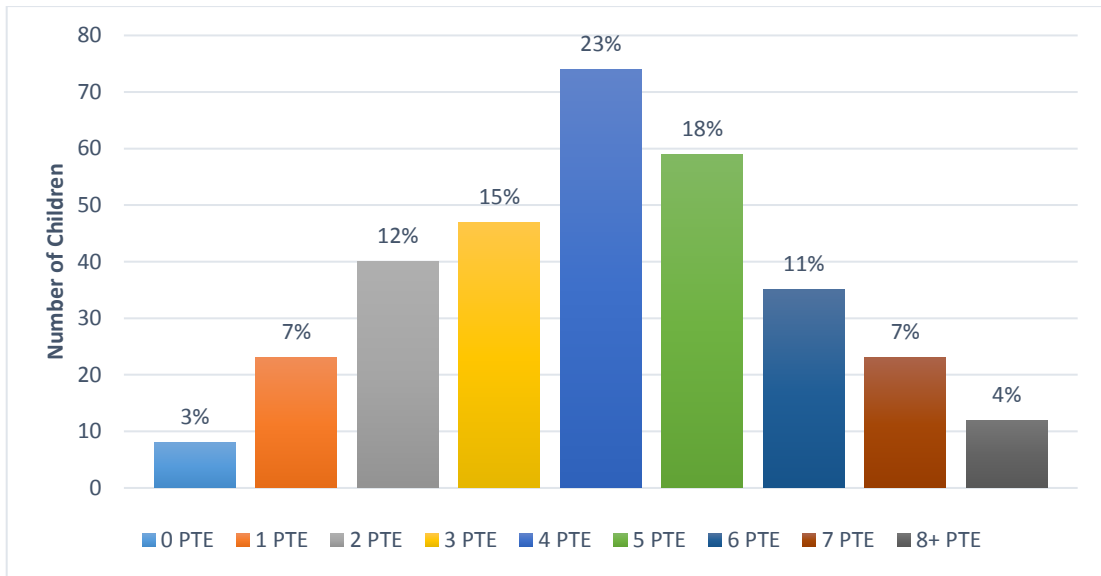
<b>Demographics</b>	<b>Frequency (%)</b>		
<b>Marital status</b>	Single 29 (11%)	Married 224 (88.5)	
<b>Parental education</b>	Low (0-8 years) 39 (14.8%)	Average (9-12 years) 105 (39.9%)	High (13+ years) 109 (41.4%)
<b>Income</b>	Low (0-2000tl) 199 (75.7%)	Average (2000-4000 tl) 48 (18.3%)	High (4000+) 6 (2.3%)
<b>Household number</b>	4-6 persons 162 (61.6%)	7-9 persons 89 (33.8%)	14 and more persons 2 (.8%)
<b>Years spent in Turkey</b>	Less than one year 29 (11.5%)	<u>1-3 years</u> 129 (51%)	3-6 years 95 (37.6%)

### 4.3. Descriptive statistics

#### 4.3.1. Trauma exposure

The mean number of total stressful events experienced by refugee children was 4.08 (SD = 1.95). Of all children, 314 (97.5%) had experienced at least one stressful event, whilst 63% had experienced four or more events (Figure 4.9).

**Figure 4.9** Number of pre-migratory traumatic events (PTE) experienced by children



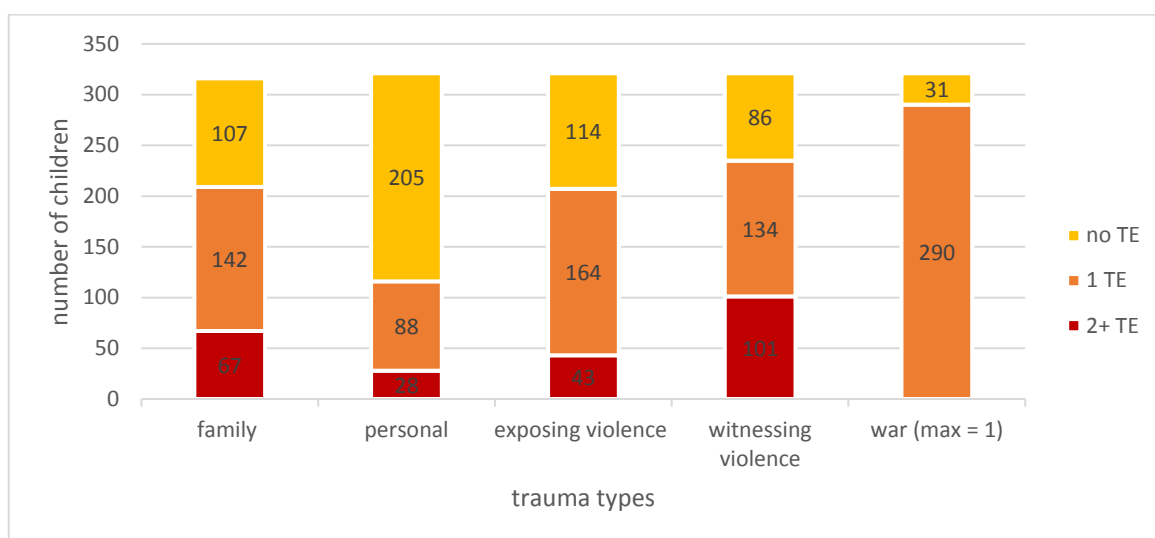
The frequency of each PTE is presented in Table 4.9. The most frequently reported traumatic events experienced by children were armed conflict in their home country (90.3 %), events that one thought of posing threat to themselves (59.2%) or others (57.6%), and loss of someone who they really cared about (51.4%). Moreover, almost half of children (n = 151) had witnessed psychical violence and one in every three children reported drastic changes in their families. Health, accident or disaster-related traumas were revealed relatively less frequently in children. Twenty-seven children (8%) had been separated from their families in Syria.

**Table 4.9 Frequencies of pre-migratory traumatic events**

	Number	%
1. War/armed conflict exposure	290	90.3
2. Personal life threats	190	59.2
3. Witnessing life threats to others	185	57.6
4. Loss of a loved one	165	51.4
5. Witnessing physical violence	151	47.0
6. Drastic changes in family	94	29.3
7. Exposure to physical violence	60	18.7
8. Natural disaster	51	15.9
9. Accident	50	15.6
10. Health problem	47	14.6
11. Separation from family	27	8.4

Items were grouped by the researcher according to their nature of the source to test the differential effect of traumatic experiences on different types of child mental health problems. The new categories emerged as ‘family-related trauma’ (by summing items 4, 6 and 11), ‘personal life events’ (by summing items 8, 9 and 10), ‘war exposure’ (item 1), ‘experiencing violence’ that is presumably directed to the individual (by summing items 2 and 7), and ‘witnessing violence’ that is presumably directed at others (by summing items 3 and 5). The distribution of children in terms of the number of these types of traumatic events experienced is shown in Figure 4.10 below.

**Figure 4.10 Types of traumatic events experienced by refugee children**



*Note: maximum total scores for each category are as follows: family = 3, personal = 3, exposing violence = 2, witnessing violence = 2, war exposure = 1)*

As can be seen in Figure 4.10, 209 children (67%) were exposed to at least one family-related trauma, whilst 116 (36%) had experienced personal life events. Moreover, 207 children (65%) were exposed to direct violence and 235 (73%) witnessed violence directed towards others. Overall, 290 (90%) children experienced war trauma in Syria.

### **4.3.1. Child psychopathology**

In terms of child psychopathology, 163 children (51.5%) scored above the CRIES-8 clinical cut-off score for the likelihood of presenting with PTSD ( $M = 17.3$ ,  $SD = 9.11$ ). The rates of general (GMHP), as well as specific, mental health problems and positive subscales (prosocial behaviour), using the original three-band categorisation for parent- and child-rated SDQ scores are presented in Table 4.10, together with total difficulties scores, which constitute the sum of emotional, conduct, hyperactivity and peer-related problems subscales. This banding was established based on a large study amongst the general population that attempted to define cut-off scores, which reported 80% of children as ‘normal’, 10% as ‘borderline’, and 10% as ‘abnormal’ (Youth in Mind, 2012).

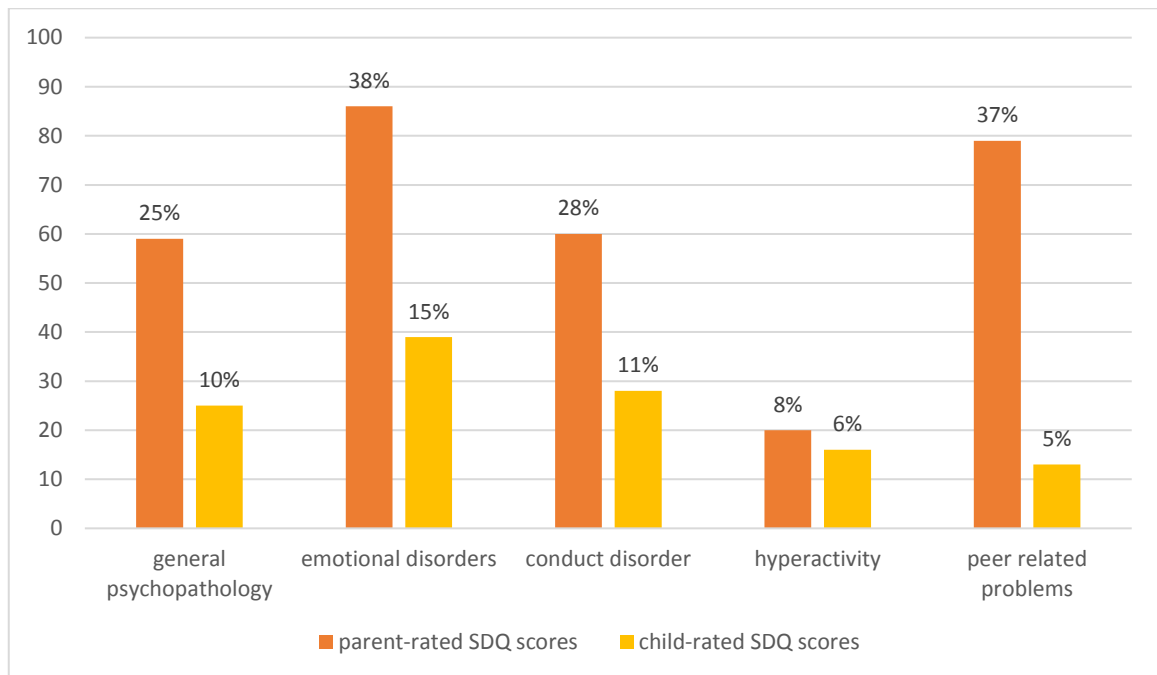


**Table 4.10 Continuous scores and frequency rates of child- and parent-rated GMHP**

		Mean (SD)	Normal	Borderline	Abnormal
<b>SDQ child-rated scores</b>	Total difficulties	12.5 (5.3)	185 (72%)	48 (18%)	25 (10%)
	Emotional problems	4.24 (2.3)	173 (67%)	46 (18%)	39 (15%)
	Conduct problems	2.26 (1.9)	203 (79%)	27 (10%)	28 (11%)
	Hyperactivity	3.21 (2.09)	216 (84%)	26 (10%)	16 (6%)
	Peer related problems	2.81 (1.5)	176 (68%)	69 (27%)	13 (5%)
	Prosocial behaviour	8.21 (1.8)	236 (91%)	6 (2%)	16 (6%)
<b>SDQ parent-rated scores</b>	Total difficulties	12.9 (5.2)	135 (55%)	52 (21%)	59 (24%)
	Emotional problems	3.74 (2.2)	117 (52%)	21 (9%)	86 (39%)
	Conduct problems	2.45 (1.8)	129 (59%)	28 (13%)	60 (28%)
	Hyperactivity	3.77 (1.9)	198 (83%)	19 (8%)	20 (9%)
	Peer related problems	3.02 (1.6)	97 (45%)	38 (18%)	79 (37%)
	Prosocial behaviour	7.80 (1.7)	228 (93%)	11 (4%)	6 (3%)

These bandings were further categorised as either clinical or non-clinical, where clinical scores were defined as those within the abnormal range. Children who fell into the abnormal category were then compared according to their source of rating (parent or child) (Figure 4.11). As can be seen in the graph, a larger number of children were rated within the clinical range by parents compared to child-reports. Fifty-nine children (25%) were rated by their parents to be within the clinical range of general psychopathology (SDQ total difficulties), in contrast with 25 children's (10%) self-ratings. Similar differences were detected for specific problems. For example, parents reported a larger number of emotional problems within the SDQ abnormal range for 38% of the children, in contrast with 15% in children's self-reports.

**Figure 4.11** Frequencies of children within the SDQ clinical range according to parent- and child-rated scores



Subsequently, Cohen's  $\kappa$  was run to determine if there was agreement between parent and child's ratings for SDQ in terms of scores within the clinical range of general, as well as specific, mental health problems (abnormal = 1, normal = 0). There was no significant agreement in terms of SDQ scores of total difficulties ( $k = 0.029, p = 0.59$ ), emotional ( $k = 0.064, p = 0.14$ ), conduct ( $k = 0.053, p = 0.25$ ), hyperactivity ( $k = 0.008, p = 0.88$ ), and peer relationship problems ( $k = 0.020, p = 0.62$ ) reported by parents and children. It was thus decided to only use parent-rated SDQ scores in the hypotheses-testing analyses, and indeed throughout this study, both in order to include a lower threshold of detected mental health problems and because Goodman (2001) found that parent-rated SDQ scores were more strongly associated with psychiatric disorders compared to child-reports.

#### **4.3.2. Parenting related factors**

Descriptive statistics are presented for the perceived attachment security (SS), parental psychopathology (GHQ-12) and perceived parenting style scales (EMBU-C). The mean scores for the maternal and paternal SS were 44.92 (SD = 7.62) and 44.98 (SD = 7.82), respectively. The previously established cut-off score of  $\geq 45$  was used to determine attachment security among children. Overall, 153 children (47.5%) reported secure maternal attachment, and 155 children (48.4%) scored above the cut-off score for secure

paternal attachment. Moreover, 29 (9%) children who scored above the cut-off score for maternal attachment reported insecure attachment to their fathers, whereas 32 children (10%) who perceived secure paternal attachment reported insecure attachment to their mothers (Figure 4.12).

**Figure 4.12** Frequency of children who perceived secure/insecure attachment to parents

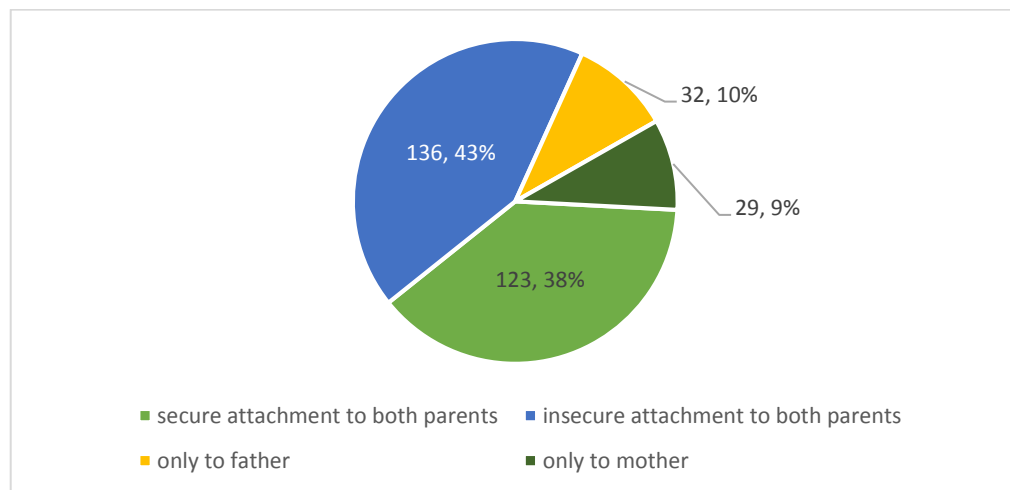


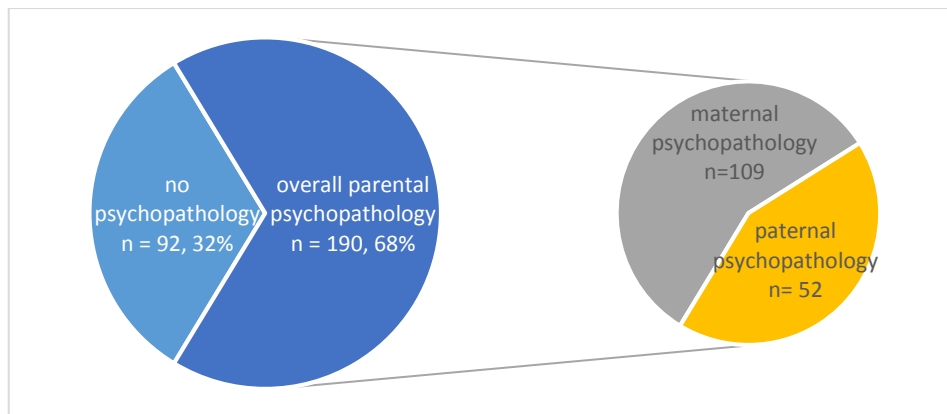
Table 4.11 reports mean scores and the standard deviations for the original maternal and paternal dependency and availability subscales and new parental category. Maternal and paternal dependency and availability scores were merged into parental dependency and parental availability categories, by summing the scores of identical items for maternal and paternal attachment scales. Although this may have resulted in missing more detailed information on specific attachment to different parents, the new parental categories were created to be consistent with other parenting-related measures which did not include separate maternal and paternal scores. New parental categories showed satisfactory internal consistency, i.e. availability  $\alpha = 0.84$  and dependency  $\alpha = 0.80$ ).

**Table 4.11** Mean and standard deviations of the original Security Scale sub-scales and new parental subscale

	Mean (SD)		Mean (SD)
<b>Maternal Availability</b>	18.54 (3.82)	<b>Parental</b>	37.12 (7.01)
<b>Paternal Availability</b>	18.60 (3.79)	<b>availability</b>	
<b>Maternal Dependency</b>	26.36 (4.51)	<b>Parental</b>	52.71 (8.21)
<b>Paternal Dependency</b>	26.37 (4.69)	<b>dependency</b>	

The GHQ-12 mean score, moreover, was established as 14.49 (SD = 14.46). Using the specified cut-off score of 11/12 (Martin & Newell, 2005), 161 parents, or almost two-thirds, of the sample (64%) fell into the psychopathology group, whilst 92 (36%) scored within the normal range. Among 183 mothers, 109 (63%) fell into the psychopathology group; whilst 52 out of 82 (62%) fathers scored above the clinical cut-off. Figure 4.13 showed the frequency of maternal and paternal psychopathology.

**Figure 4.13 Frequency of maternal and paternal psychopathology**



The mean scores and standard deviations of the EMBU-C subscales are presented in Table 4.12. Mean scores for perceived mothering and fathering styles were very close, and there was a strong correlation between maternal and paternal parenting styles (emotional warmth mothering/fathering,  $\rho = 0.92$ ,  $p < 0.001$ ; rejecting mothering/fathering,  $\rho = 0.93$ ,  $p < 0.001$ ; overprotective mothering/fathering,  $\rho = 0.94$ ,  $p < 0.001$ ). To avoid possible multi-collinearity in the further analysis, maternal and paternal styles were merged into one subscale by summing the scores of identical items for mothering and fathering scales. The new parenting categories showed high reliability (emotionally warm,  $\alpha = 0.91$ ; rejecting,  $\alpha = 0.84$ ; over-protective,  $\alpha = 0.85$ ). The mean scores and SDs of the original mothering/fathering subscales and the new parenting subscale are presented in Table 4.12.

**Table 4.12 Mean scores and standard deviations of the original EMBU-C subscales and new parenting subscale**

	<b>Emotionally warm</b>	<b>Rejecting</b>	<b>Overprotective</b>
	Mean and (SD)	Mean and (SD)	Mean and (SD)
<b>Mothering</b>	61.09 (9.95)	29.03 (7.605)	32.70 (6.49)
<b>Fathering</b>	63.11 (10.22)	28.93 (7.79)	32.34 (6.57)
<b>Parenting</b>	124.53 (19.80)	57.78 (14.97)	65.15 (12.93)

#### 4.3.3. Sensitivity analysis

As the dataset was based on 322 children's and 263 parental reports (59 parental reports were completely missing), a sensitivity analysis was conducted to test how different values of a parent-reported independent variable, in this case parental psychopathology scores (GHQ), were associated with dependent variables (CRIES and SDQ total difficulties) under a given set of assumptions, instead of excluding children's reports. Thus, two assumptions of 'extremely good' and 'extremely poor' GHQ scores were tested. For the first assumption, all missing GHQ scores were replaced with the minimum GHQ score of 0, assuming that all non-responding parents would score their mental health as very good. For the second assumption, missing values were replaced with the maximum GHQ score of 36, assuming that all non-responding parents would score their psychopathology as really poor. Three univariate linear regression (ULR) models were run (GHQ with missing values, GHQ missing values replaced with 0, GHQ missing values replaced with 36), with CRIES and SDQ total difficulties scores as outcome variables, respectively. Standardized B coefficients and p-values in all three models are presented and contrasted in Table 4.13.

**Table 4.13 Sensitivity analysis of GHQ-12**

		<b>CRIES</b>		<b>SDQ total difficulties</b>	
		$\beta$	p	$\beta$	p
<b>GHQ with missing values</b>	M=14.49 SD=6.46	-0.05	0.42	0.30	0.000
<b>GHQ replaced with 0</b>	M=11.39 SD=8.2	-0.07	0.19	0.21	0.000
<b>GHQ replaced with 36</b>	M=19.19 SD=10.5	0.02	0.68	0.33	0.000

*Note: GHQ = General Health Questionnaire*

As can be seen from Table 4.13, the changes in B coefficients are small between the assumptions, whilst the significance remained the same in all models. Thus, the missing values in the GHQ scale did not appear to have a significant impact on the results of the analysis.

#### 4.4. Preliminary analysis

##### 4.4.1. Child psychopathology and gender

A series of Chi-squared tests for independence were utilized to test the relationship between sex (boy/girl) and child psychopathology status (clinical/normal). Results are shown in Table 4.14, and do not indicate any significant sex-based differences with regards to mental health status.

**Table 4.14 Chi-squared tests for independence on the relationship between sex and child psychopathology status**

	Girls	Boys	$\chi^2$	p	Phi
<b>PTSD</b>	82 (49%)	81 (53%)	0.271	0.60	-0.036
<b>GMHP</b>	32 (26%)	27 (22%)	0.447	0.50	0.052
<b>Emotional problems</b>	48 (42%)	38 (35%)	0.847	0.35	0.071
<b>Conduct problems</b>	28 (25%)	31 (30%)	0.562	0.45	-0.061
<b>Hyperactivity</b>	10 (8%)	10 (8%)	0.000	0.10	-0.004
<b>Peer-related problems</b>	39 (36%)	40 (37%)	0.000	0.10	-0.010

*Note: PTSD = Post traumatic stress disorder, GMHP = General mental health problems*

Sex-based differences in relation to child psychopathology were also tested for continuous scores of child psychopathology measures by utilizing the Mann-Whitney U Test. Results revealed that there were no significant differences between girls and boys in terms of any of the child psychopathology scores considered with the exception of emotional problems. The Mann-Whitney U test showed that girls ( $Md = 4.00$ ,  $n = 133$ ) had significantly more emotional problems compared to boys ( $Md = 3.30$ ,  $n = 128$ ),  $U = 7215$ ,  $z = -2.132$ ,  $p < 0.05$ . However, this difference might be due to girls' greater capacity to admit to symptoms compared to boys (Morgos et al., 2008).

#### 4.4.2. Child psychopathology and age

Participants were initially separated into two age groups, i.e., children aged between 8-11 years (166 children, 51.4%) and adolescents aged between 12-18 years (156 adolescents, 48.6%). A series of Chi-squared tests for independence were repeated to test the relationship between age (children/adolescents) and child psychopathology status (clinical/normal). Results are shown in Table 4.15.

**Table 4.15 Chi-squared tests for independence on the relationship between age and child psychopathology status**

	Children	Adolescent	$\chi^2$	p	Phi.
<b>PTSD</b>	81 (49%)	82 (53%)	0.404	0.52	0.042
<b>GMHP</b>	30 (25%)	29 (23%)	0.021	0.88	-0.019
<b>Emotional problems</b>	48 (41%)	38 (35%)	0.504	0.47	-0.057
<b>Conduct problems</b>	33 (30%)	27 (25%)	0.514	0.47	-0.059
<b>Hyperactivity</b>	16 (13%)	4 (3%)	6.11	0.013*	-0.176
<b>Peer-related problems</b>	47 (38%)	38 (35%)	0.064	0.80	-0.011

*Note: PTSD = Post traumatic stress disorder, GMHP = General mental health problems*

A significant difference was found between children and adolescents in terms of hyperactivity status,  $\chi^2(1, n = 217) = 6.11, p < 0.05$ , showing that more children reported symptoms that could indicate more potential hyperactivity problems than for adolescents. This is consistent with the early onset of ADHD being during childhood (Austin, Reiss & Burgdorf, 2007). The relationship between age and child psychopathology was also tested for continuous scores of age and child psychopathology by utilizing Spearman's rho. Results indicated that younger children were more likely to have conduct ( $\rho = -0.131, r = -0.128, p < 0.05$ ) and GMHP ( $\rho = -0.146, r = -0.151, p < 0.05$ ), alongside hyperactivity ( $\rho = -0.195, r = -0.219, p < 0.005$ ).

#### 4.4.3. The effect of sex on trauma and parenting variables

A Mann-Whitney U Test was utilized to compare girls and boys in terms of each predictor variable, i.e., age, trauma exposure, attachment security (parental dependency and parental availability), perceived parenting styles (warm, rejecting, overprotective) and parental psychopathology. Results of the non-parametric test are reported in Table 4.16.

**Table 4.16 Mann-Whitney U Test results upon the sex-based differences in trauma and parenting variables**

	Girls		Boys		U	z	Sig
	Median	N	Median	N			
<b>Age</b>	12	166	11	156	11813	-1.37	0.16
<b>PTE</b>	4	166	4	155	10747	-2.58	0.01*
<b>Parental dependency</b>	50.9	159	53.3	152	10235	-2.33	0.02*
<b>Parental availability</b>	36	159	39	151	10919	-1.37	0.16
<b>Warm parenting</b>	127	146	131	147	9318.5	-1.94	0.05*
<b>Rejecting parenting</b>	53.3	149	56	149	9636.5	-1.97	0.04*
<b>Overprotective Parenting</b>	64	148	66	148	9511.5	-1.95	0.05*
<b>Parental psychopathology</b>	14	130	14	123	7544	-0.77	0.43

*Note: PTE = Pre-migratory traumatic exposure*

There was a significant difference in the total trauma exposure, parental dependency, warm, rejecting and overprotective parenting scores between girls and boys. Mean rank scores were higher for boys, indicating that they reported more trauma exposure ( $M_{rboys} = 174$ ,  $M_{rgirls} = 148$ ), parental dependency ( $M_{rboys} = 168$ ,  $M_{rgirls} = 144$ ), perceived more warmth ( $M_{rboys} = 156$ ,  $M_{rgirls} = 137$ ), rejecting ( $M_{rboys} = 159$ ,  $M_{rgirls} = 139$ ) and overprotective parenting ( $M_{rboys} = 158$ ,  $M_{rgirls} = 138$ ) compared to girls.

#### **4.4.4. The effect of age on trauma and parenting variables**

A non-parametric Mann-Whitney U Test was subsequently conducted to compare children (8-11 years) and adolescents (12-18 years) in terms of the predictor variables. Results are shown in Table 4.17.



**Table 4.17 Mann-Whitney U test results on age differences in trauma and parenting variables**

	Children		Adolescents		U	z	Sig
	Median	N	Median	N			
<b>PTE</b>	4	166	4	155	11863	-1.22	0.22
<b>Parental dependency</b>	51	157	52	154	11322	-.96	0.33
<b>Parental availability</b>	36	156	38.6	154	10501	-1.91	0.06
<b>Warm parenting</b>	133	156	124.1	137	7971.5	-3.75	0.00*
<b>Rejecting parenting</b>	56	157	52	141	9298	-2.38	0.01*
<b>Overprotective parenting</b>	66.5	158	60	138	7184.5	-5.06	0.00*
<b>Parental psychopathology</b>	15	123	13.5	130	7215	-1.34	0.18

Note: PTE = Pre-migratory traumatic exposure

There was a significant difference for warm, rejecting and overprotective parenting scores between children and adolescents. Mean rank scores were higher for children, indicating that they perceived their parents as more warm ( $M_{children} = 164.4$ ,  $M_{adolescents} = 127.1$ ), but at the same time more rejecting ( $M_{children} = 160.4$ ,  $M_{adolescents} = 136.9$ ) and overprotective ( $M_{children} = 172$ ,  $M_{adolescents} = 121.5$ ) compared to adolescents.

The relationship between age and parenting variables was also tested by utilizing Spearman's rho. Results indicated, similar to the Mann-Whitney U test analysis, that children were more likely to report warmth ( $\rho = -0.18$ ,  $p < 0.001$ ), rejecting ( $\rho = -0.15$ ,  $p < 0.05$ ) and overprotective parenting ( $\rho = -0.31$ ,  $p < 0.001$ ) compared to adolescents. Additionally, adolescents reported more trauma exposure ( $\rho = 0.11$ ,  $p < 0.05$ ) compared to children.

#### **4.4.5. Associations between trauma exposure, attachment security, parenting styles and parental mental health**

Spearman's rank correlation was utilised to explore the associations between predictor variables, i.e., pre-migratory trauma exposure (PTE), parental dependency (PD) and parental availability (PA), emotionally warm parenting (EWP), rejecting parenting (RP), overprotective parenting (OPP) and parental psychopathology (PP). Non-parametric correlation test results are shown in Table 4.18.

**Table 4.18 Spearman's rank correlation test results of predictor variables**

	1	2	3	4	5	6	7
<b>1.PTE</b>	-						
<b>2.PP</b>	0.05	-					
<b>3.PD</b>	-0.02	-0.10	-				
<b>4.PA</b>	-0.02	-0.12*	0.77*	-			
<b>5.EWP</b>	-0.13*	-0.03	0.16*	0.21*	-		
<b>6.RP</b>	0.04	0.19*	-0.17*	-0.22*	-0.24*	-	
<b>7.OPP</b>	-0.06	0.05	-0.00	-0.02	0.56*	0.20*	-

*Note: PTE = Post-migratory trauma exposure, PP = Parental psychopathology, PD = Parental dependency, PA = Parental availability, EWP = Emotionally warm parenting, RP = Rejecting parenting, OPP = Overprotective parenting*

There was a negative correlation between trauma exposure (PTE) and emotionally warm parenting (EWP),  $\rho = -0.13$ ,  $p < 0.05$ , with high numbers of traumatic events being associated with lower perceived emotionally warm parenting. Another significant correlation was established between PP and PA ( $\rho = -0.12$ ,  $p < 0.05$ ), and RP scores ( $\rho = 0.19$ ,  $p < 0.05$ ), thus showing that children reported less parental availability and more rejecting parenting when their parents reported greater parental psychopathology. Moreover, there were positive correlations between EWP and PD,  $\rho = 0.16$ ,  $p < 0.05$ , and EWP and PA,  $\rho = 0.21$ ,  $p < 0.001$ , showing that children who scored higher in parental dependency and availability were more likely to perceive their parents as being emotionally warm. Negative correlations between RP and PD,  $\rho = -0.17$ ,  $p < 0.05$ , and RP and PA,  $\rho = -0.22$ ,  $p < 0.001$ , were established, indicating that children who scored lower in parental dependency and availability were more likely to perceive their parents as being more rejecting. However, all correlation coefficients were between 0.10 and 0.30, which indicates only small effect sizes (Cohen's, 1988).

Parental dependency and availability scores were strongly correlated,  $\rho = 0.77$ ,  $p < 0.001$ , with a large effect size, indicating that children who scored higher in parental availability were more likely to also report higher parental dependency. Another strong correlation was established between emotionally warm and overprotective parenting subscales,  $\rho = 0.56$ ,  $p < 0.001$ , showing that children who scored higher on the emotionally warm parenting subscale were also more likely to score higher on the overprotective parenting scale. There were also significant but small effect size

correlations between EWP and RP,  $\rho = -0.24$ ,  $p < 0.001$ , and RP and OPP,  $\rho = 0.20$ ,  $p < 0.001$ , suggesting that children who scored higher in rejecting parenting were more likely to score lower in emotionally warm parenting and higher in overprotective parenting.

#### **4.4.6. Analysis of parenting-based exploratory model**

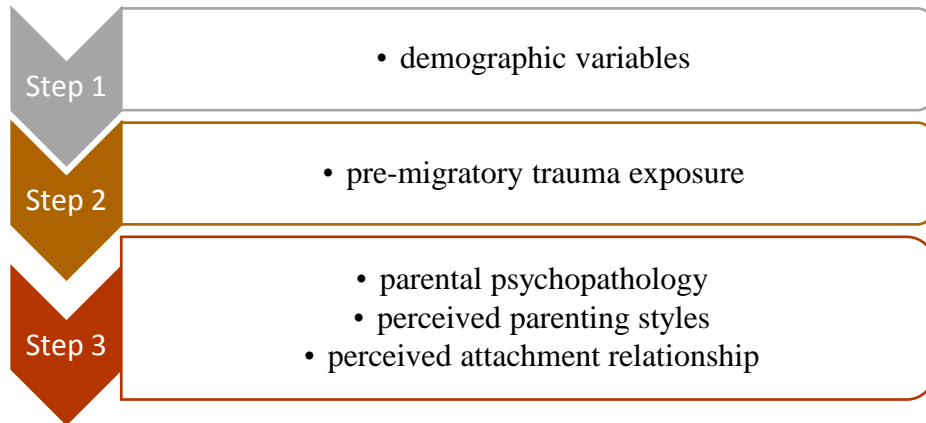
##### ***4.4.6.1. Criteria for determining the order of the predictor variables***

The ordering of the predictors entered into a Hierarchical Regression model requires prior determination (Cohen, West, & Aiken, 2014). Thus, the sequence of the variables should not be data-driven and not based on any primary analysis, but should rather be predetermined, even before the data collection. Cohen et al. (2014) defined three basic principles for variable entry:

- 1) Causal priority: Based on the priority theory, there could be a potentially causal relationship between the predictors entered into the model, e.g.,  $X1 \rightarrow X2 \rightarrow X3$ . The predictors should thus be entered following this sequence.
- 2) Research relevance: Based on the related literature, predictors that have been established as ‘mostly relevant’ should be entered in the initial steps, whilst all other exploratory, or possible, variables should be entered in a later sequence.
- 3) Temporal precedence: Predictors should be entered in terms of their natural occurrence in time, e.g.,  $\text{sex} \rightarrow \text{attitude} \rightarrow \text{behaviour}$ .

In the present study, the order of the independent variables entered into the regression models were determined based on both ‘causal priority’ and ‘research relevance’ criteria (Figure 4.14). The effect of demographic variables (age, sex and income) were controlled for by entering them as a block in the first step of the regression model. These were followed by total pre-migratory trauma scores that were introduced into the regression in Step 2. Parental psychopathology (GHQ-12), perceived parenting styles (EWP, RP, OPP) and perceived attachment relationship (PA and PD) were entered in Step 3, as previous studies have shown that pre-migratory trauma exposure can result in changes of parents’ mental health problems, parenting styles and attachment security.

**Figure 4.14 Hierarchical model for predicting child mental health problems**



This order also fits with research relevance criteria, as the predictor variable in the initial steps, i.e., pre-migratory trauma exposure, has been established in the literature as a predictor of child mental health outcome variables. Trauma exposure scores were thus introduced in the initial steps, while exploratory predictor variables such as parental psychopathology, perceived parenting styles and attachment security, which were not necessarily anticipated to predict the outcome variables based on existing - and often inconclusive - evidence, were entered in the subsequent steps of the equation.

#### **4.4.6.2. Hypothesis testing**

A series of Hierarchical Logistic Multiple Regression (HLMR) were utilized to test the model. Four consecutive HLMR were performed to assess the impact of a number of factors on the likelihood of a child having PTSD, general mental health problems (GMHP), emotional, or conduct problems. The model contained ten independent variables (age, sex, income – Step 1: pre-migratory trauma exposure – Step 2: and parental psychopathology, three parenting styles, and two attachment security domains – Step 3. These were entered by pre-determined order.

##### **4.4.6.2.1. Hypothesis One: Pre-migratory trauma exposure (PTE) as a predictor of child mental health problems**

With likely PTSD as an outcome variable (as measured by CRIES-8 scores and determined by established cut-off scores), the full model containing all predictors was

statistically significant:  $\chi^2 (10, N = 215) = 28.519, p < 0.005$ , indicating that the model was able to distinguish between participants who reported, and did not report, likely PTSD. The model as a whole explained 16.6% (Nagelkerke R-squared) of the variance in PTSD status, and correctly classified 67% of cases. Moreover, the Hosmer and Lemeshow test was non-significant,  $p = 0.512$ , showing that the model was a good fit. Results are shown in Table 4.19.

In Step 1, demographic factors did not indicate statistical significance in explaining children's PTSD status (clinical/normal),  $\chi^2 (3, N = 215) = 2.955, \text{Nagelkerke } R^2 = 0.005, p = 0.399$ . Pre-migratory trauma exposure (PTE), however, significantly predicted the likelihood of a child reporting PTSD in Step 2:  $\chi^2 (1, N = 215) = 10.398, \text{Nagelkerke } R^2 = 0.080, p < 0.005$ . As such, the addition of the pre-migratory trauma variable significantly explained a further 7.5% of the variance in PTSD status, recording an odds ratio of 1.28.

When general psychopathology status was entered as the outcome variable (measured by the total SDQ score and determined according to established cut-offs), the full model was also significant:  $\chi^2 (10, N = 205) = 27.882, p < 0.05$ , indicating that this was able to distinguish between children who were reported as likely to have GMHP and those children whose parents' SDQ scores fell within the non-clinical (normal) range. The model as a whole predicted 19.1% (Nagelkerke R-squared) of the variance in general psychopathology status, and correctly classified 78.5% of cases. The Hosmer and Lemeshow test supported the model, as the p-value was non-significant (0.245). Demographic variables were entered in the first step, and did not predict children's general psychopathology status  $\chi^2 (3, N = 205) = 2.008, \text{Nagelkerke } R^2 = 0.015, p = 0.57$ . Pre-migratory trauma did not reach statistical significance either in Step 2,  $\chi^2 (1, N = 205) = 0.476, \text{Nagelkerke } R^2 = 0.018, p = 0.490$ . Results are presented in Table 4.20.

Subsequent hierarchical logistic regression analyses were conducted to test the effect of pre-migratory trauma exposure (PTE) on the likelihood of children reporting possible emotional or conduct problems. The full model was not significant for conduct problems:  $\chi^2 (10, N = 195) = 16.665, p = 0.082$ , indicating that this failed to distinguish between children who had been reported as likely to have conduct problems or otherwise. In contrast, the model for likely emotional problems was significant:  $\chi^2 (10, N = 189) =$

36.246,  $p < 0.001$ . The whole model explained 17% (Nagelkerke R-squared) of the variance in emotional problems status, and correctly classified 67% of cases. Similar to the first two analyses, demographic variables did not predict emotional problems status in Step 1  $\chi^2 (3, N = 187) = 4.442$ , Nagelkerke  $R^2 = 0.032$ ,  $p = 0.218$ . Furthermore, adding pre-migratory trauma in Step 2 did not reach significance:  $\chi^2 (1, N = 187) = 0.103$ ,  $R^2 = 0.032$ ,  $p = 0.412$ . Results are presented in Table 4.21.

#### **4.4.6.2.2. Hypothesis Two: Parenting-related factors as predictors of child mental health problems**

When PTSD status was entered as the outcome variable (above cut-off on CRIES-8 scores), parenting-related factors as a block significantly predicted the likelihood of a child reporting likely PTSD in Step 3:  $\chi^2 (6, N = 215) = 15.166$ , Nagelkerke  $R^2 = 0.166$ ,  $p < 0.005$ , thus indicating that the addition of parenting-related variables significantly explained a further 8.6% variance in PTSD after the effect of demographic variables and pre-migratory trauma had been controlled for. Moreover, two of the perceived parenting style variables, i.e., lower scores of emotionally warm parenting and higher scores of rejecting parenting, and both attachment variables, i.e., higher parental dependency and lower parental availability uniquely contributed in predicting children with PTSD (Table 4.19).

**Table 4.19 Hierarchical Logistic Regression results for PTSD status as an outcome variable**

CRIES-8			
Predictors	$\beta$ (SE)	OR	95% CI
Step 1			
Gender	-0.08 (0.27)	0.91	0.53 - 1.57
Age	0.26 (0.27)	1.30	0.75 – 2.23
Economic status	0.03 (0.28)	1.03	0.58 – 1.83
Step 2			
Pre-migratory trauma	0.25 (0.07)	1.28*	1.10 – 1.49
Step 3			
Parents' psychopathology	0.02 (0.02)	1.02	0.98 - 1.06
Warm parenting	-0.03 (0.01)	0.97*	0.94 - 0.99
Rejecting parenting	0.02 (0.01)	0.97*	0.95 – 1.00
Over-protective parenting	0.02 (0.01)	1.02	0.99 - 1.05
Parental dependency	0.06 (0.03)	1.06*	1.00 – 1.12
Parental availability	-0.07 (0.03)	0.92*	0.86 - 0.99
Constant	0.70 (2.26)	2.02	
Total R <sup>2</sup>	0.16		
$\Delta R^2$	0.86		
N	215		

For general child psychopathology as the outcome variable (based on total SDQ cut-off scores), parenting-related factors as a block also significantly predicted the likelihood of a child reporting likely child mental health problems in Step 3:  $\chi^2$  (6, N = 202) = 25.398, Nagelkerke R<sup>2</sup> = 0.191,  $p < 0.005$ , showing that parenting-related variables significantly explained a further 17% variance in general child psychopathology after the effects of pre-migratory trauma had been controlled for. Moreover, parental psychopathology and

perceived lower parental availability uniquely contributed in predicting children with general psychopathology (Table 4.20).

**Table 4.20 Hierarchical Logistic Regression results for general child psychopathology status as the outcome variable**

SDQ total difficulties			
Predictors	$\beta$ (SE)	OR	95% CI
Step 1			
Gender	0.41 (.34)	1.50	0.77 - 2.94
Age	-0.009 (.09)	0.99	0.83 - 1.18
Economic status	-0.19 (.37)	0.82	0.39 - 1.70
Step 2			
Pre-migratory trauma	-0.06 (.09)	0.93	0.78 - 1.11
Step 3			
Parents' psychopathology	0.07 (.02)	1.08*	1.02 - 1.14
Warm parenting	0.000 (.01)	1.00	0.97 - 1.02
Rejecting parenting	-0.003 (.01)	0.99	0.97 - 1.02
Over-protective parenting	0.003 (.02)	1.00	0.96 - 1.04
Parental dependency	0.02 (.03)	1.01	0.94 - 1.09
Parental availability	-0.11 (.04)	0.89*	0.82 - 0.97
Constant	0.916 (2.6)	2.50	
Total R <sup>2</sup>	0.19		
$\Delta R^2$	0.18		
N	205		

Finally, emotional problems status was entered into the model as the outcome variable (Table 4.21). Similar to the first two analyses, parenting-related variables significantly



predicted emotional problems status:  $\chi^2 (6, N = 187) = 20.111$ , Nagelkerke  $R^2 = 0.167$ ,  $p < 0.000$ , indicating that parenting-related factors as a block significantly explained a further 14% variance in emotional problems. Furthermore, similar to the general child mental health problems model, parental psychopathology and lower parental availability uniquely contributed in explaining emotional problems among refugee children.

**Table 4.21 Hierarchical Logistic Regression results for emotional problems status as the outcome variable**

SDQ emotional problems			
Predictors	$\beta$ (SE)	OR	95% CI
Step 1			
Gender	0.64 (0.36)	1.90	0.93 - 3.87
Age	-0.09 (0.09)	0.90	0.75 – 1.09
Economic status	0.52 (0.34)	1.68	0.85 – 3.33
Step 2			
Pre-migratory trauma	0.07 (0.09)	1.07	0.90 – 1.29
Step 3			
Parents' psychopathology	0.05 (0.02)	1.05*	1.00 - 1.11
Warm parenting	-0.01 (0.01)	0.99	0.95 - 1.01
Rejecting parenting	0.002 (0.01)	1.00	0.97 – 1.03
Over-protective parenting	0.01 (0.02)	1.01	0.99 - 1.08
Parental dependency	0.006 (0.03)	1.00	0.94 – 1.06
Parental availability	-0.07 (0.03)	0.93*	0.86 - 1.00
Constant	2.17 (2.4)	8.75	
Total $R^2$	0.16		
$\Delta R^2$	0.13		
N	187		

#### 4.4.6.2.3. Hypothesis Three: Differential effect of trauma types on child psychopathology

As already discussed, measures of trauma exposure vary widely in terms of type of conflict, sociocultural context and item constitution (Blackshaw, Evans & Cooper, 2017). Moreover, they were usually designed to measure total trauma exposure, predominantly pre-migration, rather than different clusters of trauma. This applies to the SLE as well. For this reason, pre-migratory trauma exposure was included as a total score in the analysis so far, particularly in testing the main research hypotheses. It was, however, considered important to explore whether different types of traumatic events were differentially associated with different types of child mental health problems, hence the inclusion of this third research hypothesis. Understanding such links could inform the development of different types of preventive and responsive interventions.

Two logistic regression analyses were thus conducted to assess the impact of different type of pre-migratory trauma exposure on PTSD and general child psychopathology status. These types of traumatic events grouped into conceptually linked groups were war exposure (yes/no), family-related trauma, personal life events, experiencing violence, and witnessing violence. Results are shown in Table 4.22.

**Table 4.22 Impact of different pre-migratory traumatic events on children’s PTSD and general psychopathology status**

	CRIES-8			SDQ total difficulties		
	$\beta$ (SE)	OR	95% CI	$\beta$ (SE)	OR	95% CI
<b>War Exposure</b>	0.94 (0.43)	2.56*	1.09-6.00	-0.25 (0.49)	0.77	0.29-2.03
<b>Family-related trauma</b>	0.18 (0.16)	1.20	0.88-1.63	-0.18 (0.22)	0.82	0.54-1.26
<b>Personal Life Events</b>	0.47 (0.19)	1.60*	1.10-2.31	0.008 (0.25)	1.00	0.61-1.65
<b>Experiencing violence</b>	0.47 (0.21)	1.61*	1.07-2.43	0.26 (0.28)	1.30	0.74-2.28
<b>Witnessing violence</b>	-10 (0.17)	0.89	0.63-1.27	-0.41 (0.23)	0.66	0.41-1.01

For PTSD status as the dependent variable, the full model containing all predictors was statistically significant:  $\chi^2 (5, N = 316) = 25.30, p < 0.001$ , indicating that this was able to distinguish between children above and below the CRIES cut-off score for likely PTSD. The model as a whole explained between 7.7% (Cox and Snell R-squared) and 10.3% (Nagelkerke R-squared) of the variance in PTSD status, and correctly classified 63.3% of cases. As indicated in Table 4.16, three of the trauma types, i.e., experiencing war, personal life events and exposure to violence, made a unique statistically significant contribution to the model. The strongest predictor of reporting PTSD was experiencing war, recording an odds ratio (OR) of 2.56. This showed that children who had experienced war were over two and a half times more likely to report PTSD than those who had not experienced war, controlling for all other factors in the model.

In terms of GMHP status, the full model containing all predictors did not reach statistical significance:  $\chi^2 (5, N = 242) = 5.060, p = 0.409$ , i.e., this did not differentiate between children with and without likely general psychopathology. The whole model explained only between 0.021% (Cox and Snell R-squared) and 0.031% (Nagelkerke R-squared) of the variance in general psychopathology status, but it correctly classified 77% of cases. Although witnessing violence almost reached significance with an odds ratio of 0.633, despite this none of the predictors uniquely contributed to the model. Subsequent regression analyses were run to test the contribution of different trauma exposure types to emotional and conduct problems. However, neither of these models reached statistical significance (emotional problems:  $\chi^2 (5, N = 223) = 2.996, p = 0.705$ ; and conduct problems:  $\chi^2 (5, N = 216) = 1.558, p = 0.906$ , showing no effect of pre-migratory trauma.

#### **4.5. Discussion**

The present study aimed to explore the effect of parenting-related factors over and above the pre-migratory trauma effect on the mental health problems of refugee children. Therefore, exploratory models were established, with parental psychopathology, perceived parenting styles, (emotionally warm, rejecting and overprotective) and perceived attachment relationship (parental availability and dependency), controlling for trauma exposure effect, in predicting different mental health outcomes. Key findings will be briefly discussed in the present section, as these will be revisited in conjunction with the results of Study 2 in the overarching Discussion, Chapter VIII.

Descriptive statistics demonstrated that children experienced various kind of traumatic events before they were displaced from Syria. Overall, 90% had been exposed to war/armed conflict, 59% and 57% had experienced and witnessed life threats, consecutively, and 51% reported that they had lost a beloved person in their lives. Almost all children (N = 314, 97%) had been exposed to at least one trauma, whilst 63% reported having experienced four or more pre-migratory traumatic events. Consistent with the refugee children literature, 163 children (51.5%) met diagnostic criteria for likely PTSD, whilst 59 (25%) were reported as having significant general psychopathology that required assessment for possible intervention (Goldin et al., 2008; Slodnjak, Kos, & Yule, 2002). The most common types of likely mental health problems were of an emotional nature (38%).

The first hypothesis of the research that pre-migratory trauma exposure would significantly predict children's mental health status was confirmed for PTSD, whilst children's exposure to trauma before displacement did not explain either general psychopathology or, indeed, other emotional problems. These findings are consistent with previous studies that differentiated between the effect of war (pre-migratory) trauma and current life stressors (post-migratory trauma). It has been shown in the related literature that pre-migratory trauma such as exposure to violence, loss of loving ones and separation from family are associated with children's PTSD, whilst post-migratory trauma such as mental illness in parents and socioeconomic adversities are related with other emotional, and with behavioural, problems (Berthold, 2000; Montgomery, 2008).

The second hypothesis stated that parenting-related factors would predict mental health problems among refugee children after the war-related trauma effect had been controlled for. This was fully confirmed for both PTSD and GMHP, as well as for emotional problems. This is consistent with the growing body of evidence upon the effect of parenting-related factors on refugee children's mental health (Reed et al., 2012). A recent study with 335 Palestinian adolescents showed that greater parental authority was negatively associated with depression (Aitcheson et al., 2017). Furthermore, in another study with 1,000 Palestinian children aged 12 to 16 harsh parenting was related to PTSD symptoms (Khamis, 2005). There might also be an interaction effect of different parenting-related variables, although this was not tested within this study, which only examined the specific contributions of each parenting-related variable. In one

longitudinal study, for instance, children who were securely attached to their parents but had subsequently been exposed to less-sensitive parenting, were more likely to show problem behaviours compared to children with early insecure attachment but subsequent sensitive parenting (Belsky & Fearon, 2002).

Results, moreover, revealed specific contributions from certain parenting-related factors in explaining different mental health problems amongst refugee children. Children who were more dependent on their parents but perceived them as less available, emotionally warm and more rejecting, were more likely to be diagnosed with PTSD. Parents with higher psychopathology and lower availability were found as unique predictors of general, as well as emotional, problems among children. Although there is little evidence upon the impact of attachment relationship, this is consistent with these findings. For example, children who develop insecure attachment relationships with their parent are more likely to show aggression (Lyons-Ruth, 1996), both internalizing (Brumariu & Kerns, 2010) and externalizing symptoms (Allen et al., 2007). Moreover, increased attachment behaviour, which was defined as “active search for protective proximity”, was associated with post-traumatic stress symptoms in traumatised children (Almqvist & Broberg, 2003, p.376).

The specific contribution of traumatic experiences was tested for PTSD and general mental health (emotional and behavioural) problems by grouping pre-migratory experiences in terms of their nature, i.e., experiencing war, family-related trauma, experiencing violence, personal life events and witnessing violence. Children who reported war exposure, experience of violence and personal life events such as illness or accidents, were 2.5, 1.6 and 1.6 times more likely, respectively, to be diagnosed with PTSD. However, none of the pre-migratory events significantly explained either general or specific mental health problems, although witnessing violence had a trend toward significance. This supports the relevant literature, indicating that pre-migratory events predict PTSD, and more recent stressors such as parental psychopathology, can be associated with other emotional and behavioural problems (Montgomery, 2008).

These findings should be considered within the context of certain methodological research limitations. As already acknowledged, the sample was recruited from two Syrian schools rather than across local schools and communities. This may have excluded

children with higher rates of needs who could not attend school because of poverty, being more traumatized, or being in transit to Europe. Parents' post-traumatic stress symptoms were not measured in the present study; instead, only their general psychiatric morbidity was reported. Similarly, parents did not evaluate their children's post-traumatic stress symptoms, which relied purely on self-reports; thus, the established rates of likely PTSD may have been different. Equally, parents' own mental states and traumatic experiences may have influenced their SDQ ratings. The nature of the attachment subscales developed by Lieberman et al., (1999) needs to be considered in future research, as higher dependence on the attachment figure was established as an indicator of secure attachment, which is contradicting with the evidence (Salmon & Young, 2009) as well as the findings of the present study. Finally, a longitudinal design would enable a better understanding of how the impact of trauma and adversity may impact on refugee children and parents at different stages of their migration process.

In conclusion, the findings of this study support jointly providing trauma- and family-focussed interventions, as both trauma and parenting-related factors contributed to children's mental health problems. Moreover, the findings of the present study revealed that a lack of perceived availability of the attachment figure was a common predictor of PTSD and other emotional and behavioural problems, along with parental psychopathology as a predictor of emotional/behavioural problems, and negative parenting styles as predictors of PTSD. Given that parenting factors are modifiable (Tingvold et al., 2012), these results led us to conduct a second study to explore the feasibility of a child-parent combined Theraplay programme (Chapter VI).

## Chapter V

Psychosocial interventions for refugee children:

Literature review II

## 5.1. Introduction

The impact of multi-level risk factors regarding the mental health problems of refugee children was considered in Chapter II within the scope of the ecological systems framework, and with a particular focus on family-related factors. The aim of this chapter is to critically review the available evidence on psychosocial interventions for refugee children. In line with the first literature review in Chapter II and its underpinning theoretical framework, psychosocial interventions have been grouped as child-, family- and community-oriented as well as multi-modal interventions, within the scope of ecological theory (Figure 5.15). This views child development as dynamically related to individual characteristics, the child's family or care environment, school and community, as well as the interaction between these systems. For this reason, studies identified by the literature search were subsequently evaluated in relation to their primary intervention focus, i.e., child-, family- or community, rather than the intervention setting. For example, some interventions are described as school- or community-focussed, whilst in reality they only use the school or community as an access point to facilitate children's groups without the involvement of teachers or other stakeholders; they are hence categorized as child-focussed approaches in the review structure.

A similar search strategy to the first review of this thesis was utilized. The same databases as in Chapter II were searched prior to the review: Scopus, PsycARTICLE, PsycINFO, PsycEXTRA, PILOTS (Published International Literature on Traumatic Stress) and Google Scholar. Searches combined similar terms such as 'refugee', 'internally displaced person', 'asylum-seeker', 'unaccompanied minor'; or 'children', 'minor', 'adolescent', 'youth', 'teenager'; or 'mental health', 'mental disorder', 'psychological adjustment', 'well-being'; or 'intervention', 'therapy', 'treatment', 'prevention'; or 'child-focussed', 'family-focussed', 'parenting skills', 'parent mental health', 'attachment', 'school-based', 'community'. More specific terminology was used to search further resources.

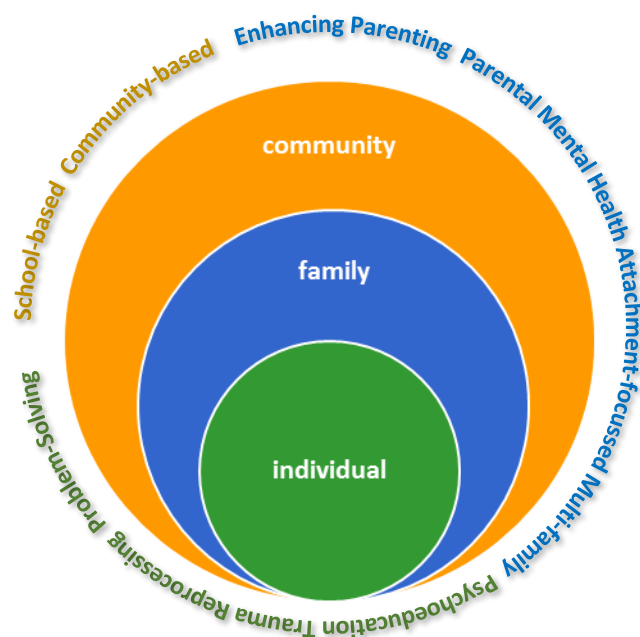
Another challenge in structuring the literature review related to the use of mental health concepts, definitions and objectives, with organizations such as the UNHCR using other inclusive definitions such as mental health and psychosocial support (MHPSS) (UNHCR, 2013). The term 'psychosocial interventions' was chosen for this review because of its wider goals in addressing children's complex needs, and is defined in the next section. Interventions have been developed both 'top-down' from theoretical frameworks and



‘bottom-up’ through applied programmes, with increasing mixed use of principles and techniques. For example, the programme Writing for Recovery described below has a psychoeducational approach; however, it also includes cognitive-behavioural therapy (CBT) techniques. Different levels of these interventions have evolved from the same framework such as variations of Narrative Exposure Therapy (NET) and Theraplay, as being delivered by either non-specialists or more skilled mental health practitioners. Consequently, these were placed within the section of the review that reflected their most common use and related evidence.

Child-focussed interventions have been partitioned further in terms of therapeutic objectives, namely psychoeducational, trauma reprocessing or coping skills interventions. Family-oriented interventions have been subcategorised as family support, parental mental health treatment, attachment-based or multi-family. These therapeutic modalities have thus followed the structure of the Chapter II review on the role of parenting skills, parental mental health and attachment relationships. Similar to the previous chapter, school-based interventions have been combined with community-oriented interventions because of their frequent overlap. Only studies targeting or involving the community as a resource were included in the community-focussed category. Finally, multi-modal interventions concurrently targeting different levels of ecological layers and service delivery are included as a distinct modality.

**Figure 5.15 Psychosocial interventions within the context of ecological theory**



## **5.2. Psychosocial interventions**

Psychosocial interventions can be defined as the wide range of techniques, approaches or activities that aim to improve one's mental well-being by aiming to alleviate the effect of biological, cognitive, behavioural, familial or societal risk factors. There is abundance of evidence on the use of psychosocial interventions targeting children with various problems ranging from school refusal (Pina, Zerr, Gonzales & Ortiz, 2009) to maltreatment (Cohen, Mannarino, Murray & Igelman, 2006) and violence exposure-related problems (Grip, Almqvist & Broberg, 2013), as well as psychiatric conditions such as ADHD (Evans, Schultz & Sadler, 2008). Psychosocial interventions have been extensively applied with refugee children and adolescents because of the documented complexity of their needs (Annan, Sim, Puffer, Salhi & Betancourt, 2017; Dybdahl, 2001; Ruf et al., 2010).

The development, implementation and evaluation of various psychosocial interventions to improve vulnerable children's mental well-being has originated from theories such as psychoanalysis, social learning and cybernetics. These have gradually evolved and have been designed for specific groups such as refugee children. Their integration has been influenced by evidence on the multitude of refugee children's needs. Ecological theory suggests that environmental factors are as prominent as biological mechanisms in terms of human development, and thus so is the interaction between the two types of factors (Bronfenbrenner, 1979). This paradigm led to a range of interventions, both combined with pharmacological treatment (Telch & Lucas, 1994) and independently (Power, Simpson, Swanson & Wallace, 1990). Emerging evidence on the limitations of psychopharmacological treatment for children and ongoing concerns regarding safety (Whittington, Kendall & Pilling, 2005) gradually resulted in combined psychosocial and pharmacological programmes for children and adolescents with severe disorders such as major depression or psychosis, whilst psychosocial interventions have flourished for children with a range of relatively mild to moderate common mental health problems.

Hobfoll et al. (2007) presented five intervention principles that should be promoted in developing and implementing psychosocial interventions with trauma-exposed children: safety, calming, connectedness, sense of self, and collective efficacy and hope. These components are particularly relevant to refugee children; for instance, their sense of safety

is usually disrupted due to past-life threatening events and current adversities, and thus impacts adversely on healthy development (Pynoos, Steinberg & Wraith, 1995), whilst trauma leads to excessive anxiety and comorbid disorders (Steel et al., 2009). These mechanisms can be compounded by disconnectedness with their equally disrupted family and community environment, hence to their self- and collective identity, and optimal growth.

As already noted, there is a tendency in the literature for certain psychosocial programmes to be defined by the settings of delivery (e.g., school or community-focussed) rather than by their conceptual models and therapeutic goals. In the review presented, however, these programmes have been evaluated according to the theoretical framework and objectives. Nevertheless, it should be acknowledged that the specific targets of interventions such as the child or their family are in continuous interaction (Bronfenbrenner, 1977). These systems, as proposed by ecological theory, are presented in Figure 5.15 above. All types of psychosocial interventions, i.e., acute, responsive and preventive, have been included in the literature review since these are all important for refugee children, and often cannot be disentangled in seamless and comprehensive programmes and services.

### **5.2.1. Child-focussed interventions**

These interventions primarily target children, individually or in groups, in order to improve their mental health or to prevent deterioration or recurrence of psychiatric disorders. The majority of these target trauma-related stress, as based on different theories, and therefore by applying various techniques such as psychoeducational, psychodynamic, narrative, or cognitive-behavioural. In this chapter, the evidence on child-focussed interventions has been reviewed according to three themes, i.e., psychoeducation, trauma reprocessing, and enhancing coping skills.

In summary, psychoeducational interventions include relatively brief training which aim to increase awareness of trauma-related symptoms and to teach practical coping and relaxation techniques to overcome these symptoms. Psychoeducation has often been utilized as a first-stage and/or preventive intervention due to its straightforward application to large groups of children, for instance in classrooms and refugee camps. Trauma reprocessing interventions, in contrast, require specific competencies, even when

not applied by specialist mental health practitioners. Interestingly, they largely originate from psychoanalysis and its psychodynamic branches, but also in recent years from the substantially different cognitive theory. Building resilience and coping skills is predominantly based on cognitive and/or behavioural approaches to helping children deal more adaptively with life stressors, rather than trying to understand and reframe the impact of past trauma. It is important to highlight that these programmes are no longer considered to be opposed or mutually exclusive; instead, these can be used in complementary stages, for example by first helping the child manage their distress, followed by understanding its causes, and then by building their capacity to function optimally in the future. The list below is not exhaustive, but rather includes the most commonly used programmes and, among them, those that have begun to develop an evidence base in the literature.

#### ***5.2.1.1. Psychoeducation***

Psychoeducation refers to providing information and basic strategies that will enable self-help for children with emerging mental health problems and the adults around them, e.g., family members, friends or teachers. It aims to enhance their awareness of symptoms, normalize everyday functioning, and provide knowledge on strengthening coping skills. Psychoeducation was originally used with adults suffering from mental illness such as schizophrenia (Anderson, Hogarty & Reiss, 1980). Different programmes were subsequently developed for children and adolescents with a range of mental health problems such as eating disorders (Geist, Heinmaa, Stephens, Davis & Katzman, 2000), substance abuse (Kaminer, Burlison & Goldberger, 2002), or experience of abuse (Deblinger, Mannarino, Cohen & Steer, 2006).

Psychoeducation is often used as a component of various approaches such as trauma- and grief-focussed (Möhlen, Parzer, Resch & Bruner, 2005), creative (Gupta & Zimmer, 2008), and trauma reprocessing interventions (Thabet, Vostanis & Karim, 2005) such as CBT (Layne et al., 2001), that targets refugee children and adolescents. In a study with 29 Afghan unaccompanied adolescents, for instance, six sessions of psychoeducation combined with relaxation, narration and cognitive structuring techniques resulted in significant reductions in post-traumatic stress symptoms (Pfeiffer & Goldbeck, 2017). Although this has been supported by further evidence (Ehnholt, Smith, & Yule, 2005;

Qouta, Palosaari, Diab & Punamäki, 2012), the combination of psychoeducation with other therapeutic techniques does not often allow for drawing conclusions on its efficiency and specificity.

In some studies, however, psychoeducation was utilized as a stand-alone intervention. Such an example was a programme for 141 Somalian refugee youth residing in Kenya (Im et al., 2017). The 12 sessions of trauma-informed psychoeducation covered various topics, e.g., trauma and stress, the effect of trauma on mind and body, the effect of trauma on relationships, conflict resolution, and helping others. Interestingly, these were delivered by trained Somali refugee peers, which is a potential strength of resource-effective and culturally engaging interventions. At post-test, refugees who were initially above the clinical threshold for PTSD reported significantly decreased PTSD symptoms and improved in their perceived social support, whilst others with no symptoms or mild levels of PTSD reported increased awareness of trauma-related issues. Since there was no control group in this study, further evidence based on more robust designs is needed to be able to draw generalizable conclusions. This evidence has gradually emerged, and is largely based on the implementation of certain widely used programmes.

#### **5.2.1.1.1. Psychological First Aid**

Although all children in a given population are exposed to various types of trauma before or during the war-induced displacement, not all of them will develop mental health problems at the time of arrival in the host country. Nevertheless, universally supporting refugees after displacement is important in the sense of preventing future mental health problems (Bisson & Lewis, 2009). The structured, primarily educative Psychological First Aid (PFA) was developed for this exact purpose (Brymer et al., 2006). PFA involves training upon trauma-related issues, normalizing stress symptoms, enhancing coping strategies, and recognizing and directing children who need further intervention to appropriate agencies (Hamblen & Barnett, 2016).

Since PFA can be delivered by paraprofessionals as basic first-line support for a range of traumatized groups; this has clear implications for teachers, volunteers and other community members (Schreiber, Gurwitch & Wong, 2006). PTSD symptoms in children aged 5 to 15 years who had been exposed to a natural disaster, for example, were found

to improve after participating in a six-week PFA programme (Cain, Plummer, Fisher & Bankston, 2010). Despite the growing evidence on the efficacy of PFA with other traumatized groups of children, such as children exposed to natural disasters (Ramirez et al., 2013), research with refugee populations is still lacking.

#### **5.2.1.1.2. Writing for Recovery**

The healing aspects of free writing upon psychological wellbeing have been long established in the adult literature (Adams, 1999; Pennebaker, 1997). Following this early recognition of the potential of a structured form of writing as a therapeutic tool, Writing for Recovery (WfR) was developed to reduce trauma-induced stress among adolescents (Yule et al., 2005). It has been proposed that WfR be administered in six 15-minute sessions over three consecutive days (two consecutive sessions, with a ten-minute break each day) and involves instructions on writing emotions associated with traumatic experiences, as well as asking children to write their recommendations for other children who experienced similar events. Like other psychoeducation programmes, WfR is resource- and time-effective. It does not require prolonged training, and can be delivered by paraprofessionals to large groups. This makes it accessible and engaging in school settings, refugee camps and other community settings.

There is growing literature on the efficacy of WfR for refugee children's mental health (Unterhitzenberger & Rosner, 2014), although the evidence on its effectiveness is not consistent so far. Efficacy studies are those that examine if the intervention works under ideal circumstances, including the *“use of design features such as random assignment to treatment and control conditions, training of therapists to a specified level of competence in providing the treatment, and ensuring that all participants have the condition that the treatment was designed to address”*; whereas an effectiveness study *“aims to enhance external validity by locating the treatment study within clinical service sites that provide ongoing health services, thus using clinicians who are routinely providing psychological services and patients who have been referred to the clinical settings”* (Hunsley, 2007, p.117). The efficacy of WfR was investigated in a randomized controlled trial with 61 Afghan refugee adolescents who had lost a loved one (Kalantari, Yule, Dyregrov, Neshatdoost & Ahmadi, 2012). Results revealed a significant reduction in grief symptoms among children in the intervention group compared to peers in the control group. Another

study similarly utilized a randomized controlled design with 139 Palestinian refugee adolescents residing in Beach Camp (Lange-Nielsen et al., 2012), but showed no superior effect of WfR compared to non-intervention. It is unclear whether this finding could be attributed to the ongoing trauma exposure in this population.

#### ***5.2.1.2. Trauma re-processing interventions***

Post-traumatic stress disorder (PTSD) has been established as the most common mental health condition among refugee children (Chapter II). A high number of studies have thus evaluated interventions which targeted trauma-related symptoms among refugee youth as based on earlier findings that, unless traumatic experiences can be understood and reframed, PTSD and other mental health problems persist or recur (Sack et al., 1993), and can even be transferred from one generation to another (Field, Muong & Sochanvimean, 2013). Approaches that primarily focus on past trauma are often referred to as trauma reprocessing interventions.

Trauma reprocessing interventions are interestingly based on different therapeutic and not always compatible therapeutic frameworks. The most commonly used and evidence-based programmes include Narrative Exposure Therapy (NET), Eye Movement Desensitization and Reprocessing (EMDR), testimonial psychotherapy, Cognitive-Behavioural Therapy (CBT), and creative/expressive therapies.

##### **5.2.1.2.1. Narrative exposure therapy**

A number of interventions have been developed under the broad definition of narrative therapy, which enables the child or adult to reframe their ‘story’, and hence traumatic experience (Morgan, 2000). Narrative Exposure Therapy (NET) originates from within this framework and was specifically developed for adults exposed to war- or conflict-related trauma. This was subsequently adapted for children and young people through the KIDNET version (Neuner et al., 2008). KIDNET is an individual therapy which enables children to ‘open’ their memories freely, before working through them. Parent involvement is limited to one or two sessions of psychoeducation on the process of KIDNET, beside the symptoms and memory recognition.

KIDNET is based on repeated exposure to traumatic memories through narratives which lead to habituation and remission of PTSD symptoms in the child. It includes at least five sessions, the first of which starts with a lifeline robe activity. For example, the therapist may ask the child to line up a rope on the floor and imagine that the rope represents his/her life. Flowers and stones, which represent happy and sad memories respectively, are given to the child, who is asked to place them on the robe while narrating traumatic events and any emotions attached to them. This process aims to map the child's history and to create a story of his/her life chronologically. The therapist reads the story at the beginning of each session and ask if anything is missing; if so, this new information is added to the lifeline. The final session ends by adding a flower to the end of the robe, which represents hope for the future.

There is growing evidence as to the efficacy and effectiveness of KIDNET among refugee children and adolescents (Schauer et al., 2004; Kangaslampi, Garoff & Peltonen, 2015). Overall, this indicates that KIDNET is effective in terms of remission of PTSD and depression symptoms, which has been shown to be sustained at 9 (Onyut et al., 2005) and 12 months (Ruf et al., 2010) of treatment. Two randomized controlled trials, moreover, have evaluated KIDNET compared with meditation and relaxation (MED-RELAX) (Catani et al., 2009) and interpersonal psychotherapy (Schaal, Elbert & Neuner, 2009).

In the Catani et al. (2009) study, which was conducted in a refugee camp in Sri Lanka, 31 children who met diagnostic criteria for PTSD were assigned to the two six-week interventions. Results revealed that 81% of the KIDNET and 71% of the MED-RELAX group recovered from PTSD symptoms at their six-month follow-up, although this difference between the two groups did not reach statistical significance. The Schaal et al. (2009) study was conducted with 26 Rwandan children who had lost their parents during the genocide. Similar to the previous study, a reduction in PTSD and depression symptoms in both the KIDNET and the IPT groups was found after four weeks of treatment, though this did not differ between the two groups. However, a six-month follow-up indicated better outcomes for symptoms of children in the KIDNET group. Only 25% of KIDNET children met diagnostic criteria for PTSD, whilst this rate was 71% for children in the IPT group, indicating the superior effect of KIDNET.



#### **5.2.1.2.2. Eye movement desensitization and reprocessing (EMDR)**

Eye movement desensitization and re-processing (EMDR) has been developed to help reduce distress in traumatized individuals by using bilateral stimulation techniques such as eye movements, hand taps or tones (Shapiro, 1989). This was based on the theory that unprocessed traumatic memories and the associated intact emotions and beliefs that have been stored can result in psychopathology, no matter how much time has elapsed since the traumatic experiences (Shapiro & Laliotis, 2011). Therefore, EMDR aims to reprocess these unchanged memories, make individuals less sensitive to traumatic stimuli, and eventually improve psychosocial functioning (Shapiro, 2002). Despite the fact that EMDR was originally developed to reduce trauma-related stress, subsequent studies suggested that it can also be effective in the treatment of comorbid depression and anxiety (Kim, Bae & Park, 2008; Bower, Pahl & Bernstein, 2004).

Although the efficacy of EMDR on PTSD symptoms has been widely established by evidence from other child groups including sexually abused children (Jaberghaderi, Greenwald, Rubin, Zand & Dolatabadi, 2004) or children from disadvantaged families, with a parent with physical or mental illness, substance abuse or criminality (Ahmad, Larsson & Sundelin-Wahlsten, 2007), only a few evaluation studies have been conducted among the refugee population, and initially with adults. One of them adopted a randomized controlled design with 70 Syrian adults residing in a refugee camp in Turkey (Acarturk et al., 2016). Results revealed a significant reduction in PTSD symptoms, as well as other emotional problems, of those who had attended up to seven sessions (with a mean of four sessions), compared to a waiting list group. Another study compared the effectiveness of group therapy, CBT, EMDR and no-treatment in 94 Chechen refugees; however, this revealed no remission in PTSD, depression or anxiety symptoms in the EMDR group (Renner, Bänninger-Huber & Peltzer, 2011). Although EMDR is recommended as treatment for PTSD by guidelines of well-established organizations (WHO, 2013), the quality of efficacy studies and inconclusive findings has long been argued (Deville, 2002).

Only two studies were identified with refugee children, and with a number of methodological limitations. Oras et al. (2004) administered up to six sessions (1-6 sessions) of EMDR combined with conversational and play therapies to 13 refugee children who were residing in Sweden. Results indicated a significant improvement in

both PTSD and functioning level. Another small-scale study involved seven Palestinian children aged 8 to 12 years who were residing in a refugee camp (Zaghrou-Hodali, Alissa & Dodgson, 2008). Remission of PTSD symptoms have been reported only after four EMDR sessions; moreover, children were reported as demonstrating reduced levels of aggression and improved school attainment (Zaghrou-Hodali et al., 2008). These promising findings must be considered with caution as both studies included small sample sizes, lacked a control group, and used unequal treatment doses.

#### **5.2.1.2.3. Testimonial psychotherapy**

Although there are certain commonalities with NET, mainly narrative exposure at the individual level, testimonial psychotherapy was primarily influenced by human rights, and was developed to also serve political purposes rather than just the needs of clinical treatment (Cienfuegos & Monelli, 1983). Conflict victims who have been imprisoned, tortured or forcibly displaced from their countries are initially asked to narrate their story. This can then be documented, reviewed through the interaction between the patient and therapist, and eventually presented as testimony during the asylum-seeking process or at human rights courts as evidence of atrocity. Through testimonial psychotherapy, the therapeutic objective is to separate the person from the traumatic events, and instead focus on different aspects of their experience by underlining the strength that they demonstrated throughout the incident, and which enable them to overcome their feelings of impotence and inferiority (Lustig, Weine, Saxe & Beardslee, 2004).

There is a scarcity of evidence on the efficacy of testimonial therapy upon the mental health of refugees and asylum seekers due to limited studies using rigorous methods. Nevertheless, a few case studies suggest that testimonial interventions are feasible and have potential for reducing PTSD symptoms (Agger & Jensen, 1990; Van Dijk, Schoutrop & Spinhoven, 2003). In a pilot study, 20 Bosnian adults who had sought refuge in Chicago participated in an average of six weekly testimonial therapy sessions (Weine, Kulenovic, Pavkovic, & Gibbons, 1998). At two- and six-month follow-up assessments, there was significant reduction in PTSD and symptoms of depression, and an improvement in psychosocial functioning. It is surprising that these promising early results, however, did not lead to further research with larger samples and a control group.

This lack of evidence on testimonial therapy is more pronounced in the child and adolescent refugee literature. So far, only one study used testimonial therapy with young refugees (Lustig et al., 2004). This involved three to nine sessions of testimonial therapy with three Sudanese adolescents who had lived in a refugee camp in Kenya for eight years before resettling in the USA. Testimonies were simultaneously transcribed during the sessions were proceeded. Although no structured assessments were utilized before and after the intervention, however, a high level of satisfaction was noted by adolescents, and the process was considered as being safe and feasible by the researchers.

#### **5.2.1.2.4. Cognitive-behavioural therapy (CBT)**

Aaron Beck (1964) initially developed CBT to help people who suffered from depression by challenging their negative and distorted thinking patterns and maladaptive behaviours, and by developing problem-solving strategies. The use of CBT has since expanded and diversified with various adaptations of different focus, techniques and length being developed and applied to various conditions such as obsessive-compulsive (McKay et al., 2015) and generalized anxiety disorders (James, Soler & Weatherall, 2005).

CBT is based on the theory that numerous mental health problems are rooted in distorted thoughts and beliefs, as well as on associated dysfunctional behaviours (Field, Beeson & Jones, 2015). Cognitive-behavioural therapists thus help clients to make sense of these dysfunctional processes that are causing distress, before proposing to reprocess and recode these thinking patterns, thus developing functional coping strategies (Beck, 2011). Techniques used in a CBT session, moreover, vary from promoting problem-solving strategies to relaxation techniques, while largely emphasizing current difficulties rather than the past. Although CBT was originally developed as an individual therapy for depression (Beck, 2011), different adaptations have emerged to address a range of conditions such as anxiety and obsessive-compulsive disorders, and problems like anger with different age groups and in different service contexts of delivery. Trauma-focussed CBT (TF-CBT), for example, is a parent-involved adaptation of CBT for older children and adolescents exposed to trauma. This is an interesting evolution from the pure framework, with concurrent gradual trauma exposure (Cohen, Mannarino & Deblinger, 2016).

There is an abundance of evidence about the efficacy of CBT on the mental health of children and adolescents (Bernstein, Layne, Egan, & Tennison, 2005; Cohen, Berliner & Mannarino, 2010; Stallard, 2005). Furthermore, trauma-focussed cognitive-behavioural therapy (TF-CBT) has been deemed as first-line treatment for PTSD in trauma-exposed children and adolescents (National Collaborating Centre for Mental Health, 2005). In a large-sample study including 229 children who had experienced sexual abuse, for instance, the efficacy of TF-CBT and Child-Centred Therapy (CCT) were compared (Cohen, Deblinger, Mannarino & Steer, 2004). Results at post-intervention indicated that children who had been assigned to TF-CBT reported significantly less PTSD, depression and behavioural problems compared to children in the CCT group. This, however, should be considered with caution, as recovery might be slower in psychodynamic therapies including CCT, hence the results might be attributable to the different nature and therapeutic process of the two therapies rather than the superiority of CBT.

In contrast with Cohen et al.'s (2004) finding that TF-CBT resulted in better outcomes than CCT, for example, a subsequent study showed that Child-Centred Play Therapy (CCPT), which was based on the principles of CCT with an additional component of play activities, was as effective as TF-CBT in terms of reducing traumatic stress symptoms in refugee children (Schottelkorb, Doumas & Garcia, 2012). In another study, 26 refugee children aged 11 to 15 years were assigned to either treatment (six weeks of CBT) or a non-intervention control group (Ehnholt et al., 2005). Children in the CBT group showed a 'modest improvement' in their PTSD, emotional and behavioural symptoms, though this improvement was not sustained at a two-month follow-up. However, both the Schottelkorb et al. (2012) and the Ehnholt et al. (2005) studies were constrained by small sample sizes and thus statistical significance.

Hence, better-powered studies utilizing robust designs are needed for application to CBT interventions with refugee children in the future. There also needs to be increased clarity in the objectives of CBT programmes and differentiation between levels of delivery, for example, between first-line universal, targeted and specialist intervention for non-responsive young people with more severe psychopathology. Refugee children constitute a unique population as they are frequently exposed to complex trauma including violence, persecution, death of loved ones and also post-migratory stressors such as poverty, cultural and linguistic differences and discrimination. Hence, complex needs and life

circumstances of refugee children should be taken into consideration before applying the same CBT programmes and evaluation designs as with other vulnerable groups (Birman, 2005; Pacione et al., 2013).

#### **5.2.1.2.5. Creative / expressive therapies**

Creative therapies consist of non-verbal modalities arising from various theories and disciplines such as art, music and play therapy, or psychodrama (Perry, 2014). These components have been embedded in psychotherapeutic approaches and have been applied to different age groups (Slayton, D'Archer & Kaplan, 2010; Waldon, 2001). They are particularly appropriate for children because of their less-developed cognitive and verbal capacities (Chapman, Morabito, Ladakakos, Schreier & Knudson, 2001). For the same reason, they can be engaging for refugee children with language-based and conceptual barriers to the use of traditional western-developed and primarily verbal-based psychological approaches. Utilizing creative tools allows children to express their thoughts, beliefs and emotions, hence their reference as expressive therapies, albeit without the narrative process described earlier (Malchiodi, 2008). With the help of drawing, painting, sand or clay, the therapist interprets both the artwork that is created by the child and the story that s/he is trying to communicate. The reality and fantasy in these stories is often dissociated, hence the goal of creative therapy is to help the child discover herself/himself by providing a safe space for them to unfold negative experiences and their accompanying emotions (Eaton, Doherty & Widrick, 2007).

Regardless of which creative component is used, the healing effect on traumatized children has been established in the literature, although the overall quality of methods is not strong in this field, and most studies were based on non-refugee samples (Chapman et al., 2001; Malchiodi, 2014; van Westrhenen & Fritz, 2014). In a study with 86 in-patient adolescents who had been exposed to various traumatic events, these were allocated to either trauma-focussed art therapy (TF-ART) or treatment as usual (TAU) (Lyshak-Stelzer, Singer, Patricia & Chemtob, 2007). At the end of the 16-week TF-ART intervention, which included collage and drawing, PTSD symptoms significantly decreased, compared to the TAU group. Consistent with this finding, other studies with sexually abused children showed that creative/expressive therapies were efficacious in

improving anxiety, post-traumatic stress, dissociation (Pifalo, 2002) and depressive symptoms (Pretorius & Pfeifer, 2010).

Although there is increasing use of creative interventions with refugee children, such new programmes have been described in the literature, but with limited evidence to date on their efficacy (Ugurlu, Akca & Acarturk, 2016; Quinlan, Schweitzer, Khawaja, & Griffin, 2016). Most studies utilized qualitative designs (Czamanski-Cohen, 2010; Miles, 2000). In two independent studies conducted in Australia (Quinlan et al., 2016) and Canada (Rousseau, Drapeau, Lacroix, Bagilishya & Heusch, 2005), school-based creative art therapy was implemented with 42 (aged 14 to 17 years) and 138 refugee children (aged 7 to 13 years), respectively. Consistent findings from these two studies indicated a significant reduction in emotional and behavioural symptoms assigned to the treatment group, whilst there was no improvement in children of the wait-list control group. Moreover, the Ugurlu et al. (2016) study with 63 Syrian refugee children (aged 7 to 12 years) administered expressive art therapy combining visual art, dance/movement and music sessions for five consecutive days. Although only half of the participants completed post-intervention measures, preliminary results from the remaining children were promising as there was a significant reduction in post-traumatic stress, anxiety and depressive symptoms.

### ***5.2.1.3. Interventions to enhance adaptive coping skills***

Coping skills-building interventions are largely rooted in cognitive-behavioural theory. Unlike reprocessing therapies, however, current life stressors rather than past traumas are their primary target of change, with children being equipped with strategies to deal with ongoing life stressors. The most reported and evaluated examples are presented below.

#### **5.2.1.3.1. Problem-solving skills training**

Various forms of problem-solving skills training (PSST) have been reported in the child mental health literature. Overall, PSST is a solution-focussed intervention that teaches children how to reduce the effect of existing stressors, and how to cope more effectively with future stress-provoking situations (Kazdin, 2011). This is a particularly relevant model to refugee children, who are exposed to ongoing adversity. It is also a more pragmatic, thus more engaging and acceptable, intervention, at least at the first stage, by

empowering children to take control over their symptoms or circumstances, as compared to trauma reprocessing interventions such as CBT, NET or EMDR, which aim to alleviate the effect of traumatic events experienced some time ago. Naturally, the two approaches are not mutually exclusive, but rather complementary, as adaptive functioning enables children to tackle past traumatic experiences. Although there are various names for PSST in the literature, such as cognitive, social and interpersonal PSST, these, more or less, share the same principles.

The theory behind cognitive PSST interventions is based on the aforementioned principles that mental health problems are rooted in dysfunctional cognitions, including inaccurate beliefs, thoughts and attitudes. Cognitive PSST thus teaches children to become aware of stressful situations which are interlinked with maladaptive cognitions and to replace them with adaptive solutions. Social and interpersonal PSST are based on the theory that both cognitive (internal) and social (external) events play important roles in children's responses to stressful situations (Guerra & Slaby, 1990). The general term of PSST is used in the present review as all variations of PSST are primarily based on the same cognitive principle.

From early studies, PSST has been widely used with children and adolescents as both a preventive approach in the general population (Nash, Fraser, Galinsky & Kupper, 2003), and as an adjunctive intervention for children with anxiety, ADHD (Aberson, Albury, Gutting, Mann, & Trushin, 2007) and antisocial behaviour (Kazdin, Siegel & Bass, 1992). To date, no evidence has been reported on the effectiveness of PSST among refugee children. This is surprising, considering the acknowledgement of the need to tackle both past and current stressors, as well as its 'hands-on' nature, which is particularly suited to this hard to engage group. This is also the reason for including PSST in this review, despite the lack of specific supporting evidence.

### **5.2.2. Family-focussed interventions**

Refugee families encounter multiple stressors throughout their transition from their home country (pre-migratory) to settling in their host country (post-migratory) (Chapter II). This process may lead to disruptions to the family relationship (Fazel & Betancourt, 2017). More specifically, Weine et al. (2004) concluded, from analysing qualitative data

from three years of family group meetings, that there were alterations in: 1) roles and responsibilities of family members; 2) family memories and communications; 3) family relationships; and 4) family links with the community. These ongoing changes, in conjunction with their traumatic experiences, may result in parental aggression (Pottie, Dahal, Georgiades, Premji & Hassan, 2015) and domestic violence, with the associated adverse effects on children (Taft, Small & Hoang, 2008).

Nevertheless, evidence from the related literature suggests that the family is also a source of resilience, especially for family-centred cultures (Weine, 1999). Limited but promising evidence indicates that it is possible to prevent mental health problems among refugee children by modifying maladaptive parenting practices (Bjørknes & Manger, 2012), improving parental mental health (Osman, Salari, Klingberg-Allvin, Schön & Flacking, 2017), and administering multi-family therapies (O’Callaghan et al., 2014).

#### ***5.2.2.1. Family support***

In parallel with addressing the multiple needs of refugee families, e.g., housing, occupational, psychosocial, health-related, educational, economic and linguistic, family support includes various strategies such as advice on the asylum-seeking process (Goodkind et al., 2014), economic strengthening (Jones, Hiddleston & McCormick, 2014) and parenting skills training (Wieling et al., 2015). Non-profit organizations in particular play an essential role in providing support for families, especially where governmental agencies fall short in terms of adequate social policies and resources, as social services tend to focus on child protection and interventions within high-risk families. The main frameworks and programmes reported in the literature, especially if accompanied by evidence, are considered in this section.

##### **5.2.2.1.1. Parenting skills training**

Parenting skills training, or parent management training (PMT) with a psychoeducation component is a behavioural approach that targets maladaptive parenting practices by empowering parents to interact and play with their children, set appropriate boundaries, reward positive behaviours and manage undesirable ones by moderating consequences (Cartwright-Hatton, McNally, White & Verduyn, 2005). Various social learning programmes have been widely used, predominantly for children with oppositional and



conduct issues (Gardner, Burton, & Klimes, 2006; McGrath et al., 2013; Patterson et al., 2002) and, to a lesser extent, emotional problems (Ajilchi & Kargar, 2013). Furthermore, some evidence suggests that PST, as a component of multimodal programmes, can lead to improvement in children with more severe difficulties such as ADHD (Motamed, Ghorbanshiroudi, Khalatbari, Maddahi & Keikhayfarzaneh, 2011) and autism spectrum disorders (McIntyre, 2008).

The integration of positive parenting practices has been shown to have a protective role with regards to the mental health of children exposed to armed conflict and war (Tol, Song & Jordans, 2013); however, there has been limited research on parenting interventions in refugee settings (Jordans, Pigott & Tol, 2016). In a randomized controlled trial conducted in Norway, 96 refugee mothers of Somalian and Pakistani background were assigned to either 18 weeks of a PMT intervention or a waiting list control group (Bjørknes & Manger, 2012). Results showed a significant decrease in harsh discipline and increase in positive parenting, with an associated reduction in conduct problems among their children aged 3 to 9 years. Consistent with the Bjørknes et al. (2012) study, conduct problems among 58 Burundi children decreased after their parents' attendance at a brief two-session parenting psychoeducation programme (Jordans, Tol, Ndayisaba, & Komproe, 2013).

#### **5.2.2.1.2. Family skills training**

Family skills training (FST) is also based on social learning theory, but involves parents in terms of developing more adaptive rearing strategies and children in improving their social skills, with both components making an impact on family functioning. Parents and children attend separate groups and are then brought together for an hour-practice session with feedback from the group leaders. A number of studies have shown the preventive effect of FST for at-risk youth (Kumpfer & Alvarado, 2003), particularly substance users and their families (Kumpfer, Alvarado, Tait & Turner, 2002; Tolan, Szapocznik & Sambrano, 2007).

Despite the relatively large body of evidence from at-risk youth populations such as young offenders, there has been limited use of FST with refugee families (Pacione et al., 2013). In a recent RCT conducted with 513 mothers and 479 children of Burmese origins,

12 FST sessions were applied in the intervention group (Puffer, Annan, Sim, Salhi & Betancourt, 2017). Results revealed positive changes in mothers' parenting practices, i.e., a significant increase in warmth and affectionate parenting, and a reduction in harsh discipline. Children who participated in the study reported improved family functioning (Puffer et al., 2017). Furthermore, in the experimental group there was a reduction of children's externalizing and attention problems, and an improvement in prosocial behaviour at a one-month follow-up (Annan et al., 2017).

#### ***5.2.2.2. Interventions for parental mental health***

Mental health problems experienced by parents have long been established as a robust risk factor that contributes to children's own ill mental health (Downey and Coyne 1990; Garber et al. 2009). Epidemiological studies showed that parents who had been suffering from PTSD were more likely to exhibit aggression towards their children, whilst parental depression was more associated with neglect (Chemtob, Gudiño & Laraque, 2013). Reciprocal disruption in both positive parenting practices and the parent-child relationship (Stormshak, Bierman, McMahon & Lengua, 2000) is often the mediating factor leading to child psychopathology (Cluxton-Keller, Riley, Noazin & Umoren, 2015). Hence, parental mental health is increasingly being addressed in the treatment of children with different conditions (Acri & Hoagwood, 2015; Sanders, Bor, & Morawska, 2007) through extensive use of CBT (Barrington, Prior, Richardson, & Allen, 2005; Sanders & McFarland, 2000; Silverman, Kurtines, Jaccard, & Pina, 2009).

Although child and parent mental health have been widely accepted as being inter-dependent, the direction of this association, i.e., whether child improvement results from improvements in parents' mental health or vice versa, remains inconclusive, possibly because of the complexity of mechanisms involved, particularly in terms of the quality of parenting (Kendall, Hudson, Gosch, Flannery-Schroeder & Suveg, 2008; Silverman, Pina & Viswesvaran, 2008). Some intervention studies including both parents and children suggest that mental health difficulties are not only transferred from the parents to their child, but can also follow the opposite direction. For instance, in a study with 119 adolescent-mother dyads with different types of anxiety disorders (separation anxiety, specific phobias, or generalized anxiety), these were assigned to either CBT or CBT/P. Adolescents assigned to the CBT group were given CBT sessions with minimal parental

involvement, whilst their peers in the CBT/P group were administered CBT while actively involving their parents (Silverman et al., 2009). Post-test and 12-month follow-up scores showed improvement in adolescent and maternal anxiety symptoms in both groups, but no obvious superior effect for the CBT/P intervention.

Some researchers have proposed that child mental health problems can be alleviated by providing appropriate multi-modal treatment for parents. In a study, for example, conducted with 66 mothers, who had been victims of domestic violence, and their children, who had been diagnosed with conduct problems, mothers in the treatment condition were provided with material and emotional support, i.e., food, transportation, furniture, therapy and training in parenting skills (Jouriles et al., 2009). Post-intervention assessments showed significant reductions in children's conduct problems compared to the control group, while mothers who received treatment revealed significantly greater improvement in psychopathology symptoms, and reduction in harsh parenting practices. Moreover, improvement in children's problems was attributable to *both* mothers' improved parenting skills *and* psychological wellbeing. Consistently, other studies targeting parental mental health produced evidence on the improvement of children's disruptive (Sanders & McFarland, 2000) and problem behaviours (Verduyn, Barrowclough, Roberts, Tarrier & Harrington, 2003).

Despite the lack of adapted programmes for refugee parents and their children, an early study by Dybdahl (2001) with Bosnian displaced mothers evaluated an interesting model of family support on the refugee mental health of both parents and children, without actively targeting parental mental health problems. This programme, which combined ingredients described in the earlier parenting section, involved 87 mothers of children aged 5 to 6 years, who were randomly assigned to either the intervention group of parental support and psychoeducation (n = 42) or a waiting list control group (n = 45). Mothers in the intervention group were invited to weekly group meetings, during which they were encouraged to share their experiences on various topics such as child development, trauma symptoms and how to manage them, and the importance of healthy child-parent interactions. This unstructured discussion was followed by a brief psychoeducation session. Results indicated a significant reduction in PTSD symptoms among both children and their mothers, as well as an improvement in children's psychosocial functioning and mothers' life satisfaction (Dybdahl, 2001). These promising

findings indicate the positive effects of broader parental psychosocial support on both children's and parents' mental health. Moreover, using teachers as group leaders was an additional innovation, considering the limited specialist services available in hosting countries, especially those of low- and middle-income status. To date, and despite the substantive body of evidence upon the efficacy of parental mental health interventions with children with behavioural difficulties, relatively little attention has been given to refugee parents and children in the literature (Khamis, 2016).

### **5.2.2.3. Attachment-focussed interventions**

As already discussed in Chapter II, early disruptions in the attachment relationship between the child and their caregiver(s) may result in later problems during childhood, adolescence and adulthood. Hence, attachment-based interventions target parent-child dyads posing a risk in terms of insecure attachment (O'Connor & Zeanah, 2003). Although attachment is not asserted as a direct cause of child psychopathology (Sroufe, Carlson, Levy & Egeland, 1999), early attachment experiences along with other associated life events such as trauma (mainly abuse and neglect), lack of social support and poverty may result in disrupted emotion regulation, which can further lead to child mental health problems (Allen, Timmer & Urquiza, 2014).

A key objective of attachment-based interventions is enhancing the parent-child bond by improving parents' sensitivity towards their children's emotional needs. In one randomized controlled trial, for instance, the intervention group of maltreated children and their mothers received eight weekly home visits (Moss et al., 2011). These consisted of brief discussions on attachment and emotion regulation, which were followed by videotaping parent-child interactions and providing feedback to the parents. At post-intervention, significant improvements were reported in parental sensitivity and children's attachment security, as well as in emotional and behavioural problems of older children (Moss et al., 2011). Further supporting evidence on the efficacy of attachment-based interventions for child maltreatment is available in the literature (Toth, Maughan, Manly, Spagnola & Cicchetti, 2002).

Although there is a dearth of evidence on the efficacy of attachment-based interventions in refugee populations, a few studies have reported promising findings showing that they

might have a positive impact on both the quality of the parent-child relationship and on refugee children's behaviours (Schottelkorb et al., 2012). In a case study with a Sudanese refugee family, Lim and Ogawa (2014) administered child-parent relationship therapy (CPRT), which aimed to strengthen the attachment bond between a father who had lost his wife and his six-year-old son using play activities. Both qualitative, i.e., transcriptions of videotapes, and quantitative measures data were collected after eight weeks of completing CPRT. At post-intervention, parental stress and the child's externalizing behaviours were significantly reduced; moreover, this reduction was attributable to the father's ability to navigate his grieving, which in turn helped the child to manage their traumatic loss within the family (Lim & Ogawa, 2014). Despite its obvious limited generalizability, this potential therapeutic process indicates the complex mechanisms involved in the relationship between disrupted attachment and trauma exposure, and how they can both affect child mental health; hence, the methodological challenges faced by evaluation studies.

Only one such study of an attachment-focussed intervention with refugee families was identified in the related literature. A randomized controlled trial was conducted in Sweden with 120 Somalian parents and their 11-16 year-old children with behavioural problems (Osman, Flacking, Schön & Klingberg-Allvin, 2017). The intervention involved two information sessions covering the child's rights, parenting practices and the purpose of social services, followed by ten sessions of the Connect programme. This was intended to enable parents to form a secure attachment with their children by reflecting on their insensitive behaviours through group activities such as reflection, role play and discussions on parenting. Children assigned to the intervention group showed decreased aggression and social difficulties in relation to the control group (Osman et al., 2017). However, this improvement could not necessarily be attributed to secure attachment between parents and children since the study did not assess changes in the attachment relationship.

Given the evidence that the attachment style of refugee children (secure/insecure-avoidant) mediated the efficacy of a cognitive behavioural-based therapy (Eloranta, Peltonen, Palosaari, Qouta & Punamäki, 2017), enhancing the attachment relationship between child and the parent might need to be prioritised as a component of other interventions. Moreover, since parental psychopathology and/or maladaptive parenting

practices are possible contributors to disruptions in attachment security, previously mentioned family-oriented interventions such as parenting skills training and interventions targeting parental mental health, could be integrated with attachment-based interventions to improve children's attachment with the caregiver, with the ultimate goal of a subsequent improvement in the child's mental wellbeing. Furthermore, attachment-focussed training can be provided to professionals such as teachers, social workers or community workers/volunteers, who can thus further facilitate attachment-focussed interventions with parents.

#### ***5.2.2.4. Multiple family therapy (MFT)***

In multiple family therapy (MFT), several families which encountered similar problems or who have individual members who have experienced similar mental health problems are gathered together (Asen, & Scholz, 2010). MFT in the present review refers to all programmes which involved multiple family group sessions by utilizing various underpinning modalities such as narrative, psychoeducational, cognitive-behavioural, systemic therapy, or psychoeducation (Gelin, Cook-Darzens, Simon & Hendrick, 2016). Overall, MFT is based on the theory that families in group sessions can encourage each other by sharing their ideas, perspectives and suggestions, as well as learning from other families who have been experiencing similar adversities (Asen & Schuff, 2006).

MFT has been used with various groups of families whose children have been diagnosed with psychiatric disorders, predominantly anorexia-nervosa (Dare & Eisler, 2000; Eisler, 2005; Scholz, Rix, Scholz, Gantchev & Thömke, 2005), and, to a lesser extent, schizophrenia (McFarlane, Dixon, Lukens & Lucksted, 2003), depression (Fristad, Goldberg-Arnold & Gavazzi, 2003), PTSD (Weine et al., 2008) and obsessive-compulsive disorders (Barrett, Farrell, Dadds & Boulter, 2005). Besides the more severe disorders, there is a growing body of literature as to the efficacy of MFT with families of children with behavioural problems. One study, for example, with 78 primary school children, who had conduct problems, and their parents utilized classroom-based MFT in London (Morris, Le Huray, Skagerberg, Gomes & Ninteman, 2014). Of those, 50 families received MFT for six months along with other usual support (OUS), i.e., learning mentors, parenting skills groups and children's support groups aiming to improve self-esteem; whilst 28 families were assigned to a waiting list control group with access only

to OUS. Results showed that conduct problems of children in the MFT group significantly decreased compared to their peers in the control group, and this improvement was sustained after 12 months.

Despite its extended use in clinical settings, there is a dearth of research on its use with trauma-exposed groups, particularly with refugee families. Only two MFT studies were identified in the refugee literature (Weine et al., 2003; Weine et al., 2008). In the first feasibility study, MFT was applied for eight weeks to 86 Kosovar refugees who had settled in the US (Weine et al., 2003). Family members (n = 73) attended multi-family group sessions during which they were trained in mental health, trauma and service use; they were then encouraged to talk together about family problems and possible solutions. At a three-month follow-up, there was significant improvement in mental health service utilization, perceived social support, trauma mental health awareness and family hardiness (Weine et al., 2003). In a subsequent study with Bosnian refugees with PTSD, the affected individuals and one of their family members were randomly assigned to either nine weeks of MFT or to a control group (Weine et al., 2008). Similar to the earlier study, MFT group members showed increased access to mental health services compared to the control group.

These results are promising in terms of increasing awareness of trauma symptoms and encouraging access to mental health services. Both studies, however, provided limited evidence as to the effect of MFT on participants' symptoms (Weine et al., 2003; Weine et al., 2008). Since the nature of MFT allows psychosocial support for multiple families *as a group*, it can be applied in refugee camps where families are accommodated together. Furthermore, participating in MFT may help refugee families to feel less alone and to decrease stigma among parents whose children have mental health problems.

### **5.2.3. Community-oriented interventions**

As the ecological framework that informed the present project suggests, a child is nested within her/his family (micro-environment), as well as the community (macro-environment). Hence, interactions between the child, their family and the community play a prominent role in terms of the child's psychosocial development. In parallel with the established importance of community as a protective factor in terms of child mental

health, several studies have developed and evaluated community-oriented interventions for child mental health problems such as autism spectrum disorders (Magiati, Charman & Howlin, 2007), substance abuse (Morral, McCaffrey & Ridgeway, 2004) and social phobia (Baer & Garland, 2005).

The term ‘community-oriented’ or ‘community-based’, however, may imply different conceptual meanings of the community. In some studies, the community has been referred to as a *setting*, e.g., school or churches, through which various types of interventions can be delivered. Others have defined community as a *resource* of individuals, groups or networks who are actively involved in the intervention. Community can also be viewed as a *target of change*, i.e., by using a broader approach to create a more optimal environment for children’s wellbeing (McLeroy, Norton, Kegler, Burdine & Sumaya, 2003). Although, these are not distinct or mutually exclusive categories, they are nevertheless useful reference guides for the interpretation of the reported interventions.

Most studies in the related literature using the term ‘community-based interventions’ included either family- or child-oriented interventions, or a combination of those that were applied in community settings such as mental health services, schools or non-statutory agencies (Birman et al., 2008; Durà-Vilà et al., 2013; Annan et al., 2017). Studies which referred to community as a setting have already been reviewed in the previous sections. Thus, only studies that defined community as a resource or target of change will be considered below.

#### ***5.2.3.1. School-based interventions***

Schools are prominent community institutions in which ongoing educational and social support and learning are provided for children and adolescents. They can also serve as a sample pool which allows a researcher to access and engage a targeted population, as well as being a venue to for the implementation of any intended interventions. Hence, the majority of studies are conducted in school settings and referred to as *school-based*, involved CBT, creative or family therapies, usually delivered to groups of children or their families without the integration and active involvement of teachers and other educationalists (Wilson, Lipsey & Derzon, 2003).



Nevertheless, several interventions for refugee children involved suitably trained teachers or community members to facilitate the therapy groups (Tol et al., 2008). These paraprofessionals were supported through weekly consultation by mental health practitioners (Fazel et al., 2009), psychosocial training; and/or supervision or counselling in dealing with the children, as well as their own trauma, when communities were collectively affected by conflict (Kos & Zemljak, 2007). These studies on the empowerment of community members have generally reported promising results, and are viewed as a way forward in maximizing community strengths and resources in LMIC contexts and in providing culturally-appropriate interventions.

For instance, in a randomized controlled trial with 32 Syrian refugee children aged 10 to 15 years with trauma-related psychopathology, group-based CBT was delivered by Arabic-speaking teachers, who were suitably trained and supervised (Gormez et al., 2017). After the completion of the eight-week programme, PTSD and anxiety scores were significantly decreased compared to the control group. Moreover, a significant proportion of children no longer met the diagnostic criteria for the two disorders. This study, which was conducted in Turkey where there is huge refugee population with limited mental health professionals, is a good example of using community as a resource.

Another interesting example of a school-based community-oriented intervention study was conducted in two sites in Bosnia-Herzegovina, with 336 displaced children from ten schools and their parents, as well as teachers, school managers and professionals from local Universities (Hasanović et al., 2009). Participating children attended weekly internal and external workshops that were held both at their own and partner schools. In these workshops, they were encouraged to discuss emotions, tolerance, non-violent action and stigma toward mental health. Group leaders, i.e., ten students and one teacher from each school, ran after-school clubs to enhance young people's growth. Parents were provided with parallel parenting training and attended joint meetings with school managers. School managers, moreover, were trained in education practices with at-risk children. The programme was delivered over five months. Post-intervention results indicated that PTSD symptoms in children who had been assigned to the intervention group were significantly reduced compared to the control group.

### **5.2.3.2. Community-based interventions**

Apart from the aforementioned interventions that included school members, other interventions identified were conducted in various settings, particularly in the absence of schools, such as refugee camps (Stepakoff et al., 2006). However, there has been limited research with refugee children, with the majority targeting adult refugees, for example through advocacy and awareness. Similar to school-based interventions, community members were involved either as a resource or as the target of change.

Advocacy and awareness programmes which aimed to increase the knowledge of refugees on accessing social care and other agencies have been successfully implemented in several countries. For instance, a community-based advocacy and learning intervention was administered to African refugees who were residing in New Mexico (Goodkind et al., 2014). In the first phase, learning circle groups including adult, child and university student refugees from the host community were conducted to increase cultural exchange through discussions, and to provide teaching support for refugees, for example in terms of English competency. In the advocacy phase, each host student co-worked with one or two refugees to facilitate access to community resources. The same procedure was applied with Hmong refugees (Goodkind, 2005). Both studies indicated a significant decrease in psychological distress and improvement in quality of life, indicating that advocacy and learning can make an independent contribution to mental well-being.

### **5.2.4. Multi-modal interventions**

Multi-modal, or multi-tiered, or multi-phased, interventions aim to tackle refugee children's complex needs through different interlinked agency layers that reflect the different aspects of their environment. The concurrent targets of change of such comprehensive programmes are thus the broader community, the family and the individual child. Multi-modal interventions help strengthen resilience in the community through giving psychoeducation to parents, teachers and peers, whilst more active, skills-promoting components target the at-risk children themselves (Ellis et al., 2013). Children with more severe disorders, who did not respond to the first intervention phase, could directly access intensive treatment through mental health services that adopted a stepped approach (Saxe, Ellis, Fogler, Hansen & Sorkin, 2017; Vostanis, 2016). The importance

of multi-modal interventions is increasingly recognized as the ideal standard for refugee children in the literature (Jordans et al., 2016).

The paucity of such service models, however, constrains the availability of evidence, despite the promising results indicated by the Ellis et al. (2013) study conducted in the US. In this study, 30 Somali children aged 11 to 15 years posing a high risk of mental health problems were allocated to a school-based skills intervention group (Tier 2). These children had initially been identified in the first phase (Tier 1), which included welfare provision and psychoeducation for the broader Somali and school community. Furthermore, fifteen children who exhibited severe emotional and behavioural dysregulation during Tier 2 were referred for more intensive treatment, i.e., either group-based psychotherapy (Tier 3) or pharmacotherapy, advocacy and case management (Tier 4), as advised by their teachers, parents and group leaders. At follow-up, significant improvement was evident in terms of the mental health of all the children who had participated in the different intervention phases. Moreover, PTSD and depression symptoms decreased among children treated during the Tier 4 phase (Ellis et al., 2013).

A multi-layered programme was evaluated in a study conducted with different populations from conflict-affected areas, i.e., Burundi, Indonesia, Sri Lanka and Sudan (Jordans et al., 2011). In this study, local counsellors and paraprofessionals were trained to deliver various components of the programme. At the first level, mental health promotion was provided to the community through psychoeducation and resource mobilization. The second level comprised recreational activities and discussion for peer groups. The third level included 15 sessions of classroom-based psychosocial intervention for at-risk children who had access to school. In the final level, children with severe psychological distress who had been identified at the first three levels, were referred to specialist mental healthcare, whilst family support was provided in parallel. Although not all children needed to go through all four levels, they all showed significant improvement in mental health symptoms and a high level of satisfaction (Jordans et al., 2011).

It is well established that refugee children's psychological functioning can either not improve at all, or problems are likely to recur while they live in a stressful environment, which includes parents with ill mental health or a community with a lack of mental health

knowledge (Ehnholt et al., 2005). In some cases, their mental health difficulties may even deteriorate in the presence of ongoing trauma (Lange-Nielsen et al., 2012), with associated social functioning impairment (Stein et al., 2003). These findings provide support the further development of multi-modal interventions which broadly target multiple layers of the refugee child's ecology.

#### ***5.2.4.1. Service delivery***

Accessing health services has always been shown to be problematic for immigrant, asylum-seeking and refugee populations. Established reasons for this include lack of health coverage by the host government, stigma and conceptualization of mental health, a general lack of familiarity, linguistic differences, and lack of information about services (de Anstiss, Ziain, Procter, Warland, & Baghurst, 2009; Weine et al., 2003). Moreover, refugee parents might be unaware of symptoms experienced by their children due to their own trauma. Furthermore, possible fear and mistrust of authorities linked to the asylum-seeking process can further disengage refugee families (Signorelli, Gluckman, Hassan, Coello & Momartin, 2017). Considering the high rates of child mental health problems, which might continue for years among refugee children and adolescents as evidenced by the literature (Sack, Clarke, & Seeley, 1996), it is important to overcome the barriers that hinder service access and early intervention.

Globally, the currently existing child and adolescent mental health services (CAMHS) cannot meet the mental health needs of the indigenous population (Mental Health Atlas, 2017). This high level of unmet need is particularly prominent among vulnerable groups such as refugee children and adolescents, even those residing in high-income countries (Boufous, Silove, Bauman, & Steel, 2005; Davidson et al., 2004; Howard & Hodes, 2000). Two separate studies conducted in the US (Betancourt et al., 2017) and Norway (Vaage, Garløv, Hauff & Thomsen, 2007) indicated that there were no differences between the refugee children and their national peers in terms of service utilization patterns; however, a significantly higher proportion of refugee children reported grief, somatising, phobic and dissociative symptoms compared to their U.S.-origin peers (Betancourt et al., 2017), which indicates their higher level of unmet needs. Different service solutions should tackle currently established barriers such as anti-stigma

campaigns, mental health awareness, joint care pathways and integrated provision for refugee children (Vostanis, 2016).

### **5.3. Conclusion**

Despite the extensive evidence on the possible risk and protective factors for refugee children's mental health, there is a relative dearth of evidence upon the efficacy and effectiveness of psychosocial interventions that address these factors, i.e., that build children's and families' resilience in managing ongoing stressors in a more adaptive manner, dealing with mental health problems, and preventing their future occurrence. There are a number of possible reasons that can explain the scarcity of such evidence, which vary between limited attention of policy makers to refugee mental health, ethical and consent issues, and a lack of so-designated research funding (Fazel & Betancourt, 2017). Furthermore, socioeconomic difficulties within the refugee population and lack of integrated psychosocial programmes may preclude them from placing a more appropriate emphasis on their mental health, particularly while even their basic needs are not being met. Cultural and linguistic differences are further barriers (Birman, 2005). Finally, the multitude of risk factors and continuing changes in refugee children's life circumstances compound both the development and evaluation of interventions in real-life contexts.

The majority of studies considered by the present review involved trauma reprocessing techniques, with relatively limited evidence on comprehensive and preventive programmes. This might be attributable to the dominance of trauma-focussed approaches in the refugee literature that initially influenced service developers and researchers in focussing on children with trauma-related disorders, predominantly PTSD, whilst excluding high-risk children without an established diagnosis. However, there is increasing evidence that current life difficulties being experienced after migration such as poverty, impaired parental mental health and family functioning, and discrimination and isolation within the host community, also contribute to refugee children's mental health problems (Erucar et al., 2017). Hence, the propagation of preventive interventions that incorporate family and societal components is being increasingly acknowledged by international organizations and policies (UNHCR, 2013).

A particularly notable gap in the refugee literature was the lack of family-focussed interventions; this is in contrast with the relative abundance of evidence on child-focussed interventions. This limited knowledge is surprising, particularly when considering the emerging evidence upon the importance of family functioning such as parental mental health, parenting practices and attachment relationships on children's mental well-being (Chapter II). There might be various reasons underpinning this scarcity. First, as the majority of epidemiological studies were informed by the war exposure model, trauma-focussed interventions were initially prioritized to help children with PTSD. Second, refugee parents or caregivers are among the most difficult vulnerable populations with whom to gain access and engage due to the various socioeconomic, cultural and linguistic barriers that usually exist. Finally, most refugee parents are struggling with their own trauma, which may constrain both their engagement with mental health services and, indeed, the very recognition of the problems being experienced by their offspring. Understanding the risk and protective roles of family-related factors thus provided the rationale for Study I, and subsequently the feasibility evaluation of an intervention in Study II of this thesis.

## Chapter VI

# Feasibility of Theraplay intervention with Syrian refugee families in Turkey: Methodology of Study II

## 6.1. Introduction

The second phase of this research was designed as a feasibility study. This was based on the research evidence from both the literature review (Chapter V), which highlighted the scarcity of interventions intended to improve the quality of attachment relationships between refugee parents and children, and also the results acquired from the cross-sectional study (Chapter IV) in which parenting-related factors, particularly attachment relationships, were found to be prominent in predicting child mental health problems. Thus, the feasibility of Group Theraplay, which is an attachment-focussed intervention with the objectives of enhancing attachment relationships, boosting the child's emotional regulation and self-esteem and increasing their trust of others, was explored in terms of its suitability to be applied with Syrian refugee children and their caregivers.

## 6.2. Research aims

The overall **Research Aim** of the present study was to explore viable interventions that might improve the parent-child relationship within refugee families. To achieve this objective, a feasibility study was conducted to address the following main **Research Question**:

Is a particular attachment-based intervention feasible (practicable, attainable, achievable and beneficial) in application with Syrian refugee children and their caregivers?

As well as the assisting **Research Sub-questions**:

- 1) Is the recruitment procedure appropriate in terms of the intended sample?
- 2) Is the data collection process and selected measures suitable for the participants?
- 3) Is the research procedure and intervention suitable for and acceptable to the participants?
- 4) Are there adequate resources and management capability to apply the intervention?
- 5) Is the selected intervention promising in terms of the defined outcome?

The aforementioned research questions were addressed by five research aims, which were developed by following the guidelines on feasibility evaluation by Orsmond and Cohn (2015). These **Research Aims** included the evaluation of:

- 1) Recruitment capability.



- 2) Data collection and comprehension of selected measures.
- 3) Acceptability and suitability of the Theraplay intervention and research procedures.
- 4) Resources and administrative capacity to implement Theraplay intervention.
- 5) Preliminary analysis of the improvement in children's attachment problems.

### **6.3. Methodological approach**

In a similar manner to Study I, the present research was carried out by utilizing a quantitative approach, which was considered appropriate to address the research questions. The features of the quantitative methodology were discussed in the methodology of study I (Chapter III).

### **6.4. Research design**

A classical experimental design, which is also referred to as a randomized experiment or randomized controlled trial (RCT), was selected for this feasibility study. Pre- and post-intervention measures were completed by participants to examine potential changes in attachment and mental health problems. An experimental design is based on the manipulation of an independent variable, e.g., application of a treatment, on participants who are randomly allocated to different groups, e.g., treatment group/no treatment group (control group), and the subsequent assessment of the effect of this manipulation on the dependent variable, e.g., improvement in mental health, while controlling for all other variables (Robson, 2011).

An RCT design is accepted as the 'gold standard' scientific method to examine if an intervention is effective or otherwise. In RCTs, selection bias is probabilistically precluded by the random allocation of participants, which allows the researcher to investigate whether the changes in the defined outcome are due to the treatment, rather than to characteristic differences between the groups (Robson, 2011). A potential ethical and service constraint is that such randomization does not enable participants to join the study group by their choice, which is 'the very condition of social and individual change' (Pawson & Tilley, 1997). Hence, this can be accomplished by only including volunteers who provide informed consent that they may not receive the experimental intervention, at least during the period of the research.

Unlike an RCT design of treatment effectiveness, in which changes in the defined outcome constitute the primary focus, a feasibility study has different objectives and underpinning process (The National Institute for Health Research [NIHR], 2012). Although an exploratory analysis of symptomatic change in the participants was included as one of the research aims, the main focus of this study was not to establish the effectiveness of the intended intervention, but rather to understand if the intervention could be applied with the targeted population, thus hopefully leading to an RCT-based effectiveness study in the next stage.

#### **6.4.1. Principles of feasibility evaluation**

The NIHR (2012) defined a feasibility study as a part of research which is conducted before the effectiveness of an intervention is tested by determining if the intended intervention “can be done”. A feasibility study can thus help us to identify possible methodological threats to validity in advance of the main study as it assesses the following aspects (Orsmond & Cohn, 2015; Tickle-Degnen, 2013):

- 1) *Research process*: Appropriate sample size, randomization of participants, sample recruitment, suitability of measurements, response rates in completing questionnaires and other instruments, compliance, and follow-up rates of participants.
- 2) *Resources*: Time and location suitability, material needs, and research budget.
- 3) *Management*: Administrative capacity, expertise and skills, and efficient data entry.
- 4) *Scientific assessment*: Preliminary analysis of change in the targeted outcomes.

Despite their distinct features, the methodologies of feasibility and pilot evaluation are usually interwoven in the literature (Thabane et al., 2010). A pilot study is the ‘miniature’ of the main research, in that it resembles all aspects of the main RCT but on a small scale (NIHR, 2012). Rigorous methodological components of an RCT design are utilized within a pilot study (Arain, Campbell, Cooper & Lancaster, 2010); whilst feasibility studies are more flexible in their methodology, in the sense of being developmental and adaptive (Bowen et al., 2009). Furthermore, the main focus of a pilot study is the outcome, which is based on the comprehensive analysis of participants’ response to the intervention, whilst a feasibility study primarily tests the adaptation and implementation

of the intervention and is therefore only exploratory in assessing participants' responses (Dobkin, 2009).

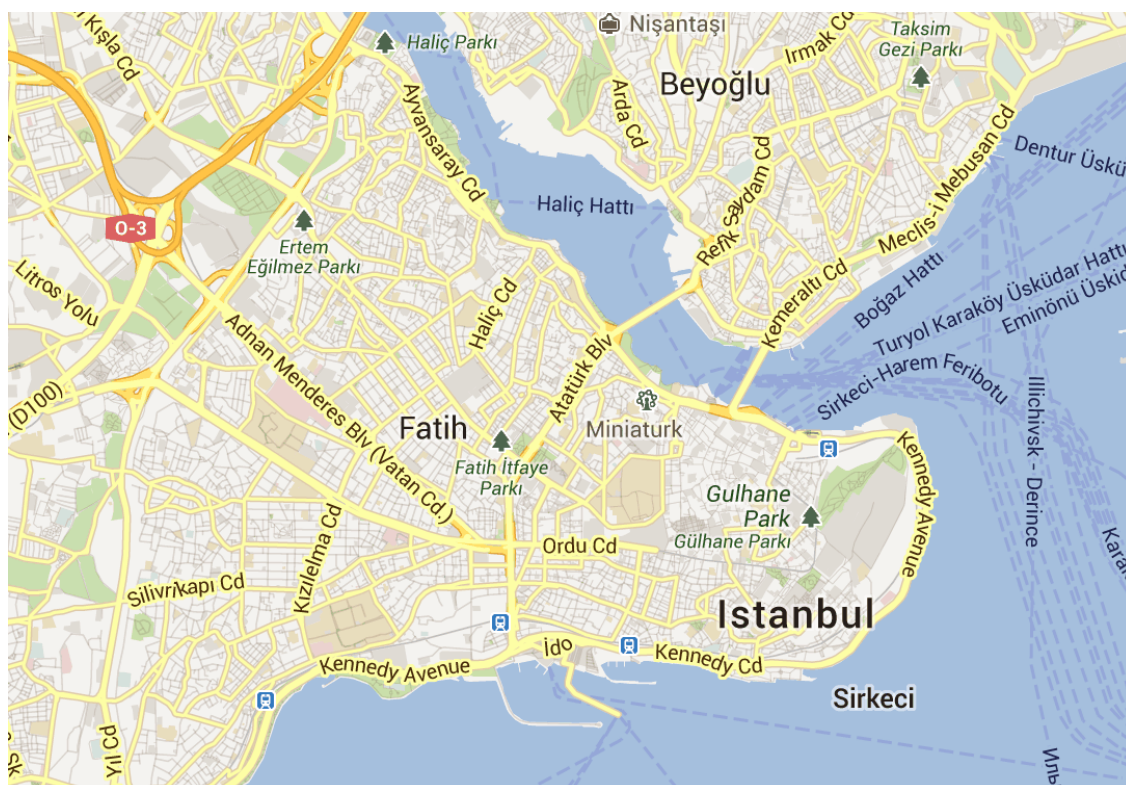
In an ideal research project, the sequence to be followed should be: first, a feasibility study to understand whether the intervention and measures can be implemented with the target population; then, a small-scale pilot study to test all components of the RCT design; and, finally, a large-scale main study examining the effectiveness of the intervention through the RCT design. It has been noted that there is no evidence on the use of Theraplay with refugee populations to date. The present feasibility study was thus conducted as a first step towards a later evaluation of the effectiveness of this specific attachment-focussed intervention with refugee children and their caregivers.

### **6.5. Sampling strategy**

Children and families in the present study were recruited through a non-governmental organization (NGO) located in Istanbul, Turkey. It was initially proposed to access children and parents through school settings since the majority of refugee children were attending government schools, as per the policy announced by the Ministry of National Education in April 2016. However, permission from the Ministry could not be obtained on account of the fact that, as stated by the information e-mail, the Ministry itself was considering assigning school counsellors for Syrian students and conducting similar psychological interventions in collaboration with the Family and Social Policy Ministry (Appendix R).

Hence, the researcher contacted İstanbul Gençlik ve Düşünce Kulübü Derneği (Genc-Dusun), which is a non-governmental organization (NGO) located in the Fatih district of Istanbul, where Syrian families have largely settled in recent years (Figure 6.16). Genc-Dusun ('Youth-Think') provides economic and educational support for refugee children and families residing in Turkey. Refugee children are provided with educational activities, i.e., Turkish, English, maths and science lessons, whilst families are regularly provided with food and support by Genc-Dusun.

**Figure 6.16 The Fatih region of Istanbul, Turkey**



Gatekeeper agreement was obtained from the head manager of Genc-Dusun (Appendix B) following a meeting in which the details of the present intervention study were discussed by the researcher and a Theraplay professional. Research ethics information letters and consent forms were subsequently distributed to parents by members of Genc-Dusun.

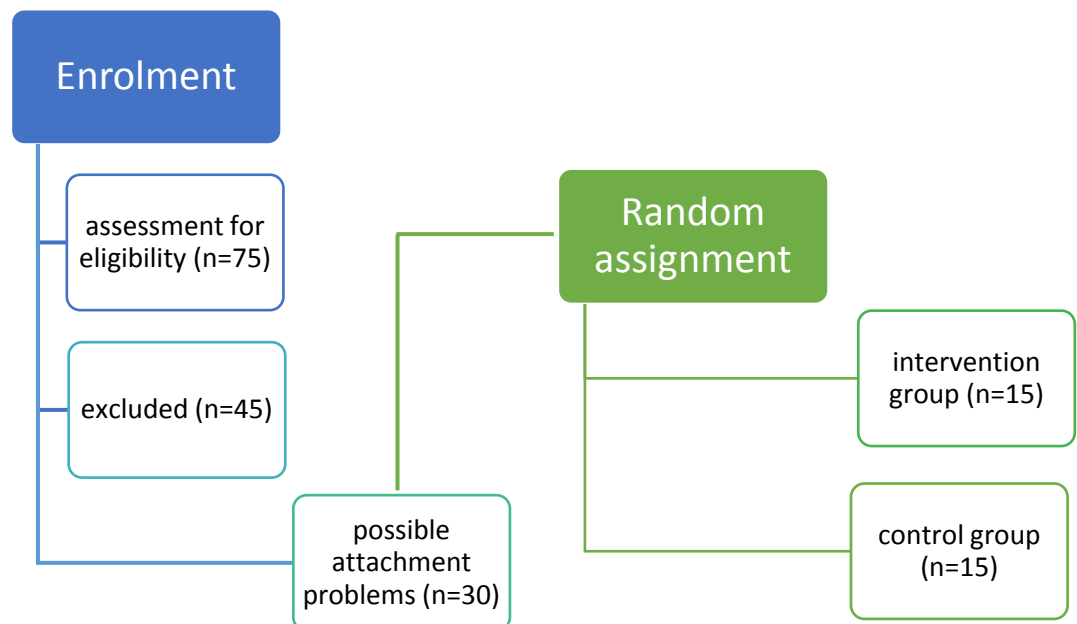
The eligibility criteria for participation in the study were as follows:

1. Being aged between 8 and 14 years.
2. Being able to read and understand either the Arabic or the Turkish language.
3. Having access to the NGO.
4. Having a primary diagnosis of a possible reactive attachment disorder (RAD).

Parents were asked to complete the Relationship Problems Questionnaire (RPQ) in order to assess the likelihood of Reactive Attachment Disorder (RAD) in their children. RAD is defined as “markedly disturbed and developmentally inappropriate social relatedness

in most contexts” (APA, 2013). These recruitment criteria were defined to assess the efficacy of the selected intervention on a group of children with potentially severe attachment difficulties that would justify clinical input. In total, 75 children were identified based on the first three eligibility criteria, and on their parents providing informed consent. Those children who were rated above the clinical cut-off score of seven for Reactive Attachment Disorder (N = 30) and their mothers were included in the study. These parent-child dyads were randomly assigned to either the intervention (N = 15) or the control group (N = 15) (Figure 6.17).

**Figure 6.17 Recruitment of participants**



## 6.6. Psychosocial intervention

### 6.6.1. Selection of the intervention

Among the various psychosocial interventions, Group Theraplay was selected to be applied within refugee families for several reasons. The selection process for this particular therapy included a range of theoretical, practical and cultural reasons. During this process, an attempt was made to address the scarcity in the related literature, and to apply the findings from the first study of this PhD project by paying due regard to the convenience of applying the chosen intervention in terms of available resources,

capability and suitability. Cultural features and the religious sensitivities of the study population, as well as ethical considerations, were observed in choosing the intervention.

The focus of intervention to be selected, e.g., child-, family- or community-focussed, was considered prior to the study by reviewing the related literature on psychosocial interventions for refugee children. Despite growing evidence as to the importance of parenting-related factors, such as secure attachment between parent and child, positive parenting styles and parental mental health in relation to child mental health (Chapter II), there is a scarcity of evidence-based family-focussed interventions as opposed to the dominance of child-focussed, largely trauma-reprocessing, interventions with refugee children in the literature (Chapter V). Hence, it was decided to select and implement a parent-involving psychosocial therapy as an attempt to address this gap in the related literature.

The findings of Study I in this thesis informed as to the type of family-focussed intervention that could be applied with the refugee population. The results of this cross-sectional study revealed that parenting-related factors significantly contributed to an explanation of child mental health problems (Chapter IV). Specifically, negative parenting styles predicted a higher probability of having PTSD, whilst parental psychopathology increased the risk of having general as well as other emotional problems among refugee children. Lack of perceived availability of and higher dependency to the attachment figures, further predicted both PTSD and GMHP. Given the importance of attachment relationship in children with regards to their mental wellbeing, an attachment-focussed intervention was considered most appropriate for application with refugee parent-child dyads.

One of the reasons for the limited use of attachment interventions with refugee families is that these are mostly resource-intensive, that is, requiring extensive training and costly materials such as playing tools and cameras (Zeanah et al., 2011), where research funding is usually limited in refugee settings. Likewise, the majority of the attachment-focussed psychotherapies for manipulating insensitive parenting responses, e.g., Child-Parent Psychotherapy (CPP) (Lieberman, 2004), the Circle of Security (COS) (Hoffman, Marvin, Cooper & Powell, 2006), or Video-based Intervention to Promote Positive Parenting (VIPP) (Juffer, Bakermans-Kranenburg & Van Ijzendoorn, 2012) largely target

only one parent-child dyad at a time, which would clearly be task-intensive when engaging with a large refugee community. These alternative interventions to enhance the attachment relationship between parent and child were thus eliminated as possibilities due to limited resources and time allocated for the current project.

In contrast, Group Theraplay, which aims to enhance attachment relationships between children and parents, as well as to foster emotional regulation, build self-confidence, improve trust with others and develop a sense of belonging in children, can be applied with multiple children in a family, school or residential setting (The Theraplay® Institute, n.d.). There is a growing body of evidence as to the effectiveness of different levels of Theraplay (Coleman, 2010; Wetting, Franke & Fjordback, 2006). Symptom reduction was reported by a number of studies that examined the effectiveness of Theraplay with various groups such as children diagnosed with mild to moderate autism (or Pervasive Developmental Disorders - PDD) (Cross & Howard, 2007; Franklin et al., 2007), internalizing problems (Siu, 2009), and aggression (Munns, 2017); there is, however, a general lack of such evidence in applying Theraplay with traumatized groups. Only one study involved mother-child dyads exposed to domestic violence (Bennett, Shiner & Ryan, 2006) has been reported to our knowledge.

Group Theraplay was thus selected for the theoretical, conceptual and pragmatic reasons described below. First, this is resource-effective in terms of staff and time required, and can be delivered over eight sessions (Siu, 2009). This does not require toys for the sessions; instead it needs only simple materials such as lotion, cotton balls, newspapers, light snacks, papers, and bubbles, which can be easily supplied (Atkinson et al., 2009). Second, it can be applied with multiple family groups, which allows four or five parent-child dyads to participate in the sessions at one time. Third, it is appropriate for use with refugee families who speak different languages, as Theraplay is predominantly non-verbal in nature, by utilising play activities to communicate. However, it should be noted that its delivery requires extensive training, even for short-term programmes, as proposed by the Theraplay Institute guidelines (The Theraplay® Institute, 2017).

In addition, the researcher was able to identify a suitably trained Theraplay practitioner and group co-facilitators who were willing to conduct the sessions on a voluntarily basis. Group Theraplay was chosen to be implemented with Syrian parent-child dyads in

multiple group settings. It has fleeting/short-winded sessions lasting only 45 minutes (Munns, 2017), which were considered convenient for this study population. It was proposed that groups should be facilitated by trained professionals (with parents as co-facilitators also having been described) to address four children's core needs, which are also referred to as Theraplay principles, i.e., structure, engagement, nurture and challenge (Wettig, Coleman & Geider, 2011). These objectives were achieved through structured, non-verbal and interactive play activities.

In addition to these reasons, the cultural relevance of the selected intervention was also considered. The targeted population is known to have a family-centred culture, where families are viewed as the central units of the society. As stated in the Cultural Atlas "*Connections with one's extended family are deeply valued and act as a crucial support system emotionally, financially and socially*" in Syrian culture (Evason, 2016, "Syrian Culture: Family", para. 1). The relationships between family members are thus often expected to be close and tight. Moreover, this solidarity can be extended by family units within their neighbourhood or kin settings (Evason, 2016). Group Theraplay allows refugee families with similar needs to experience this solidarity, and this was another reason for its ultimate selection. Considering the religious sensitivity of the study population to girls attending mixed groups (Benn, Dagkas & Jawad, 2011), girls and boys were invited to separate Theraplay sessions.

#### **6.6.2. Application of Group Theraplay**

After consulting with the Theraplay practitioner, eight weeks of dyadic Theraplay sessions were planned, as this was set as the minimum recommended period (Siu, 2009). Time and venue arrangements were made by considering participants' characteristics and availability. Since the children in this study were attending school during weekdays and parents were more available during weekends, sessions were planned to be conducted during Saturdays. The selected venue for the intervention was located opposite the school of the participating children and close to their homes. Only mothers were included in the study as a general practice in attachment-focussed interventions and also to ensure the homogeneity of groups. Each session lasted for around 45 minutes. Before the intervention started, the therapist delivered an informative session for two mental health professionals and one Syrian teacher, who volunteered to assist with the intervention sessions.



The intention was to address the four main objectives of Theraplay by directing parent-child dyads to engage in the following activities:

- 1) *Structuring*: These activities included games of ‘Simon Says’ and ‘Mother May I’, which aimed to define and clarify boundaries for children. Through these games, mothers were encouraged to set limits for their children, which are important in terms of their physical and emotional security.
- 2) *Challenging*: Children were encouraged to improve their self-confidence by putting themselves forward through these activities, which included thumb-wrestling and balancing games.
- 3) *Nurturing*: Activities involved holding, cuddling, hugging and feeding. Their aim was to provide a sense of calmness and reassurance through safe physical contact, by utilizing games such as exchanging lotions from hand to hand.
- 4) *Engaging*: The purpose was to increase children’s sense of being special and unique through games like clapping and hiding cotton balls around the child’s body and clothing.

### **6.7. Research procedure**

This study was conducted between April and August 2017 at the Genc-Dusun NGO setting, which is located in Istanbul, Turkey. Before meeting with the manager of Genc-Dusun to obtain their permission for recruitment, the researcher initially contacted a psychologist who had trained as a chartered Theraplay practitioner and who resided in Istanbul. After being given details of the feasibility study, she agreed to conduct Theraplay sessions with refugee children on a voluntarily basis. To be able to conduct a Theraplay group session, one trained therapist and at least three assistant professionals are required. Thus, a Theraplay team was generated for the present study by advertising the project through the Istanbul NGO Hayat Foundation, which involves more than one hundred volunteers, including psychologists, medical and psychology students. The Hayat Foundation is a well-established charitable organization which provides psychosocial and economic support for children working in the streets and their families (Hayat Sağlık ve Sosyal Hizmetler Vakfı, n.d.). One experienced psychologist and one psychology student thus agreed to take part in the project on a voluntarily basis.

In line with the results of the cross-sectional Study I (Chapter III), engaging the intended population was sensitively handled by considering the likely distrust and doubt among trauma-exposed groups (Majumder et al., 2015). The researcher thus initially contacted and obtained approval from the manager of Genc-Dusun, who had established it as a non-profit organization. The information letters and consent forms were then distributed to parents and children (Appendices F and G). Since English was not the participants' first language, all documents were translated into Arabic. Participants completed the questionnaires pre- and post-intervention. Parents and children were administered the baseline measures in the NGO classroom. Parent reports at post-intervention were distributed and collected from the children by the researcher.

### **6.8. Measures**

Data were collected by utilizing both structured measures, which had been previously validated and widely used, and open-ended feasibility free text questions, respectively. Questionnaires were completed by parents and children both before and after the intervention, whilst feasibility free text was completed by children, parents and professionals after the Theraplay sessions had been completed. All measures which had not previously been validated in the Arabic language were translated/back-translated into Arabic. Children were presented with the measures in bilingual format (Turkish and Arabic), as they could also read and write in Turkish, whilst parents were only given Arabic measures.

Mental health problems amongst children and parents, as well as perceived attachment relationship of children, were assessed using the same validated questionnaires selected for Study I of this thesis. That is, PTSD and general, as well as emotional and conduct problems, among children were assessed by the self-rated Children Impact of Events Scale (CRIES-8), and by both the self- and parent-rated Strengths and Difficulties Questionnaires (SDQ), respectively, whilst parental mental health was measured by the General Health Questionnaire (GHQ). The Security Scale for perceived attachment security was completed by the children. Please see Chapter III for detailed information on the psychometric properties of these measures.

Additional measures used in the feasibility study were as follows:

## **6.8.1. Questionnaires**

### ***6.8.1.1. Parenting style***

Parenting style was assessed using the Parent Perception Inventory (PPI) (Hazzard, Christensen & Margolin, 1983). The PPI was originally developed as a self-administered tool to assess perceived nurturing and support, e.g., through questions such as “How often does your mom/dad play with you, spend time with you, do things with you which you like?”; or harsh and neglecting parenting, e.g., “How often does your mom/dad get mad at you, yell at you, holler at you, scream at you, shout at you?”. The PPI consists of 18 parental behaviours items, half of which describe positive parenting strategies such as time spent together, positive reinforcement, and providing comfort or assistance, whilst the remaining half describe negative parenting strategies such as corporate punishment, yelling, and ignoring. The parent-rated version of the PPI was later developed to assess parents’ perceptions of their parenting style (Chaffin et al., 2004). This later version involves 20 items, of which 18 are the same as the original PPI items, whilst the two additional items describe positive and negative parenting, respectively. Both the child- and parent-rated versions of the PPI were utilized in this study (Appendices O and P). The PPI is rated on a 5-point scale (0 = Never, 1 = A Little, 2 = Sometimes, 3 = Pretty Much, 4 = A lot). It has two subscales of positive and negative parenting.

The PPI has been widely used with various child and parent groups, including bereaved children (Wolchik, Ma, Tein, Sandler & Ayers, 2008), children with depressive symptoms (Jaenicke et al., 1987; Bruce et al., 2006), and ADHD (Hechtman et al., 2004), as well as with parents exposed to partner violence (Samuelson, Krueger & Wilson, 2012), and substance abuse (Ondersma, Delaney-Black, Covington, Nordstrom & Sokol, 2006). Since the PPI has so far only been utilized in its original English language, with no validation study using an Arabic version, this was translated and back-translated by two Arabic-speaking psychology researchers. Total PPI scores were used in this study, with a relatively acceptable internal consistency for the child- ( $\alpha = 0.73$ ) and parent-rated versions ( $\alpha = 0.62$ ).

### ***6.8.1.2. Reactive attachment disorder (RAD)***

Likely reactive attachment disorders (RAD) among children were assessed using the Relationship Problems Questionnaire (RPQ). The RPQ was developed as a parent- and

teacher-rated tool to identify likely attachment disorders in school-age children (Minnis et al., 2007). It consists of ten items, of which six describe inhibited, i.e., “Runs away when approached”, “Unpredictable friendliness”, “Aggressive to self”, “Has no conscience”, “Looks frozen with fear” and “False affection”, and four items identify disinhibited attachment behaviours, i.e., “Gets too psychically close”, “Asks personal questions”, “Too cuddly” and “Too friendly with strangers” (Appendix Q). RPQ items are rated on a 4-point scale (0 = Not at all like, 1 = A bit like 2 = Like 3 = Exactly like). The cut-off score to identify ‘likely cases’ for attachment disorder has been defined as 7 and above (Minnis et al., 2013).

The RPQ has been validated in the general population, with high internal reliability ( $\alpha = 0.85$ ) (Minnis et al., 2007). Although it was originally developed for younger children, it has also been used with youths up to 17 years old (Moran, 2014). It has been widely used with various child populations, including looked after (Laybourne, Andersen & Sands, 2008; Gurney-Smith, Granger, Randle & Fletcher, 2010) and maltreated children (Kočovská et al., 2012), as well as children with autism (Davidson et al., 2015) and attention deficit-hyperactivity disorder (Follan et al., 2011). Although the RPQ has been validated in other languages (Vervoort, Doumen, Bosmans & Verschueren, 2011), there has been no Arabic version of this measure to date. Hence, the RPQ was translated and back-translated to Arabic by two psychology researchers to be used with Syrian parents. Total RAD scores were used in this study, with satisfactory internal consistency ( $\alpha = 0.81$ ).

### **6.8.2. Feasibility questions**

One criticism of the RCT design is that it fails to explain “what works, for whom and in which context”, hence *why* an intervention has succeeded or failed (Robson, 2011). This is mainly due to the numerical questions which are utilized to test the effectiveness of an intervention, which might thus preclude participants from expressing further opinions on the study. Although feasibility studies do not include as much detailed information as interviews might provide, they do allow the use of more flexible measures such as open-ended questions or free texts. Through these questions, it is possible to capture what the participants actually think about the research process, e.g., venue and time arrangements or the intervention itself, e.g., whether it is appropriate for their culture and/or religious tradition.

In this study, children and parents who conducted the intervention sessions were administered open-ended feasibility questions (Appendix P). These questions covered issues such as clarity of instructions, suitability of the intended intervention in terms of culture, delivery of sessions, simplicity of measures administered before and after the intervention, or any difficulties encountered during the sessions. Responses were analysed by content analysis, which allows the researcher to frame the responses quantitatively, albeit with supporting quotes, following the guidelines set out by Orsmond and Cohn (2015).

### **6.9. Ethics procedure**

The same ethics procedure followed in Study I was pursued in the present research; that is, ethical approval was obtained from the University of Leicester Research Ethics Committee. Permission from the Turkish Ministry of Education, as stated by the information e-mail, was not given because counsellors were assigned to state schools for Syrian students in collaboration with the Family and Social Policy Ministry (Appendix R). Hence, the researcher co-operated with a non-profit organization, which had no requirement for additional approval from a government body such as the local educational authority in Istanbul, because of its independent status.

Informed consent forms were obtained from parents and children before the study. They were provided with information letters in which the purpose and procedure of the study were explained, especially their right not to take part, as this was entirely voluntary participation. They were assured that their participation in the study, as well as the data they provided, were confidential, and that they would remain anonymous throughout the study. To that effect, each participant was given a code number and letter, e.g., parent1-child1, parent2-child2 to protect their confidentiality. All data hard copies were kept securely locked up by the researcher. It was acknowledged that their selection was random, and they might not be offered the intervention at the outset. It was stated that positive benefits could not be guaranteed, even if they were allocated to the study group. Participants in the control group were offered the intervention at the end of the study.

Trauma exposure was not assessed in this study; however, the researcher was aware that the prevalence rates of exposure to trauma are relatively high in this population, as based

on the literature and the findings of Study I. Thus, the researcher was cautious about the possible sensitivity of the participants. Pre- and post-intervention measures were completed by parents and children with the help of the researcher, who has a Psychology background, and a Syrian volunteer, who was present during the data collection in case of need for interpretation of questions or any difficulties that might arise due to cultural or linguistic differences. Theraplay was applied by a group of mental health professionals and a volunteer Syrian teacher. Since this therapy does not include trauma reprocessing techniques which might cause distress in both children and parents, it was not anticipated that significant distress would emerge during the sessions. However, participants were encouraged to withdraw from the study at any time if they felt any distress.

## **6.10. Data analysis**

### **6.10.1. Exploratory statistical analysis**

Most feasibility research aims, including recruitment capability, data collection process, retention and completion rates, were addressed through descriptive statistics, mainly frequencies. As previously discussed in this chapter, assessing the effectiveness or efficacy of an intervention is not one of the purposes of a feasibility study. This is due to the small sample size utilized in feasibility studies, which precludes inferential analyses from being conducted (Leon, Davis & Kramer, 2011). Nevertheless, in order to understand whether the intervention is advisable at some level, preliminary analysis and evaluation of child and parent rating scales are presented in the next results chapter (Chapter VII).

The normality of the data was tested using the Shapiro-Wilk test, which showed that it was normally distributed. Independent Samples t-test and Chi-Squared Test for Independence were utilized to compare sociodemographic characteristics, as well as the severity of participants' mental health problems in the intervention and control groups. The Repeated Measures t-test was utilized to test for changes, and the direction of such changes, in relation to the primary outcome of attachment problems and the secondary outcomes of child mental health and parenting-related variables. Again, it is important to acknowledge the fact that this distinction between primary and secondary outcomes is not required for a feasibility study, but is instead important for the pilot and RCT stages.

Effect size was calculated for study outcomes to assess the extent of the difference between participants' scores pre- and post-assessment (Coe, 2002). Descriptive statistics were conducted to assess the status of children's change, i.e., mental health scores within the 'clinical' or 'normal' range, by using categorical variables.

#### **6.10.2. Feasibility analysis**

Content analysis was utilized in analysing participants' responses to open-ended feasibility questions. This type of analysis enables the researcher to systematically describe patterns in written, spoken or visual communication data in a replicable way (Bryman, 2016). Content analysis provides reliable and valid data through a quantification process. In the present study, responses were coded into categories, e.g., the responses to the question on the time allocated for the intervention were categorized into 'too long', 'too short' and 'enough'. Quotes from the feedback forms will be presented as supporting the emerging categories.

## Chapter VII

### Study II - Results



## **7.1. Introduction**

This chapter presents the findings of feasibility Study II in which the Theraplay intervention was implemented with Syrian refugee children and their parents residing in Turkey. A quantitative approach was used to address the research questions, following the feasibility criteria proposed by Orsmond and Cohn (2015) in their influential paper on “*The Distinctive Features of a Feasibility Study: Objectives and Guiding Questions*”. These criteria are related to the sampling procedure and sample characteristics, acceptability and suitability of the intervention, data collection procedure and outcome measures, resources and management, as well as any potential for improvement.

As already stated, a feasibility study does not necessitate the demarcation between primary and secondary outcomes, in contrast with a pilot or RCT design. Conceptually, however, Theraplay was mainly developed to enhance attachment relationships, for which reason children’s attachment relationships will be referred to as the ‘primary’ outcome, while other child mental health and parent-related problems (namely parenting styles and parental psychopathology) will be referred to as ‘secondary’ outcomes, although these definitions might have to be reconsidered in the light of the emerging findings. Measures were analysed by using pre- and post-intervention scores. Participants’ narrative feedbacks on the open-ended feasibility questions were analysed through content analysis, which established frequencies of categories supported by participants’ quotes. The results below are thus structured to address the five research feasibility aims of Study II.

## **7.2. Recruitment procedure and sample characteristics**

The research question of “Is the recruitment procedure appropriate in terms of intended sample?” was addressed by evaluating recruitment rates, resulting sample size and participants’ characteristics. This evaluation enabled the researcher to assess the appropriateness of the eligibility criteria for the intended study population, as well as to appraise the need for the intervention. Sample demographics and recruitment rates were analysed using descriptive statistics.

The targeted population of this study is the three and a half million Syrian refugees residing in Turkey. Approximately 3,300,000 Syrians live outside the camps (UNHCR, 2018), of whom more than half a million reside in Istanbul. Governmental organizations

mainly operate in the Southern regions of Turkey, where emergency aid is provided for refugees in camps. Consequently, reaching the majority of the population living in Istanbul, where there are no refugee camps, is a major challenge. Non-governmental organizations (NGOs) across Turkey, especially in Istanbul, try to address this service gap and play an important role in engaging with refugees by providing economic and social support, as well as integrating Syrian refugees into the host community. There are at least 43 NGOs in Turkey, of which 25 are located in Istanbul (Cilga, 2017).

In the present study, participants were accessed through one particular NGO, Genc-Dusun, which is located in the Fatih region of Istanbul where a large proportion of the Syrian refugees live. At the time of data collection, there were 60 families with 75 children who were in active contact with this NGO. All of the parents gave their consent to participate in the study (recruitment rate = 100%). This high participation rate was achieved by using a local gatekeeper organization as a recruitment base (Carroll et al., 2011), since co-operating with Genc-Dusun enabled the researcher to overcome the mistrust and fear anticipated in trauma-exposed groups. Hence, the researcher did not face any obstacles in the recruitment process.

The inclusion criteria were the likelihood of a primary diagnosis of a possible reactive attachment disorder (RAD), being aged between 8 and 14 years, ability to read and write either in Arabic or in Turkish, and having access to the NGO. Out of 75 children who were screened in terms of possible attachment disorder, 30 (40%) were rated above the clinical cut-off score and were thus included in the study. The inclusion criteria used in this study were, therefore, relatively easily accomplished in recruiting an appropriate number of participants. This high prevalence rate, which is in line with the other high-risk children groups (Zeanah et al., 2004) also supported the choice of an attachment-focussed intervention in Study II.

### **7.2.1. Sample characteristics**

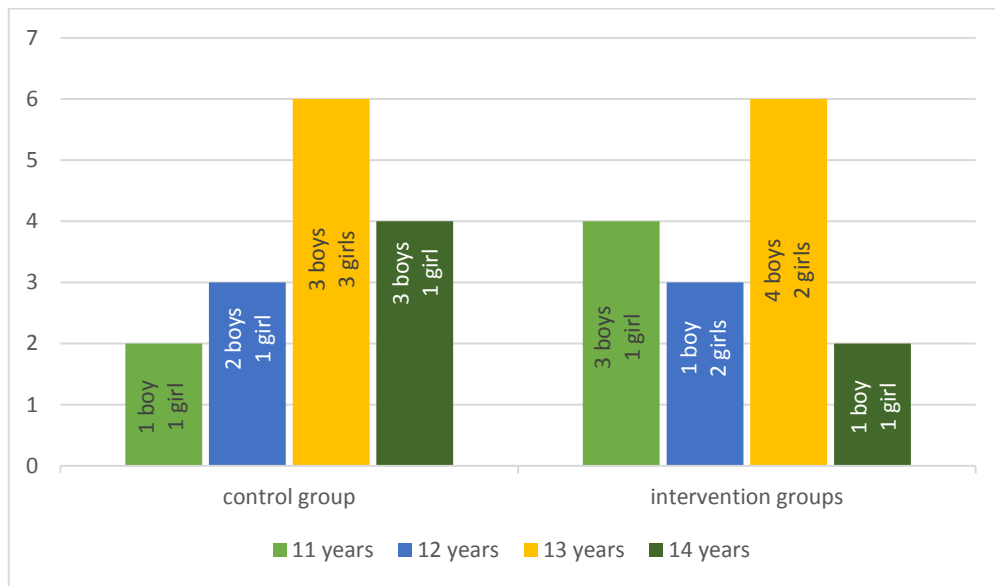
The participants' demographic characteristics are presented in Table 7.23. In total, 30 mother-child dyads were recruited for the feasibility study. Participants were allocated to either the intervention or the control group by using a stratified random sampling method, which involved dividing the study sample into homogenous groups and selecting

participants randomly from each of these groups (Marshall, 1996). In the present study, 30 children were divided into two groups of boys and girls. Among the participating children ( $n = 30$ ,  $M_{age} = 12.60$ ,  $SD = 1.03$ ), 18 were boys ( $M_{age} = 12.61$ ,  $SD = 1.09$ , Age range = 11-14 years) and 12 were girls ( $M_{age} = 12.58$ ,  $SD = 0.99$ , Age range = 11-14 years); whilst only mothers participated as a parent ( $n = 30$ ,  $M_{age} = 39.8$ ,  $SD = 6.64$ ). Age and sex distribution of children according to assigned groups, i.e., intervention versus control, are presented in a bar graph (Figure 7.18).

**Table 7.23 Sample characteristics**

<i>Children</i>	<b>Intervention group (n=15)</b>	<b>Control group (n=15)</b>
Age	Mean (SD) = 12.45 (1.05) Range = 11-14 years	Mean (SD)=12.80 (1.01) Range = 11-14 years
Sex	Boys = 9 (60%) Girls = 6 (40%)	Boys = 9 (60%) Girls = 6 (40%)
<i>Parents</i>		
Age	Mean (SD) = 40.53 (6.35) Range = 32-42 years	Mean (SD) = 39.13 (7.07) Range = 31-54 years
Income	Low = 3 (20%) Medium-Low = 12 (80%)	Low = 5 (33%) Medium = 10 (67%)
Low=Up to 2,000 TL Medium-Low=2,000-4,000 TL Medium-High=4,000 TL and more	Medium-High = 0	High = 0
Education	Primary = 5 (33%) Secondary = 8 (53%) High school = 2 (14 %) Bachelor = 0 Higher Education = 0	Primary = 4 (27%) Secondary = 7 (46%) High school = 4 (27 %) Bachelor = 0 Higher Education = 0

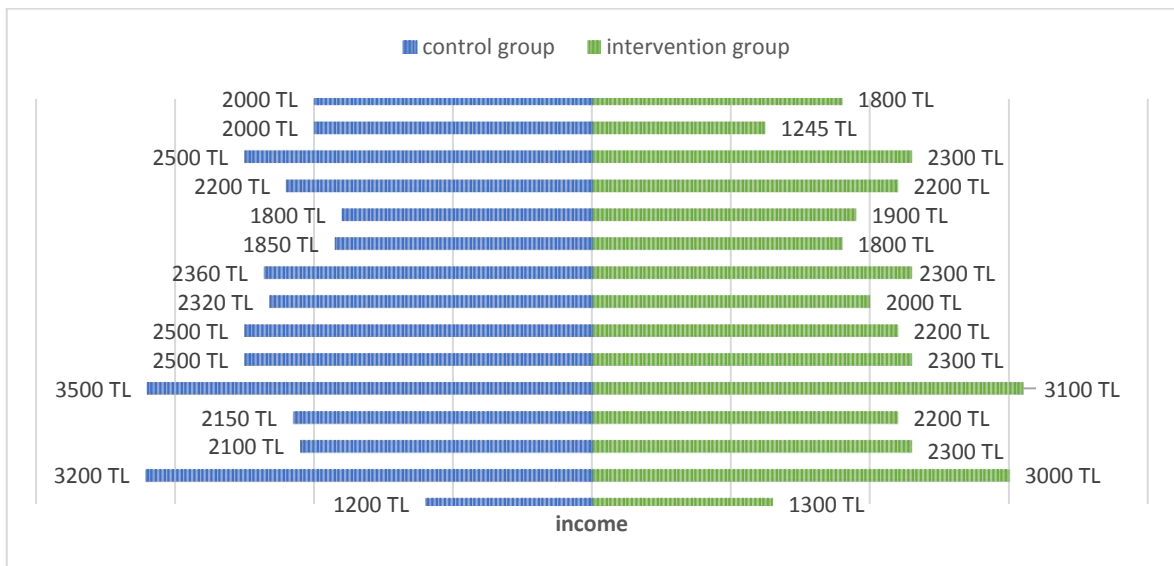
**Figure 7.18 Age and sex distribution of children in intervention and control groups**



Among the participants, 13 (44%) fell into the Very Low income category, which was classified based on a monthly income of up to 2,000 Turkish Liras, 17 (56%) were categorized as being in the Low-Medium category referring to a monthly income of 2,000-4,000 TL, whilst none of the participating families were assigned to the category of Medium-High income (4,000 TL and greater).<sup>2</sup> Monthly income categories of participating families according to their assigned group, i.e., intervention versus control, are presented in Figure 7.19.

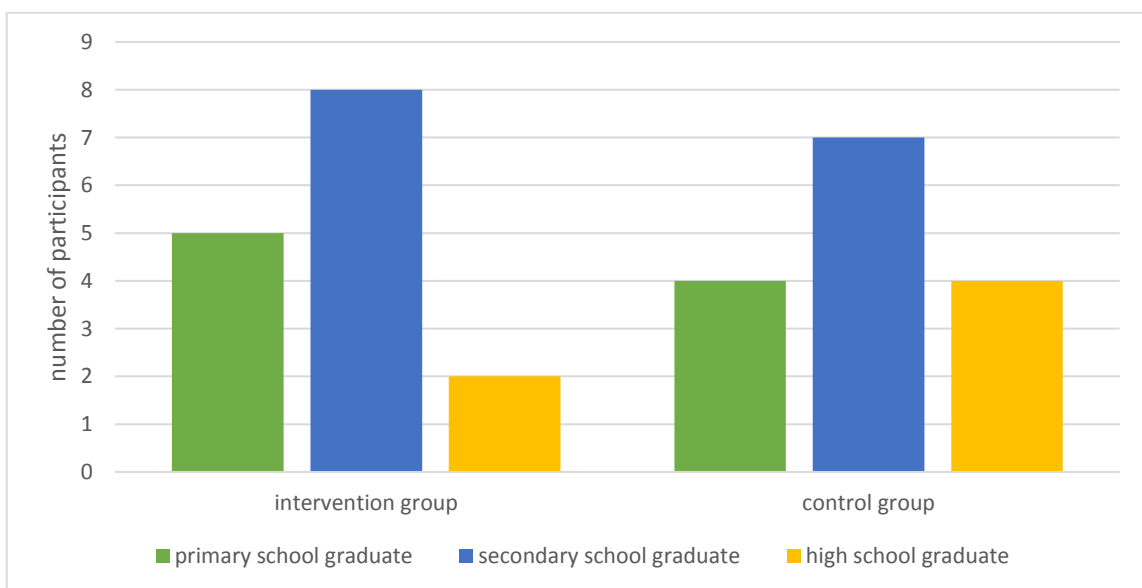
<sup>2</sup> See p.75 for monthly income categorization

**Figure 7.19 Monthly income of the study participants**



Among the participants, 9 (30%) parents were graduates of primary (5 years), 15 (50%) were graduates of secondary (8 years), and 6 (20%) parents were graduates of high school (12 years), whilst no participants reported having a degree in higher education. The number of mothers in the intervention and control groups in terms of their educational status are presented in Figure 7.20. A low socioeconomic and educational status among parents was anticipated as the sample was recruited from a similar area to the sample in Study I.

**Figure 7.20 Parental education according to intervention and control groups**

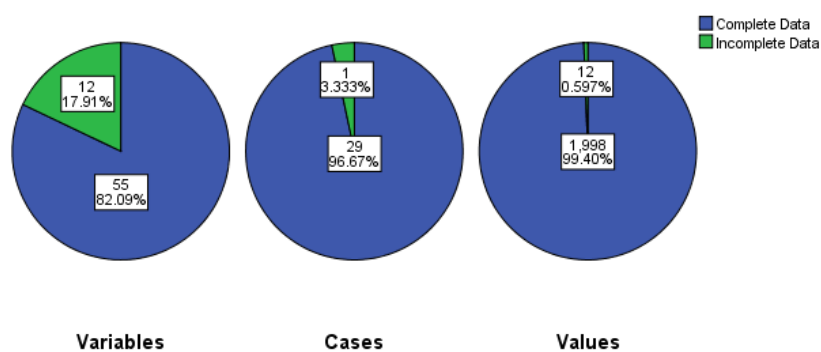


### 7.3. Data collection process and outcome measures

The data collection process, and the completion and acceptability of measures were evaluated using both descriptive statistics and participants' answers to the feasibility questions related to appropriateness of the measures utilized in pre- and post-tests ("Did the questionnaires give you enough opportunity to express how you felt? Were they easy to understand? Were they appropriate to your culture?"). The primary research question to be addressed by this intended evaluation was "Was the data collection process and selected measures suitable for the participants?"

There was only a small proportion of missing data (0.6%) in parent-rated questionnaires at pre-test (Figure 7.21). This was because of one parent (3.3% of all cases) who did not complete the GHQ (parental mental health questionnaire) which included 12 items (18% of all variables). Parents' responses to the related feasibility questions were in line with this finding. They reported no significant difficulties in understanding and completing the questionnaires. All parents thought the questionnaires were easy to understand, appropriate, and gave them enough opportunity to express their emotional state, e.g., "good test, and I think the questions were suitable for all cultures", "yes, easy and understandable".

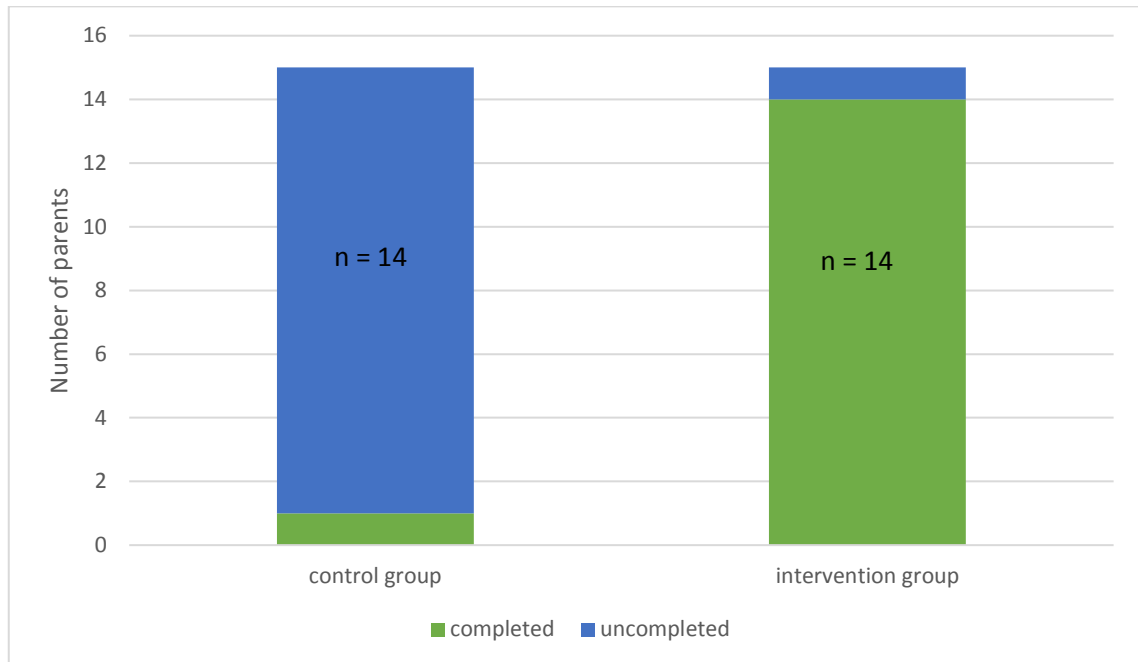
*Figure 7.21 Missing data analysis for parent-rated measures*



However, only 15 parents (50%) completed measures at Time 2. The majority of the Time 2 measures were obtained from parents in the intervention group, whilst only one parent

in the control group completed those at the same time point (Figure 7.22). No missing data were identified in the Time 2 data provided by those parents.

**Figure 7.22 Drop-out cases in parent-rated data at Time 2**

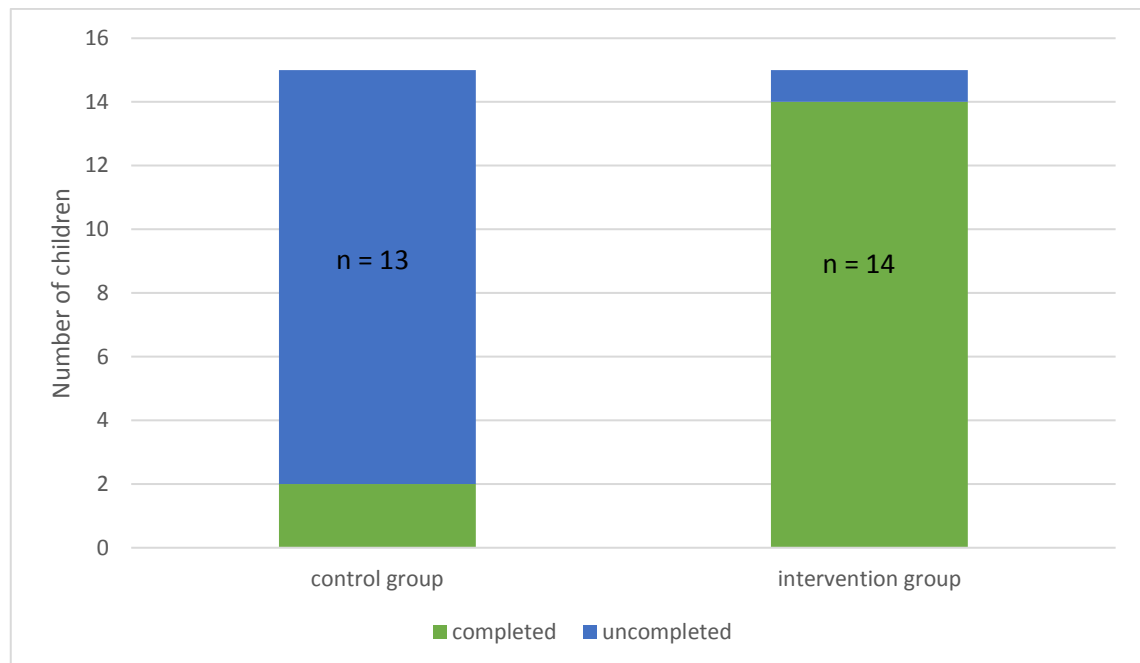


In terms of child-rated measures, no missing data were revealed at baseline. However, children struggled to understand several of the questionnaire items. Some children needed items to be explained by the interpreter. They understood better when questions were read out loud to them in Arabic. Five children (33%) found the questionnaires too long and also difficult to understand, as they responded to the related feasibility questions as, e.g., “it was difficult, and it was too much”, “it was so difficult, and I was a bit worried but the answering them were interesting”. The remaining 10 children (67%) thought that the questionnaires were easy to understand, e.g., “yes, it was easy and nice, and I was happy to fill these forms”, “yes, it was so easy”.

Similar to parents, a considerable amount of child-rated data were missing at Time 2. Data were obtained from 16 children (53.3%), of whom 14 were in the intervention group and two in control group (Figure 7.23). There were no missing data in the data collected from these 16 children. However, there was a considerable number of participants who dropped out (both in child- and parent-rated data) at Time 2. Only two parent-child dyads in the control group were accessed at Time 2. Of those, two children and one parent

completed the measures, where the other parent did not return the questionnaires. Data obtained from the control group were thus excluded from the subsequent analysis, due to the small sample size. Pre-and post-intervention measures completed by the 14 parent-child dyads were analysed.

*Figure 7.23 Drop-out cases in child-rated measures completed at Time 2*



There are several possible reasons for the high drop-out rate among participants in the control group. Children and parents in the control group could have not been accessed since: 1) three families (20%) who were related to each other moved back to Syria, and one family (7%) fled to Germany seeking asylum; 2) the NGO had to stop food aid for a short period because of their limited resources, thus parents were no longer incentivised to attend; and 3) schools were closed at the time when the intervention was completed, therefore parents could not be accessed through the teachers and their children. In contrast, almost all children (n = 14) in the intervention group completed all eight-sessions, despite the reasons mentioned above. Their engagement might also indicate their satisfaction with the selected intervention

Children in the intervention group completed the Time 2 measures on the day of the last session. Their parents had completed the measures either during the brief



psychoeducation and the Theraplay group session or in their homes. Overall, the collected dataset was sufficient to allow analyse for feasibility purposes as it was relatively complete and usable. Parent-rated measures were easy to understand and appropriate in terms of the culture, as indicated by parental feedback and low missing data rates. However, some children struggled to complete the questionnaires. Thus, child-rated measures should preferably be applied using a one-to-one structured interview format, during which the researcher should read the items with the help of an interpreter, and clarify their meaning when required.

#### **7.4. Acceptability and suitability of the research procedure and Group Theraplay**

The acceptability and suitability of the selected intervention, as well as that of the research procedure, was evaluated by utilizing children's and parents' feedback to the related feasibility questions (Table 7.24). The research question to be addressed in this section was "Is the research procedure and intervention suitable for, and acceptable to, the participants?"

**Table 7.24 Feasibility questions for children and parents regarding suitability and acceptability of the research procedure and Theraplay**

Children	Parents
<i>Please tell us if the instructions were easy or simple to understand during the play activities?</i>	<i>What do you think about the group you attended? Was it clear to understand?</i>
<i>To what extent were the play activities easy and fun to do?</i>	<i>To what extent was it informative and useful in terms of your and your child's needs?</i>
<i>How did you find the time you had for the play activities? Too short? Too long?</i>	<i>How did you find the time allocated for your child's play sessions? Has it created a burden?</i>
<i>How did you find the place?</i>	n/a
<i>Have you experienced any problems by taking part in the play activities?</i>	n/a
<i>Which parts of the play activities were relevant to your culture and which were not? Why?</i>	<i>Which parts of the play activities were relevant to your culture and which were not? Why?</i>
<i>Please let us know in your own opinion which play activities were helpful, and which were not helpful? Why?</i>	<i>Please let us know of your own opinion on which parts of the course were most and least helpful to you and your child? Why?</i>

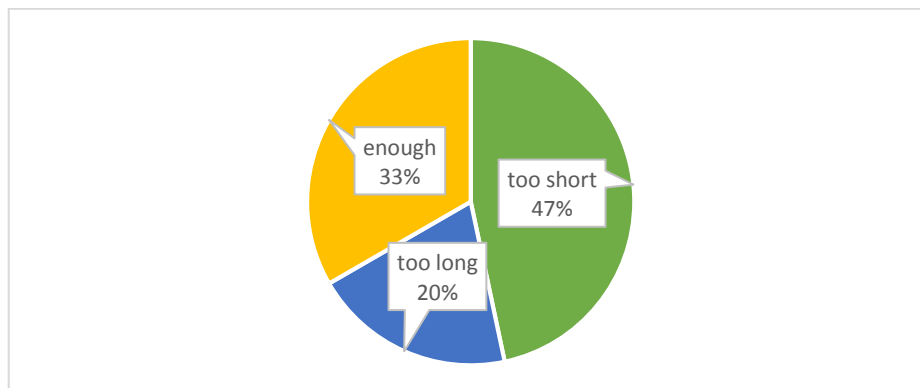
The main pitfall of the present study was engaging with mothers in terms of attendance of the intervention sessions. Out of 15, only two parents (13.3%) attended the intervention sessions, and of those for just two out of the eight sessions planned (retention rate = 25%). For those who were not able to attend the weekly sessions, a brief psychoeducation session was delivered by the Theraplay professional. This brief session consisted of two parts. During the first part, a general background on attachment theory, attachment styles and importance of attachment security were discussed. During the second part the Theraplay games were taught and practiced with parents. This overview session lasted

for about two hours, and was attended by six parents. Parents were asked to complete a feasibility questionnaire after this session.

Taking this adjustment into consideration, parental feedback on the Theraplay intervention was positive. All six parents found the instructions clear, e.g., “*it was easy to understand*”. They reported that the intervention was useful in terms of the child’s mental health, e.g., “*fun games are good for their mental health*”, “*good for psychological development of children, especially after they left the war*”. Moreover, all six parents thought that the intervention was relevant to their culture. However, they recommended more religious components to be included in the sessions, e.g., “*teaching Quran would be good*”. Another parent stated that the language was a barrier, as she stated, “*songs were Turkish, it is not in our language*”. They reported that games were helpful in engaging with the children, e.g., “*drawing was very useful, and games promoted child’s instinct of love people, doing good things and helping others*”. All parents reported that they would recommend this intervention to other families, e.g., “*yes, we hope all families participate in this study with you*”.

In contrast, children were more consistent in attending the sessions. All children but one (who attended for five weeks due to a health problem) were able to attend all eight sessions, giving high adherence (93%) and retention (97.5%) rates. Children’s feedback on the time allocated for the intervention sessions is summarized in the pie-chart below (Figure 7.24). The majority thought that the sessions were too short, e.g., “*it was short, and each game was five minutes long*”; whilst one in three children found it “*long enough*” and one in five said that “*it was long*”.

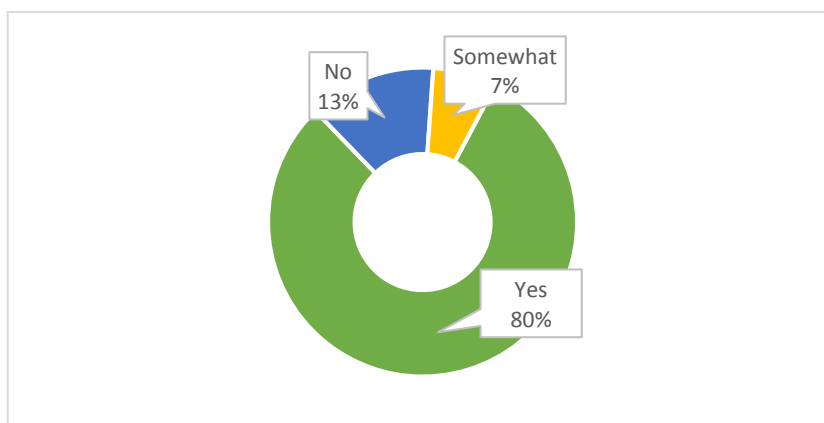
**Figure 7.24 Summary of children’s feedback on the allocated time**



Overall, children stated that the instructions during the Theraplay sessions were easy and understandable. Six children (40%) reported that they could understand the instructions only after the interpreter had translated them into Arabic, e.g., “*yes, it was easy to understand after it was explained by the teacher*”; whilst two children responded that they had difficulty in understanding, i.e., “*almost no*” or “*not much*”. The majority of them (86.6%, n = 13) reported that the activities were fun and suitable, e.g., “*yes, all of them were interesting, really good and easy...nothing is easier and more beautiful than these games!*” or “*all of them were useful for me*”. On the other hand, two male participants aged 13 and 12 years reported that the games were not suitable for their age, e.g., “*the games were interesting but unsuitable for me, they were for a child*”.

In terms of the possible burden that the children might have encountered by taking part in the sessions, no children reported any problems in this regard, except one who was living quite a long distance away. She mentioned that she had struggled because “*my home is too far from the place*”. All 14 children stated that Theraplay was relevant to their culture, e.g., “*There were no unsuitable games and all of these games I played in Syria*” or “*the games we played were all appropriate*”. Moreover, most children reported that they would recommend Theraplay to other children in similar situations, which might indicate a high satisfaction level (Figure 7.25). Twelve children (80%) would recommend this intervention to their peers, whilst the two adolescents mentioned above would not, as they found the play activities to only be suitable ‘for children’.

**Figure 7.25 Overall children’s satisfaction**



### **7.5. Resources and capacity to plan and implement Theraplay**

Resources and management capacity were evaluated by addressing the fourth research question of “Were there adequate resources and management capability to apply the intervention?”

Although this project had a very limited budget, the researcher managed to conduct this intervention study without considerable constraints in terms of resources. Gathering a professional team, including a professional trained in Theraplay techniques and three other assisting professionals, had aroused concern at the beginning. However, this was addressed by finding volunteer professionals through NGOs. The therapist delivered the intervention sessions with the help of another psychologist and a psychology student, as well as a Syrian teacher, voluntarily. This voluntary participation should not, however, be assumed to be generalizable in other contexts, and staff costs should be considered at the planning stage, in particular to gain access to higher-level Theraplay skills.

The application of Theraplay carried a relatively low cost as it required only simple materials, e.g., cotton ball, lotion, etc. to be used in the games. The venue was freely available for conducting the sessions as it was provided by the NGO. The researcher, as she was studying for her PhD in the UK, was present only before and after the intervention to administer the pre- and post-measures to the participants, and also to ensure that ethical procedures were adhered to. Participants were clearly informed that they could withdraw from the study at any time. Confidentiality was addressed by assigning code numbers to participants and their names, along with the data, were only initially held by the researcher. The anonymized data was subsequently transferred to a statistical programme which had been previously used by the researcher.

### **7.6. Potential for improvement among participants**

The final research question of this study was “Was the selected intervention promising in terms of the defined outcome?” This was addressed through a preliminary analysis of the quantitative data, which was obtained by pre- and post-intervention measures, as well as through content analysis of narrative comments by parents in response to the question “Have you recognized behavioural changes in your child?”

### **7.6.1. Preliminary analysis**

Data were analysed using the Statistical Package for Social Sciences, SPSS version 22.0 for Windows. Since Time 2 data could not be obtained from most of the participants in the control group ( $n = 13$ , drop-out rate = 86%), so the effects of the intervention in terms of a comparison between the groups could not be analysed or determined. Instead, the change in outcome was analysed on the basis of data provided by 14 child-parent dyads in the intervention group. Parametric tests were utilized as the data was normally distributed ( $p > 0.005$ ). At baseline, participants in the intervention and control groups were compared using the Independent Samples t-test and the Chi-Squared Test for Independence. An online AI-Therapy Statistics tool was utilized to assess the effect size for outcome variables that were found to have significantly improved (AI-Therapy, n.d.).

The Repeated Measures t-test was utilized to establish any changes and their direction in the main outcome variable, i.e., attachment problems, which was assessed through the parent-rated Relationship Problems Questionnaire (RPQ) and the child-rated Security Scale (SS), as well as the secondary outcomes, i.e., child mental health and parent-related problems. As in Study I, children's mental health was assessed by the child-rated Children's Revised Impact of Events Scale (CRIES-8 item) and the parent-rated Strengths and Difficulties Questionnaire (SDQ), whilst parenting-related variables, i.e., parenting styles and parental mental health, were assessed by the child- and parent-rated Parent Perception Inventory (PPI) and the parent-rated 12 items General Health Questionnaire (GHQ-12), respectively. Descriptive statistics were conducted to assess any change in mental health among the children, i.e., from the clinical to the normal range, using categorical variables.

#### ***7.6.1.1. Baseline comparison between intervention and control group***

Of the 75 children whose parents consented to take part in the study, 30 were included, as they were rated above the clinical cut-off score for likely Reactive Attachment Disorder (RAD). Parent-child dyads were randomly assigned to either the intervention ( $n = 15$ ) or the control group ( $n = 15$ ). Of those in the control group, only two participants completed the Time 2 measures (and were hence removed from further analysis), whilst almost all participants ( $n = 14$ ) in the intervention group completed the questionnaires at the second time point.

Participants assigned to the intervention and the control group were compared in terms of sociodemographic characteristics and mental health problems at baseline. An Independent Samples t-test was conducted for continuous variables of child and parent age, monthly income and education in years. Results are shown in Table 7.25.

**Table 7.25 Comparison of demographic characteristics of participants in the intervention and control group**

	Intervention group	Control group	t	df	Sig.
	Mean (SD)	Mean (SD)			
<b>Child age</b>	12.40 (1.05)	12.80 (1.01)	-1.05	28	0.29
<b>Parent age</b>	40.53 (6.35)	39.13 (7.07)	0.57	28	0.57
<b>Income</b>	2.278 (553.05)	2.129 (506.23)	0.77	28	0.44
<b>Education</b>	7.53 (2.29)	8.26 (2.65)	-0.81	28	0.42

There were no significant differences between the two groups in terms of child age  $t(28) = -1.05, p = 0.29$ , parent age  $t(28) = 0.57, p = 0.57$ , monthly income  $t(28) = 0.77, p = 0.44$ , or parental education  $t(28) = -0.80, p = 0.42$ . That is, child-parent dyads in the intervention and the control groups were of similar profile.

The Chi-squared test for Independence was utilized to compare baseline categorical variables of child and parent mental health status, i.e., PTSD and GMHP in children, and general psychopathology in parents. Specific mental health problems measured by the SDQ subscales of emotional, conduct, hyperactivity and peer-related problems were not analysed due to the violation of the Chi-squared test of having at least five cases in each cell (Pallant, 2013). Results are shown in Table 7.26.

**Table 7.26 Comparison of baseline mental health status between intervention and control group**

	Intervention group		Control group			
	N (%)		N (%)	$\chi^2$	Sig.	Phi.
<b>PTSD</b>	10 (47%)		11 (52%)	0.00	1.00	0.073
<b>GMHP</b>	6 (60%)		4 (40%)	0.15	0.69	-0.14
<b>GHQ</b>	4 (40%)		6 (60%)	0.27	0.59	0.17

*Note: PTSD = Post-traumatic stress disorder, GMHP = General mental health problems, GHQ = General Health Questionnaire*

There was no significant difference between children who were assigned to the intervention and the control group in terms of PTSD  $\chi^2(1, n = 30) = 0.00, p = 1.00, \phi = 0.073$ , or general mental health status  $\chi^2(1, n = 30) = 0.150, p = 0.69, \phi = -0.141$ . A Chi-squared test for Independence also indicated no significant difference between parents in the two groups in terms of their psychopathology status (GHQ)  $\chi^2(1, n = 29) = 0.276, p = 0.599, \phi = 0.170$ . That is, participants in both groups were similar in terms of their presentation of mental health needs.

### 7.6.1.2. Changes in attachment scores

Descriptive statistics revealed that the rate of likely attachment disorder among children decreased by 40% post-intervention (Table 7.27). That is, six children who had been rated above the cut-off score for likely RAD pre-intervention had RPQ scores within the normal range post-intervention. Children's RPQ scores at pre- and post-intervention are presented in the following graph (Figure 7.26).

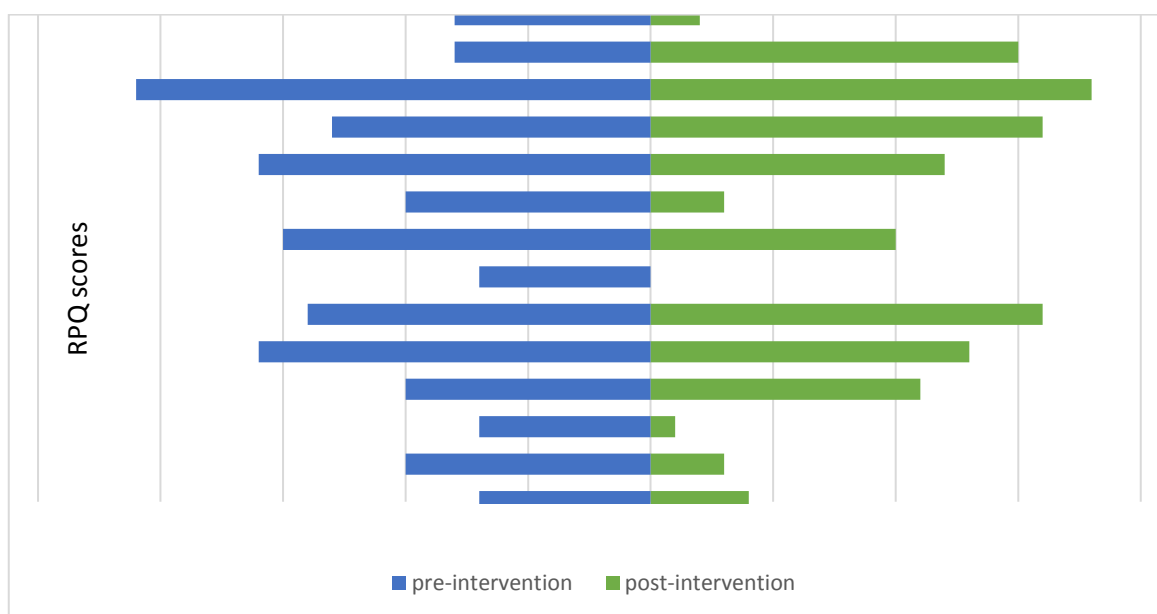
**Table 7.27 Children's likely attachment disorder at baseline and post-intervention**

	Baseline (n=15)		Post-intervention (n=15)	
	Mean (SD)	N (%)	Mean (SD)	N (%)
<b>RPQ total</b>	11.38 (4.29)	15 (100%)	8.85 (6.41)	8 (60%)
<b>Availability</b>	35.18 (6.74)	n/a	35.57 (4.63)	n/a
<b>Dependency</b>	49.26 (9.17)	n/a	50.27 (4.86)	n/a

*Note: RPQ = Relationship Problems Questionnaire, Availability = Security Scale parental availability subscale, Dependency = Security Scale parental dependency subscale*



**Figure 7. 26 RPQ scores at pre- and post-intervention**



The Repeated Measures t-test was conducted to determine whether there was a statistically significant difference between pre- and post-intervention scores for both parent-rated attachment problems (RPQ) as well as child-rated attachment security scores (SS) (Table 7.28). Results showed that an eight-week Group Theraplay intervention consisting of weekly sessions elicited a statistically significant change in RPQ scores for children with likely attachment disorder,  $t(14) = 2.19, p < 0.05$ , thus indicating that the intervention is promising in terms of reducing attachment-related symptoms. The effect size was calculated as  $r = 0.40$ , thus indicating a medium effect size according to the criteria of 0.1 = small effect, 0.3 = medium effect and 0.5 = large effect, as proposed by Cohen (1988).

The same analyses were repeated for the child-rated Security Scale scores. Two consecutive Repeated Measures t-tests were conducted to determine whether there was a statistically significant difference between perceived attachment security as assessed by the parental dependency and availability subscales of SS before and after they received Theraplay sessions. Results revealed that there were no significant difference between the scores of perceived parental availability  $t(15) = -0.67, p = 0.51$ , and dependency  $t(15) = -1.06, p = 0.30$  obtained at pre- and post-assessment, indicating that perceived attachment security was not improved by the Group Theraplay intervention.

**Table 7.28 The Repeated Measures t-test of attachment variables**

	t	95% CI		Sig.
		Lower	Upper	
<b>RPQ total</b>	2.19	0.059	4.83	0.045*
<b>Availability</b>	-0.67	-4.74	2.47	0.51
<b>Dependency</b>	-1.06	-6.87	2.30	0.30

*Note: RPQ = Relationship Problems Questionnaire, Availability = Security Scale parental availability subscale, Dependency = Security Scale parental dependency subscale*

### 7.6.1.3. Changes in child mental health problems

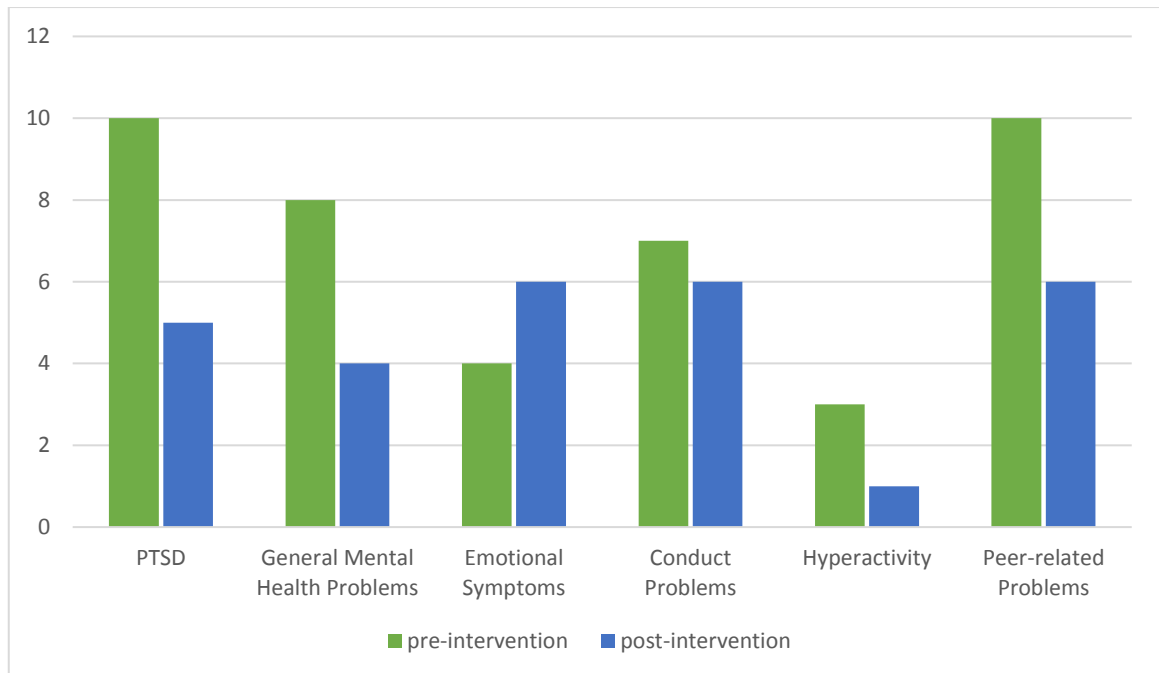
Children's PTSD, general and specific mental health problems scores at baseline and post-intervention are presented in Table 7.29. Five of the ten children who had scored above the clinical cut-off for PTSD before the intervention did not meet these criteria at Time 2. Similarly, four out of eight children who had scored within the abnormal range with the GMHP (as assessed by SDQ total difficulties scores) scored within the normal range at post-intervention. The rate of children found to be in the abnormal range for specific mental problems on the SDQ subscales also decreased, with the exception of emotional problems. Two children within the normal range at baseline scored within the clinical range for emotional problems post-intervention (Figure 7.27).

**Table 7.29 Child mental health problems at baseline and post-intervention**

	Baseline (n=15)		Post-intervention (n=14)	
	Mean (SD)	N (%)	Mean (SD)	N (%)
<b>CRIES-8</b>	19.86 (8.43)	10 (66 %)	16.50 (3.61)	5 (33%)
<b>SDQ total</b>	16.26 (6.46)	8 (53%)	14.35 (4.89)	4 (27%)
<b>SDQ emotional</b>	3.35 (2.05)	4 (27%)	3.81 (2.35)	6 (43%)
<b>SDQ conduct</b>	3.06 (1.75)	7 (47%)	3.14 (2.14)	6 (43%)
<b>SDQ hyperactivity</b>	5.26 (2.25)	3 (20%)	4.92 (5.43)	1 (7%)
<b>SDQ peer</b>	4.60 (2.44)	10 (67%)	3.00 (1.35)	6 (43%)

*Note: CRIES-8 = Children Impact of Events Scale, SDQ total = Strengths and Difficulties Questionnaire total difficulties score; SDQ emotional = SDQ emotional problems subscale, SDQ conduct = SDQ conduct problems subscale; SDQ hyperactivity = SDQ hyperactivity subscale; SDQ peer = SDQ peer-related problems subscale.*

**Figure 7.27 Children with mental health problems pre- and post-intervention**



The Repeated Measures t-test was conducted to assess whether these changes in mean scores, as indicated by the descriptive statistics, were statistically significant (Table 7.30). Results revealed that there was a significant reduction between the pre- and post-intervention CRIES scores  $t(13) = 2.65$ , 95% CI: 0.88 to 8.68,  $p < 0.05$ ; SDQ total difficulties  $t(13) = 3.49$ , 95% CI: 1.09 to 4.62,  $p < 0.05$ ; and SDQ hyperactivity sub-scale scores  $t(13) = 4.48$ , 95% CI: 1.25 to 3.5,  $p < 0.05$ . These results indicate that PTSD, GMHP and peer-related symptoms had significantly decreased after the intervention. The effect sizes of difference in PTSD, GMHP and peer-related problem scores were calculated as  $r = 0.59$ ,  $r = 0.623$  and  $r = 0.389$ , respectively, indicating large and medium effect sizes. Thus, the differences between these two groups were large and consistent, consequently indicating a degree of promise as to the efficacy of Group Theraplay before further testing through an RCT.

**Table 7.30 Repeated Measures t-test for child mental health problems**

	t	95% CI		Sig.
		Lower	Upper	
<b>CRIES</b>	2.65	0.88	8.68	0.020*
<b>SDQ total</b>	3.49	1.09	4.62	0.004*
<b>SDQ emotional</b>	0.30	-0.86	1.15	0.765
<b>SDQ conduct</b>	-1.85	-1.54	0.115	0.086
<b>SDQ hyperactivity</b>	4.48	1.25	3.59	0.001*
<b>SDQ peer</b>	2.08	-0.03	2.03	0.058

*Note: CRIES-8 = Children Impact of Event Scale, SDQ total = Strengths and Difficulties Questionnaire Total Difficulties score; SDQ emotional = SDQ emotional problems subscale, SDQ conduct = SDQ conduct problems subscale; SDQ hyperactivity = SDQ hyperactivity subscale; SDQ peer = SDQ peer-related problems subscale.*

#### **7.6.1.4. Changes in parent-related variables**

Descriptive statistics were repeated for baseline and post-intervention scores of parent-related variables, i.e., parental psychopathology (GHQ), as well as for positive and negative parenting practices perceived by children (C-PPI) and parents (P-PPI). Results are presented in Table 7.31. A disproportionate increase in parental psychopathology was noted, although this was not the focus of Theraplay. Only four parents (out of 15) scored above the cut-off for likely clinical psychopathology at baseline. This proportion increased to 14 parents at the end of the eight-weeks' intervention for their children.

**Table 7.31 Descriptive statistics of parent-related variables at pre- and post-intervention**

	Baseline (n=15)		Post-intervention (n=14)	
	Mean (SD)	N (%)	Mean (SD)	N (%)
<b>GHQ-12</b>	10.53 (5.60)	4 (26%)	21.0 (3.06)	14 (93%)
<b>C-PPI (positive)</b>	21.54 (6.27)	n/a	19.29 (5.73)	n/a
<b>C-PPI (negative)</b>	13.52 (4.27)	n/a	13.49 (3.34)	n/a
<b>P-PPI (positive)</b>	24.82 (5.16)	n/a	26.70 (5.02)	n/a
<b>P-PPI (negative)</b>	17.86 (5.91)	n/a	17.71 (5.77)	n/a

*Note: GHQ-12 = General Health Questionnaire; C-PPI: Child-rated Parent Perception Inventory; P-PPI: Parent-rated Parent Perception Inventory; (positive): positive parenting subscale; (negative): negative parenting subscale*

The statistical significance of differences between the mean scores of parent-related variables between pre- and post-intervention was tested using the Repeated Measures t-test (Table 7.32). As expected, there was a significant difference between pre- and post-intervention GHQ scores  $t(14) = -6.53$ , 95% CI: -13.6 to -6.8,  $p < 0.001$ , showing that parental psychopathology symptoms were significantly increased. On the other hand, there was no significant change in either child- or parent-rated PPI positive and negative subscales, although parent-rated positive parenting has a trend towards significance, indicating that there were no differences between perceived parenting by parents and children pre- and post-intervention.

**Table 7.32 Repeated Measures t-test for parent-related variables**

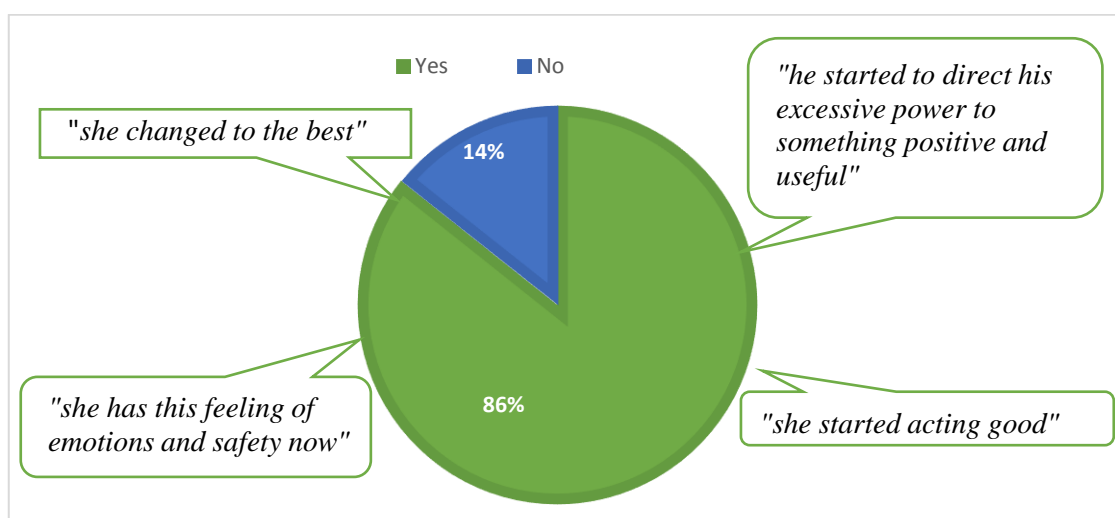
	T	95% CI		Sig.
		Lower	Upper	
<b>GHQ</b>	-7.08	-13.68	-6.88	0.000*
<b>C-PPI (positive)</b>	1.58	-0.88	5.75	0.137
<b>C-PPI (negative)</b>	0.080	-3.49	3.76	0.937
<b>P-PPI (positive)</b>	-2.09	-4.48	-0.44	0.055
<b>P-PPI (negative)</b>	0.319	-2.88	3.88	0.755

*Note: GHQ = General Health Questionnaire; C-PPI: Child-rated Parent Perception Inventory; P-PPI: Parent-rated Parent Perception Inventory; (positive): positive parenting subscale; (negative): negative parenting subscale*

### 7.6.2. Feasibility evaluation

The answers to the question “*Have you recognized behavioural changes in your child?*”, as provided by the parents, are presented in the graph below (Figure 7.28). Twelve parents (86%) reported that they had noticed a positive change in their children’s behaviour, whilst two parents reported no change (14%). The feedback was brief, without elaboration on the nature of these changes and the reasons behind them, e.g., “*nothing has changed*” or “*yes, there are changes in my daughter*”, hence it was not possible to gain a more in-depth understanding of those comments.

**Figure 7.28** Parents' responses to the feasibility question on improvement in their children's behaviour



## 7.7. Discussion

This study was intended to evaluate the feasibility of a psychosocial intervention to address emerging parental risk factors. Given the findings of Study I, an attachment-based intervention was considered appropriate, and thus Group Theraplay was subsequently selected and implemented with 15 Syrian refugee families. Results are only briefly discussed in this section, as an overarching discussion will be presented in the following General Discussion Chapter (Chapter VIII).

The first research aim was addressed by establishing the recruitment rate among participants who were eligible to participate. Thirty out of 75 children (40%) were rated above the cut-off score for likely attachment disorder, which is consistent with evidence available from other high-risk groups of children (Zeanah et al., 2004). Moreover, this relatively high rate of attachment disorder among refugee children indicated that the selected intervention was relevant to the intended study population. Furthermore, the second aim was addressed using both descriptive statistics and content analysis, revealing that the data collection procedures and selected measures were appropriate. Both child- and parent-data in the intervention group were mostly completed; however, data from the control group were excluded from analysis due to the high drop-out rate (93%). Participants' responses to the feasibility question on the measures were positive in terms of suitability, clarity and relevance.

The main pitfall of the study was revealed in addressing the third aim of acceptability and suitability of the research procedure and the intervention. Although high recruitment rates were established prior to the intervention – that is, all parents agreed to participate – parents' adherence (13.3%) and retention rate (25%) was very low, which limited the impact of any subsequent evaluation (Dumka, Garza, Roosa & Stoerzinger, 1997). However, six parents participated in the complementary session conducted after the intervention. Feasibility responses showed that both parents and children who attended the sessions found Therapy to be suitable for their culture. Six children (40%) reported signs of there being a language barrier as they responded that they could only understand the instructions after the interpreter repeated them. Moreover, two children reported that the intervention was not appropriate for their age, so future activities would thus need to be adapted to be developmentally appropriate to different age groups.

Potential improvements in children's attachment as the primary outcome, as well as child and parent mental health and parenting style as secondary outcomes, were assessed through preliminary and content analyses. Descriptive statistics revealed that 40% of children who scored above the clinical cut-off score for likely reactive attachment disorder at pre-intervention were rated within the normal range post-intervention. Moreover, this change between Time 1 and Time 2 was found to be significant, with a medium effect size (0.40). However, there was no change in perceived parent availability and dependency specifically. This discrepancy between parent- and child-reports with regards to attachment might be due to the different nature of the questionnaires used since RPQ assesses likely attachment disorder, whereas the Security Scale was developed for perceived secure attachment in children. As shown in the literature, the features of attachment disorder and insecure attachment are conceptually and clinically distinct (Minnis et al., 2009); moreover, supporting evidence showed that children who are classified in the secure attachment category might show the symptoms of Reactive Attachment Disorder, and vice versa (O'Connor et al., 2003; Zeanah et al., 2005)

Five children who had scored above the clinical cut-off for PTSD before the intervention no longer met the criteria, whilst 50% of children who had scored within the clinical range on GMHP did not meet the criteria post-intervention. These findings were supported by the feasibility responses of parents, as the majority (86%) recorded a

positive change in their children's behaviour. In contrast, results revealed increased psychopathology in parents post-intervention (66%), which could be related to their increased awareness due to the intervention itself (Ballard, Wieling & Forgatch, 2017). Moreover, low adherence and retention rates amongst parents could thus be explained by their psychopathology (Nock & Ferriter, 2005). The motivation of refugee parents in the present study to attend the intervention could thus have been limited due to increased psychopathology. This increased psychopathology, on the other hand, cannot be attributed to the intervention due to limited parent engagement.

The results of the present study need to be considered within certain methodological limitations. First of all, excluding the control group from the analysis due to the high drop-out rate could be considered a significant limitation as to the evidence for the potential efficacy of the Theraplay intervention. Future studies might take into consideration that the population is highly mobile. Secondly, parents could not be engaged in the intervention session, which precluded us from drawing conclusions as to any improvement to attachment in the parent-child dyad. More inclusive discussion on these limitations will be reviewed in the following chapter.



# Chapter VIII

## General Discussion

## **8.1. Introduction**

This overall objective of this thesis was to investigate the role of parental factors in the development of refugee children's mental health problems and the feasibility of a conceptually linked psychosocial intervention. In the first study presented in this thesis, a parenting-based exploratory model that included the analysis of the effect of perceived attachment, parenting styles and parental mental health on the mental health problems of refugee children, was tested using a cross-sectional design with 322 Syrian refugee children and their 263 parents living in Istanbul. The second study sought to investigate the feasibility of an attachment-based intervention using an experimental design with 30 Syrian parent-child dyads. Although the results were briefly discussed at the end of each study, this chapter critically considers the integrated findings of the two studies in the context of the literature. Next, the methodological implications, limitations and future research opportunities are highlighted. The chapter concludes with a discussion of the policy, service and practical implications of the findings in relation to refugee children and their families.

## **8.2. Summary of key findings**

Study I addressed the question "Which parenting-related factors increase the likelihood of a refugee child presenting with mental health problems after any exposure to war trauma has been controlled for?" The results revealed, in line with the literature, that a higher number of pre-migratory traumatic experiences increased the possibility of children experiencing significant PTSD symptoms. When the effect of pre-migratory trauma was controlled for, parenting-related variables significantly predicted PTSD and general mental health problems (GMHP) among refugee children. A unique contribution of parenting variables was evidenced; that is, children who perceived lower availability of and more dependency on the attachment figure and positive parenting styles were less likely to have PTSD, whilst parental ill mental health and lower availability of the attachment figure increased the possibility of having GMHP, particularly of an emotional nature.

Considering the importance of attachment relationships detected by the results of Study I, Study II sought to address the question "Is an attachment-based intervention feasible for application with Syrian refugee children and their caregivers?" The selected intervention, which was Group Theraplay, was found to be suitable for, and acceptable

to, refugee children, even in the absence of active parental involvement. Parents who could not be engaged in the intervention were included in a complementary session. Both children's and parents' feedback were positive regarding the clarity of instructions and relevance to the Syrian culture. The retention rate was high among the children, as 14 out of 15 completed all eight sessions. The completion rate of measures by participants in the intervention group was very high; however, the control group had to be excluded from the analysis due to the inadequate amount of data returned. Preliminary analysis of pre- and post-intervention assessments revealed promising results. Reactive Attachment Disorder (RAD) symptoms (but not perceived attachment security by children), as well as PTSD and GMHP scores, were significantly decreased at post-assessment among refugee children.

### **8.3. Discussion of key findings**

The present study contributes to the literature regarding refugee children's mental health by providing a parenting-based model which accounts for the contribution of parenting factors in predicting child mental health problems in addition to the effects of pre-migratory trauma, and also in providing new evidence as to the feasibility of an attachment-based intervention, Group Theraplay, with this vulnerable and hard to engage population. Results from Study I and Study II are discussed in the following section in relation to the literature, and potential explanations or mechanisms that could be used to explain these findings are proposed.

#### **8.3.1. War trauma and refugee child mental health**

War-related traumatic experiences have been widely established as a major predictor of mental health problems among refugee children in the literature, which is unsurprising as exposure to trauma is an essential diagnostic criterion for PTSD in both the DSM-5 and ICD-10 classifications (see Chapter II, Table 2.2). A high number of pre-migratory war traumatic events consistently predicted the likelihood of refugee children experiencing significant PTSD symptoms in Study I. However, no effect of war trauma was detected in relation to GMHP, including other emotional symptoms. Although not extensively studied, such differential effects of traumatic experiences on different aspects of refugee children's mental health have been evidenced by previous research, which supports the results of Study I (Beiser & Hou, 2016; Berthold, 2000; Montgomery, 2008). For

example, pre-migratory traumatic experiences were associated with PTSD, whilst post-migratory stressors such as financial difficulties were associated with depression, and uncertainty over asylum status was related to both types of mental health problems in a study carried out with refugee children resettled in London (Heptinstall et al., 2004).

There is also evidence that post-migratory stressors may also be related to PTSD symptoms (Trickey, Siddaway, Meiser-Stedman, Serpell & Field, 2012). It has been argued that even these do not directly predict PTSD, the effect of past trauma may be reactivated by current life stressors, and this interaction further increases children's vulnerability to mental health problems (Foy, Madvig, Pynoos & Camilleri, 1996). Thus, in the refugee context, the effect of war trauma is often triggered by post-migratory experiences such as social isolation, poverty, discrimination and language barriers (Buchanan, Abu-Rayya, Kashima, Paxton & Sam, 2017; Miller & Rasmussen, 2010). Moreover, the impact of both pre-migratory trauma and post-migratory stressors on refugee child mental health can be mediated by family-related factors (Palosaari, Punamäki, Peltonen, Diab & Qouta, 2016; Pynoos, Steinberg, & Piacentini, 1999), which is directly relevant to the following findings drawn from Studies I and II.

### **8.3.2. Attachment security and refugee children's mental health**

The relationship between distorted attachment security and child mental health problems has been studied for different child groups in the literature, in particular children who have suffered abuse and neglect and who were subsequently placed in care or adopted (Crittenden, 1995; McLaughlin, Zeanah, Fox & Nelson, 2012). In contrast, and despite similar characteristics in experiencing multiple traumatic events, there is limited evidence in relation to refugee children. In Study I, the perceived attachment relationship, specifically lower parental availability and higher dependency of the child, predicted GMHP and PTSD symptoms. This finding is supported by evidence showing that perceived secure attachment with parents predicted lower depression and anxiety symptoms in Ugandan adolescents (Okello, Nakimuli-Mpungu, Musisi, Broekaert & Derluyn, 2014), whilst paternal attachment security predicted lower post-traumatic stress symptoms among Palestinian children (Punamäki et al., 2015). Although these studies were conducted with war-exposed youth rather than with refugees, their findings can be generalizable because of the similar psychosocial profiles of the two samples.

The scarcity of epidemiological research on the role of attachment on child refugee mental health is reflected by the absence of attachment-based interventions in this population (Vostanis, 2016). Study II aimed to address this gap by applying such an attachment-based intervention, namely Group Theraplay, with Syrian refugee families. The selected intervention was found applicable, acceptable, beneficial and culturally relevant, despite the limited parental involvement. Preliminary analysis revealed promising trends in significantly reducing parent-rated attachment difficulties and child psychopathology. However, the improvement in children's attachment difficulties needs to be interpreted cautiously, as Theraplay was implemented with children only, whilst parents' active involvement should be prominent in enhancing dyadic attachment relationships. Thus, the improvement in attachment difficulties might be attributable to more adaptive emotion regulation by children, which is also one of the goals of Theraplay. Moreover, child-rated attachment security did not improve at post-intervention, which might be attributable to the lack of parental participation. On the other hand, Group Theraplay can also be applied in situations when parents are not present such as with unaccompanied minors, although parental involvement is recommended as desirable in achieving a positive treatment outcome for children with reactive attachment disorders (Boris & Zeanah, 2005).

A secure base attachment between parents and children can mediate the effects of trauma on child mental health (Cicchetti & Doyle, 2016; Hankin, 2005). The Study II findings indicated that the selected intervention was promising in terms of the primary outcome (although this distinction is not necessary in a feasibility design), that is, the rate of likely attachment disorder according to established cut-off scores decreased by 40% with a moderate effect size, whilst five out of ten (50%) children with possible PTSD, and four out of eight (50%) children with a likely clinical GMHP, no longer fell into the clinical category at post-intervention, and with a large effect size. Although the small sample size and the lack of control group constrained the conclusions that could be drawn from Study II, nevertheless a plausible mechanism may have been that the improved attachment relationships as a direct impact of the intervention led to a further reduction in child psychopathology. This would be in line with the findings of Study I, in which secure attachment was found to help protect children from developing PTSD and general mental health symptoms.

The quality of the parent-child interaction can be critical during exposure to traumatic events such as in war situations, since the children's capacity to process and adjust to the trauma can be moderated by the degree and quality of a secure attachment relationship between parent and child (Lieberman, 2004). As Schore (2001a; 2001b) proposed in his developmental psychoneurobiological model, robust strategies to cope with new situations, including stressful events, are nested in interactions with others. An efficient right brain regulatory function that is responsible for coping with stressful situation, as he suggested, is closely linked with secure attachment and the resulting adaptive mental health. However, traumatic experiences may also adversely impact existing attachment relationships, thus parents' responses to the child's cues. For example, several studies indicated that children of mothers exposed to domestic violence displayed insecure attachment, even if they had not directly been exposed to the trauma themselves (Lyons-Ruth & Block, 1996). Of course, there could be an alternative explanation involving a third chronic variable such as poor mental health of the mother or a history of abuse acting as the main vulnerability associated with both victimization by the perpetrator and an insecure relationship with their child. This cycle can be even more prominent in the context of refugee parent-child dyads where both parties are continuously exposed to pre-, peri- and post-migration traumatic events. Since insecure or other distorted attachment patterns carry a high risk for future interpersonal relationships and various types of mental health problems (Wilson, 2009), future research should better inform practitioners when, and how, attachment-focussed interventions could be implemented with refugee families.

### **8.3.3. Parenting styles and child refugee mental health**

There is a considerable body of evidence that considers the relationship between maladaptive/negative parenting styles and child psychopathology in the general child mental health literature (Caron, Weiss, Harris & Catron, 2006; Gewirtz et al., 2008; Morris et al., 2002). Consistent with these trends, the Study I results revealed that lower parental emotional warmth and higher rejection, as perceived by the children, was a significant predictor of PTSD symptoms. An earlier study carried out with 412 Palestinian children living in refugee camps provided similar evidence that children who perceived parenting styles as supportive were less likely to develop PTSD symptoms (Thabet, Ibraheem, Shivram, Winter, & Vostanis, 2009).

Despite this, we still have limited understanding of the complex mechanisms through which parenting affects refugee children's mental health (Williams, 2010). It is important to remember that refugee parents are trying to provide both physically and emotionally for their children whilst simultaneously struggling with their own losses, in addition to other post-migratory stressors and hardships. All these adversities can lead to harsh parenting styles (El-Khani, Ulph, Peters & Calam, 2016), and even child maltreatment (Lustig et al., 2004). Given the evidence that parenting is adaptable, in that negative parenting practices can be replaced with more positive approaches through suitable interventions (Gardner et al., 2006), and that refugee parents have been found to be receptive to information and support with regards to their parenting skills (El-Khani, Ulph, Peters & Calam, 2018; El-Khani, Cartwright, Redmond & Calam, 2016), such interventions require further development and evaluation in various refugee contexts such as refugee camps or during resettlement.

#### **8.3.4. Parental and child psychopathology**

A consistent finding in both the general and the refugee literature is the strong association between parent and child mental health (Bryant et al., 2018; Reupert, Maybery, Nicholson, Göpfert & Seeman, 2015). Indeed, in Study I, parental psychopathology was found to be a significant predictor of GMHP in refugee children, which is also consistent with evidence from war trauma research (Meyer, Steinhaus, Bangirana, Onyango-Mangen & Stark, 2017; Panter-Brick, Eggerman, Gonzalez & Safdar, 2009). A partial contradiction to the literature was that parents' psychopathology only predicted GMHP, including emotional symptoms on the SDQ subscale, but not specifically PTSD. This might be due to the ongoing and multiple traumatic events affecting refugee children, which could thus 'dilute' the pre-migration impact of war trauma. A study of Afghani parent-child refugee dyads, for example, indicated that the effect of parental psychopathology on children's PTSD could be disentangled if they had been exposed to one to two traumatic events, but this became less straightforward when there had been three or more events (Panter-Brick, Grimon & Eggerman, 2014). In our study, children reported a high number of traumatic experiences (a mean number of four events). This is much higher than the Panter-Brick et al. (2014) study, and this might explain these findings to a greater or lesser extent.

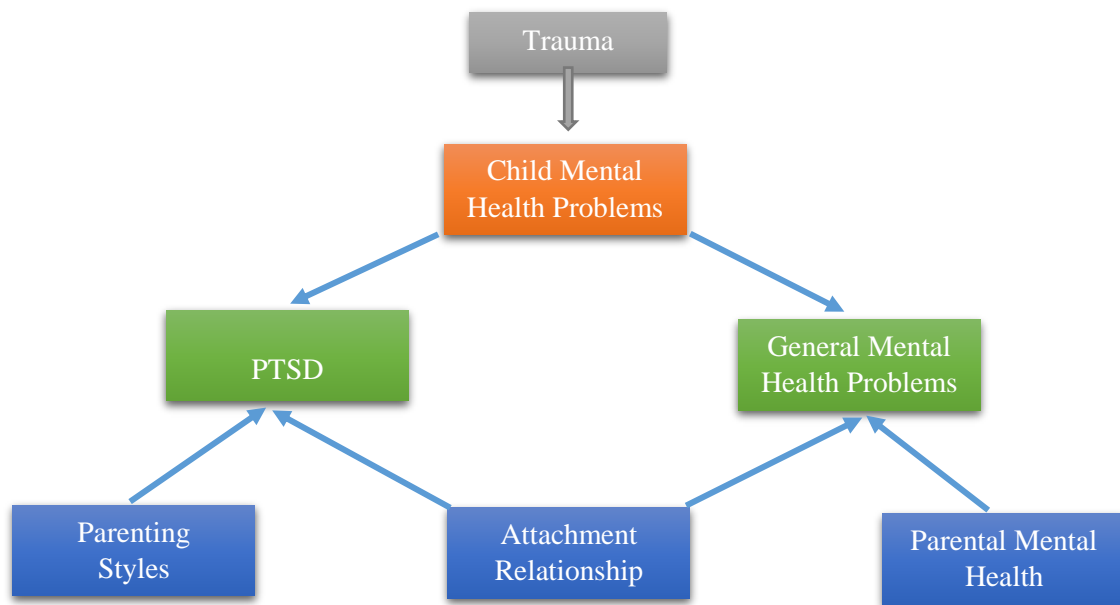
### **8.3.5. Relationship between parenting constructs**

The parenting constructs or factors measured in this study included attachment security, parenting styles and psychopathology. These were strongly associated and interwoven, although the underpinning mechanisms were rather too complex to establish through a cross-sectional design. Some studies have attempted to explore the direction of these associations; for example, a recent study with refugee caregivers and children residing in Australia revealed that parental PTSD enhanced harsh parenting practices, which in turn contributed to the development of emotional and behavioural problems in the children (Bryant et al., 2018). Moreover, insecure attachment has been established as a consequence of both poor parental mental health and negative parenting practices. In contrast, sensitive and responsive parenting have been shown to predict secure attachment in children (Kerns, Schlegelmilch, Morgan & Abraham, 2005). Interestingly, a study with refugee children established that both parental PTSD and disconnected parenting style resulted in increased risk for insecure and disorganized attachment (van Ee et al., 2016). Such a complex mechanism is more plausible than the linear associations identified in the literature to date.

Although the pathways of the impact by parental factors were not investigated in the present thesis, since the data collected in Study I was cross-sectional and the sample size in Study II was too small for inferential statistics, it was found that perceived attachment and positive parenting practices perceived by children, as well as parental mental health, made significant contributions, respectively, to children's mental health (Figures 8.29). Further studies using longitudinal designs (the pragmatic difficulties with this population notwithstanding) are needed to investigate these pathways in order to inform the development of attachment-focussed and other parenting interventions for refugee children.



**Figure 8.29 Parenting-related constructs as contributors of refugee child mental health**



#### **8.4. Methodological implications**

These findings were considered within the context of the methodological limitations of the present thesis.

##### **8.4.1. Limitations**

The main pitfall in this research was engaging with a sufficiently large number of parents in terms of missing parent-rated data in Study I and parents' lack of attendance in Study II. This was, however, not surprising, as parents' involvement has often been problematic in refugee settings (Schottelkorb et al., 2012), as well as with other disadvantaged groups (Bailey, 2001). Specifically, in Study I 18% of parents who agreed to participate did not return the questionnaires, whilst only two parents attended two intervention sessions in the feasibility study. This lack of parent participation can be attributed to various reasons, including financial difficulties and other life priorities. The majority of parents in Study I (79%) and almost half of parents in Study II (44%) reported a low monthly income. One in three families reported a crowded household that exceeded nine persons. Moreover, the majority of parents reported high rates of psychopathology in both studies, for example 64% of parents in Study I scored above the GHQ clinical cut-off score. Other reasons could be related to stigma, mistrust and fear, which were not assessed in this research but are well evidenced in the refugee literature (Majumder et al., 2015). Parent engagement was a challenge in both studies reported in the present thesis, despite

participants being recruited from designated schools, which enabled easy access. Future research should consider parents' engagement in advance, particularly for families of children who were out of school.

Another limitation was the lack of control group data in Study II due to the poor compliance rate, which restricted the analysis of between-group comparisons. Most of the participants (13 parent-child dyads out of 15) could not be reached for the second assessment for a number of reasons: 1) the collaborating NGO had to temporarily stop providing food for refugee families due to funding issues, thus parents stopped visiting during that critical period of the Time 2 assessment; 2) some families moved to Germany; whilst others returned to Syria; and 3) since the intervention ended during the summer period, parents could not be accessed through schools. Identifying such challenges promptly is the reason behind the expanding use of feasibility studies. Their main objective is understanding the applicability and suitability of an intended intervention rather than its effect on outcome, which provides funders and researchers with the opportunity to anticipate and resolve such challenges in advance of planning further pilot and randomized controlled trials.

Attachment measures used in the present study might also pose a limitation, although the difficulties of reliably assessing attachment relationships has always been argued in the related literature (Kerns et al., 2005). Despite the conceptualization of attachment as the quality of the relationship between parent and infant during the early years, existing measures rely on the parent's or caregiver's state-of-mind much later in the child's life, which can be confounded by other attitudes, beliefs and behaviours. The majority of studies depended on parental reports, semi-structured parental interviews or observational methods to assess the child-parent attachment relationship (de Haene, Dalgaard, Montgomery, Grietens & Verschueren, 2013; Mukaddes, Bilge, Alyanak & Kora, 2000). This is mostly because certain developmental ages have been prioritized, i.e., new-borns and infants, whilst only limited research to date has focussed on school-age children or adolescents (Kerns, Tomich, Aspelmeier & Contreras, 2000).

An observational method such as the Strange Situation Procedure (Ainsworth et al., 1978), which is acknowledged as being the 'gold standard' of measurements, assesses the quality of the caregiver-child bond more objectively, whilst the Adult Attachment

Interview (George, Kaplan & Main, 1996) has been used to appraise the parent's or caregiver's state of mind regarding attachment. Compared to early developmental periods, there has been little attention given to middle childhood attachment, with resulting limited suitable measures with satisfactory psychometric properties. The Security Scale, which was utilized in this research, has been shown to be as reliable as narrative measures, parent-rated questionnaires or parents' interviews (Kerns, Brumariu & Seibert, 2011). Admittedly, no attachment measure was completed by parents in Study I because of the already large questionnaire battery used for this particular group, with its attendant language difficulties and limited engagement. This was, however, ratified in Study II using the Relationship Problems Questionnaire.

Post-traumatic stress symptoms in children were assessed through children's self-reports instead of structured diagnostic interviews, which can provide a more reliable judgement as to whether the child fulfils established diagnostic criteria for PTSD (Cohen, 1998). However, diagnostic interviews are rarely used in studies of this scale because of their high cost. In any case, the purpose of Study I was not to establish prevalence rates of PTSD and other mental health problems, but rather to investigate associations with parental variables based on symptomatic severity. Moreover, the Children's Revised Impact of Events Scale (CRIES-8) has repeatedly been found to provide these psychometric qualities across different cultures (Giannopoulou et al., 2006; Perrin et al., 2005).

Moreover, there was a lack of multi-informant assessment of PTSD symptoms, as only child-rated reports were used in both studies. Although a multi-informant approach provides more robust conclusions in assessing child mental health problems (De Los Reyes et al., 2015), child-rated measures are widely utilized, as they are also robust in identifying psychopathology (rather than making a diagnosis), particularly of emotional nature, which can be missed by adult informants. These can be particularly useful in situations where parents are struggling with their own experience of trauma, as is common in a refugee context. Another limitation of the present thesis might be the lack of qualitative data collected through interviews or focus groups which provides "interesting responses and underlying motives in a way that questionnaires cannot" (Robson, 2011, page 280). The use of qualitative methods could provide insight into refugee families'

experiences and the nature of the relationship between parenting-related variables and children's mental health. To a certain extent, Study II adopted these principles and utilized open-ended questions to understand participants' opinions on the intervention, although their responses were not qualitatively analysed; instead, only quotes were presented to complement the emerging quantitative categories.

### **8.5. Recommendations for future research**

The previously mentioned limitations can inform and aid future researchers. Hence, this section presents recommendations to advance the findings of the present thesis in this research field. Since engaging with parents was found to be the main pitfall in each of these studies, further studies with refugee parents need to take additional precautions in planning their research procedures. First, addressing the stigma attached to mental health is an important step in engaging parents, thus increasing participation. Parental psychoeducation sessions on trauma, attachment and related mental health problems might be beneficial prior to initiating a study. Second, future randomized controlled trials including refugee parents might consider oversampling and recruiting from multiple sites to achieve sufficient statistical significance. Likewise, future longitudinal studies need to acknowledge the potential jeopardy of high drop-out rates at follow-up due to the highly mobility of this particular population. Various retention strategies could be used based on previous research with other vulnerable and mobile groups such as looked after and homeless young people. These include collaboration with agencies such as health care, social services, NGOs, and in particular communities and support groups; having research team members from the same ethnic background as the intended study population; collecting detailed information on participants' contact details such as mobile phone number and social media; remaining in contact throughout the research; and providing financial incentives (Carroll et al., 2011; Patrick, Pruchno & Rose, 1998).

This thesis adopted a child-centred approach, according to which children were included in the research as central participants and informants. The UN Convention on the Rights of the Child (1989) asserts that every child has the right to express their opinion and be listened to. There is growing awareness and acceptance on the importance of understanding children's views in various settings through the adoption of such a child-centred research philosophy (Coad & Shaw, 2008; Coyne, Hayes & Gallagher, 2009). It is argued that children have to be considered to be decision-makers in their own right,

because parents' or caregivers' views on the child's experiences might considerably differ from the child's own perspective, and this discrepancy can result in misleading conclusions (Söderbäck, Coyne & Harder, 2011). However, there is still resistance to genuinely involving children as active participants and advisers in research, especially vulnerable groups such as refugee children and youths (Lundberg, 2011; Bhabha, 2006; Chatty, Crivello & Hundt, 2005).

Since parents can still be viewed as more reliable in terms of reporting family, parenting and mental health needs, there is clearly a lack of knowledge on children's perspectives as to their attachment relationships with their caregivers and their parenting strategies. In the present study, children's self-reports were thus used to assess attachment security, parenting styles and PTSD symptoms. Parent reports were only utilised for children's general mental health problems (GMHP), in order to ensure the inclusion of a lower threshold of detected mental health problems; as a larger number of children were rated within the clinical range by parents compared to children's self-reports. However, this might be due to parents' own psychopathology, which has been shown to be related in over-reporting children's symptoms (Kassam-Adams, Garcia-Espana, Miller & Winston, 2006). Consistent with the previous literature which was largely based on adult-rated measures and occasionally on interviews or observational assessments, findings of the present study indicate that refugee children can be considered reliable sources of information. This knowledge is directly relevant to their lives and the sources of help they should receive. This conclusion was reinforced by the children's free-text utilized in Study II which also indicated that children formulated and articulated their views independently of adults. Hence, future research should prioritise both the improvement and validation of existing child-based measures, and refugee children's active participation in research on their mental health. This should include involvement in an advisory capacity on both the treatment implementation and the research. These principles are also pertinent in relation to practice and service development, as discussed in the following section.

### **8.6. Policy, practice, service and training implications**

The findings of the present study confirmed the well-established role of parental factors in the development of child mental health problems in the complex context of multiple vulnerabilities affecting refugee families. These findings have several implications for

practitioners and services. First, policies endorsed by host governments need to be coordinated into joint actions across Ministries, and this joint work should be reflected on the ground by the actions of frontline services. Adult and child mental services should be closely linked, for which there is usually a gap in a worldwide context (Singh, 2009). Parents' mental health also needs to be supported socially, economically and legally, as all these risk factors can have a detrimental effect on their parenting capacity, which can in turn impact on children's well-being.

Given the importance of parental factors in refugee children's mental health, parental availability and nurturing, unaccompanied refugees needs special consideration, as they have lost their primary attachment figure in addition to the other losses and disruptions they have suffered. Attachment-focussed training should thus also be provided to caregivers and professionals in community settings and residential institutions. There are a number of successfully implemented programmes, especially for foster carers, which can be adapted further to the cultural and other specific needs of refugee children (Golding, 2003; Minnis & Devine, 2001). Group Theraplay can be implemented with these children in case of parental loss, and also in situations where parents are struggling to attend interventions, as the feasibility study showed promising results in terms of child attachment as well as mental health outcomes.

As a part of social support programmes, interventions need to adopt a multimodal approach which targets the broader community, family and individual children according to their needs. Hereby, psychoeducation on trauma and information on mental health service use should be provided to parents and community members, including teachers, especially for those counselling teachers working in Turkish schools who are inexperienced and not trained in relation to traumatized child groups (Weine et al., 2003; 2008). Interventions could include multi-family support groups and the more specific enhancement of parenting skills could be provided in refugee and community settings in a manner which is acceptable to refugee families. Moreover, establishing joint care pathways between social services, schools, health care, community and religious groups has been shown to increase awareness, access and engagement (Ellis et al., 2010). Service initiatives should be complemented by joint training for front-line professionals, carers, volunteers and interpreters in the recognition of trauma-related mental health problems in refugee children and in developing integrated care plans (Erucar et al., 2017).

## **8.6. Conclusion**

The aim of this thesis was to improve our understanding of the role of parenting components on the mental health of refugee children, and to investigate the feasibility of an attachment-focussed intervention as informed by the first study. A higher number of pre-migratory traumatic experiences can be associated with the likelihood of children developing PTSD symptoms. After controlling for the effects of pre-migratory trauma, PTSD symptoms were predicted by the perceived attachment (lower parental availability and higher parental dependency) and perceived negative parenting practices (lower emotional warmth and higher rejecting styles), whilst GMHP were explained by lower parental availability, as perceived by children, and by higher parental psychopathology.

The selected attachment-focussed intervention was Group Theraplay, which was found to be acceptable and engaging for refugee children, although it proved difficult to actively involve their parents. The primary outcome of possible attachment disorder was found to improve after the intervention, while secondary PTSD and GMHP were also significantly decreased. This thesis thus demonstrated that children exposed to the same levels of pre-migratory war trauma were differentiated in the development of mental health problems by attachment security, parenting style and parental psychopathology. Furthermore, the effectiveness of Group Theraplay with refugee children needs to be evaluated through well-designed and contextualized randomized controlled trials, whilst taking into consideration lessons from this feasibility study in terms of engaging refugee parents.

## References

- Aberson, B., Shure, M. B., & Goldstein, S. (2007). Social problem-solving intervention can help children with ADHD.
- Abraham, M. M., & Kerns, K. A. (2013). Positive and negative emotions and coping as mediators of mother-child attachment and peer relationships. *Merrill-Palmer Quarterly*, 59(4), 399-425.
- Acarturk, C., Konuk, E., Cetinkaya, M., Senay, I., Sijbrandij, M., Gulen, B., & Cuijpers, P. (2016). The efficacy of eye movement desensitization and reprocessing for post-traumatic stress disorder and depression among Syrian refugees: Results of a randomized controlled trial. *Psychological Medicine*, 46(12), 2583-2593.
- Acri, M. C., & Hoagwood, K. E. (2015). Addressing parental mental health within interventions for children: A review. *Research on Social Work Practice*, 25(5), 578-586.
- Açıkgöz, M., & Arner, H. O. (2014). Turkey's new law on foreigners and international protection: An introduction. *Turkish Migration Studies Group at Oxford*, Briefing Paper, 2.
- Adams, K. (1999). Writing as therapy. *Counseling and Human Development*, 31(5), 1.
- Agger, I., & Jensen, S. B. (1990). Testimony as ritual and evidence in psychotherapy for political refugees. *Journal of Traumatic Stress*, 3(1), 115-130.
- Ajdukovic, M. (1998). Displaced adolescents in Croatia: Sources of stress and posttraumatic stress reaction. *Adolescence*, 33(129), 209.
- Ahmad, A., Larsson, B., & Sundelin-Wahlsten, V. (2007). EMDR treatment for children with PTSD: Results of a randomized controlled trial. *Nordic journal of psychiatry*, 61(5), 349-354.
- Ahmadzadeh, G., & Malekian, A. (2004). Aggression, anxiety, and social development in adolescent children of war veterans with PTSD versus those of non-veterans. *Journal of Research in Medical Sciences*, 9(5), 231-234.



- Aiken, L. S., West, S. G., & Reno, R. R. (1991). *Multiple regression: Testing and interpreting interactions*: Sage.
- Ainsworth, M. D. S., & Bell, S. M. (1970). Attachment, exploration, and separation: Illustrated by the behavior of one-year-olds in a strange situation. *Child Development*, 49-67.
- Ainsworth, M. D. S., Blehar, M. C., Waters, E., & Wall, S. N. (1978). *Patterns of attachment: A psychological study of the strange situation*. Psychology Press.
- Aitcheson, R. J., Abu-Bader, S. H., Howell, M. K., Khalil, D., & Elbedour, S. (2017). Resilience in Palestinian adolescents living in Gaza. *Psychological Trauma: Theory, Research, Practice, and Policy*, 9(1), 36.
- AI-Therapy. (n.d.). *Effect size calculator*. Retrieved from <https://www.ai-therapy.com/psychology-statistics/effect-size-calculator>
- Ajilchi, B., & Kargar, F. R. (2013). The impact of a parenting skills training program on stressed mothers and their children's depression level. *Procedia-Social and Behavioral Sciences*, 84, 450-456.
- Allen, J. P., Porter, M., McFarland, C., McElhaney, K. B., & Marsh, P. (2007). The relation of attachment security to adolescents' paternal and peer relationships, depression, and externalizing behavior. *Child Development*, 78(4), 1222-1239.
- Allen, B., Timmer, S. G., & Urquiza, A. J. (2014). Parent–Child Interaction Therapy as an attachment-based intervention: Theoretical rationale and pilot data with adopted children. *Children and Youth Services Review*, 47, 334-341.
- Almqvist, K., & Brandell-Forsberg, M. (1997). Refugee children in Sweden: Post-traumatic stress disorder in Iranian preschool children exposed to organized violence. *Child Abuse & Neglect*, 21(4), 351-366.
- Almqvist, K., & Broberg, A. G. (1999). Mental health and social adjustment in young refugee children y 3½ years after their arrival in Sweden. *Journal of the American Academy of Child & Adolescent Psychiatry*, 38(6), 723-730.

- Almqvist, K., & Broberg, A. G. (2003). Young children traumatized by organized violence together with their mothers—The critical effects of damaged internal representations. *Attachment & Human Development, 5*(4), 367-380.
- Alyahri, A., & Goodman, R. (2006). Validation of the Arabic strengths and difficulties questionnaire and the development and well-being assessment. *Eastern Mediterranean Health Journal, 12*(2), 138-146.
- American Psychiatric Association. (2013). *Diagnostic and statistical manual of mental disorders (DSM-5®)*: American Psychiatric Pub.
- Anderson, C. M., Hogarty, G. E., & Reiss, D. J. (1980). Family treatment of adult schizophrenic patients: A psycho-educational approach. *Schizophrenia Bulletin, 6*(3), 490-505.
- Angel, B., Hjern, A., & Ingleby, D. (2001). Effects of war and organized violence on children: A study of Bosnian refugees in Sweden. *American Journal of Orthopsychiatry, 71*(1), 4.
- Annan, J., Sim, A., Puffer, E. S., Salhi, C., & Betancourt, T. S. (2017). Improving mental health outcomes of Burmese migrant and displaced children in Thailand: A community-based randomized controlled trial of a parenting and family skills intervention. *Prevention Science, 18*(7), 793-803.
- Ao, T., Shetty, S., Sivilli, T., Blanton, C., Ellis, H., Geltman, P. L., . . . Cardozo, B. L. (2016). Suicidal ideation and mental health of Bhutanese refugees in the United States. *Journal of Immigrant and Minority Health, 18*(4), 828-835.
- Appleyard, K., & Osofsky, J. D. (2003). Parenting after trauma: Supporting parents and caregivers in the treatment of children impacted by violence. *Infant Mental Health Journal, 24*(2), 111-125.
- Arain, M., Campbell, M. J., Cooper, C. L., & Lancaster, G. A. (2010). What is a pilot or feasibility study? A review of current practice and editorial policy. *BMC Medical Research Methodology, 10*(1), 67.

- Arrindell, W. A., Perris, C., Eisemann, M., van der Ende, J., Gaszner, P., Iwawaki, S., Maj, M., & Zhang, J.-E. (1994). Parental rearing behaviour from a cross-cultural perspective: A summary of data obtained in 14 nations. In C. Perris, W. A. Arrindell, & M. Eisemann (Eds.), *Parenting and Psychopathology*. Chichester: Wiley.
- Asen, E., & Scholz, M. (2010). *Multi-family therapy: Concepts and techniques*. Routledge.
- Asen, E., & Schuff, H. (2006). Psychosis and multiple family group therapy. *Journal of Family Therapy*, 28(1), 58-72.
- Atkinson, N., Bettendorf, C., Boada, M., Bovingdon, T., Buckwalter, K. D., DiPasquale, L. . . . Franke, U. (2009). *Applications of family and Group Theraplay*: Jason Aronson.
- Attanayake, V., McKay, R., Joffres, M., Singh, S., Burkle Jr, F., & Mills, E. (2009). Prevalence of mental disorders among children exposed to war: a systematic review of 7,920 children. *Medicine Conflict and Survival*, 25(1), 4-19.
- Austin, Reiss & Burgdorf. (2007, November 5). *Onset and prevalence of ADHD*. Retrieved from <https://www.mentalhelp.net/articles/onset-and-prevalence-of-adhd/>
- Baer, S., & Garland, E. J. (2005). Pilot study of community-based cognitive behavioral group therapy for adolescents with social phobia. *Journal of the American Academy of Child & Adolescent Psychiatry*, 44(3), 258-264.
- Bailey Jr, D. B. (2001). Evaluating parent involvement and family support in early intervention and preschool programs. *Journal of Early intervention*, 24(1), 1-14.
- Bakwin, R. M., & Bakwin, H. (1940). Psychologic care of the preschool child. III. *The Journal of Pediatrics*.
- Balamir Coşkun, B. (2015). An evaluation of the EU's migration policies after Arab Spring. *Moment Journal*, 2(1), 41-59. doi:10.17572/mj2015.1.4159
- Ballard, J., Wieling, E., & Forgatch, M. (2017). Feasibility of implementation of a parenting intervention with Karen refugees resettled from Burma. *Journal of Marital and Family Therapy*. 44(2), 220-234.

- Barrett, P., Farrell, L., Dadds, M., & Boulter, N. (2005). Cognitive-behavioral family treatment of childhood obsessive-compulsive disorder: Long-term follow-up and predictors of outcome. *Journal of the American Academy of Child & Adolescent Psychiatry, 44*(10), 1005-1014.
- Barrington, J., Prior, M., Richardson, M., & Allen, K. (2005). Effectiveness of CBT versus standard treatment for childhood anxiety disorders in a community clinic setting. *Behaviour Change, 22*(1), 29-43.
- Bartels, S. J., Coakley, E., Oxman, T. E., Constantino, G., Oslin, D., Chen, H. . . . Gallo, J. J. (2002). Suicidal and death ideation in older primary care patients with depression, anxiety, and at-risk alcohol use. *The American Journal of Geriatric Psychiatry, 10*(4), 417-427.
- Baumrind, D. (1966). Effects of authoritative parental control on child behavior. *Child Development, 37*, 887-907.
- Baumrind, D. (1970). Socialization and instrumental competence in young children. *Young Children, 25*, 104-119.
- Baumrind, D. (1971). Current patterns of parental authority. *Developmental psychology, 4*(1p2), 1.
- Baumrind, D. (1991). The influence of parenting style on adolescent competence and substance use. *The Journal of Early Adolescence, 11*(1), 56-95.
- Bean, T., Derluyn, I., Eurelings-Bontekoe, E., Broekaert, E., & Spinhoven, P. (2007). Comparing psychological distress, traumatic stress reactions, and experiences of unaccompanied refugee minors with experiences of adolescents accompanied by parents. *The Journal of Nervous and Mental Disease, 195*(4), 288-297.
- Bean, T., Eurelings-Bontekoe, E., Derluyn, I., & Spinhoven, P. (2004). Stressful life events (SLE): User's Manual. *Centrum'45, Oegstgeest*.
- Bean, T. M., Eurelings-Bontekoe, E., & Spinhoven, P. (2007). Course and predictors of mental health of unaccompanied refugee minors in the Netherlands: One year follow-up. *Social Science & Medicine, 64*(6), 1204-1215.

- Beck, J. S. (2011). *Cognitive behavior therapy: Basics and beyond*. Guilford press.
- Beck, A. T. (1964). Thinking and depression: II. Theory and therapy. *Archives of General Psychiatry, 10*(6), 561-571.
- Beck, A. T., Steer, R. A., & Brown, G. K. (1996). Beck Depression Inventory-II. *San Antonio, 78*(2), 490-498.
- Beiser, M., Armstrong, R., Ogilvie, L., Oxman-Martinez, J., & Rummens, A. (2005). The new Canadian children and youth study: Research to fill a gap in Canada's children's agenda. *Canadian Issues, 21*.
- Beiser, M., & Hou, F. (2016). Mental health effects of premigration trauma and postmigration discrimination on refugee youth in Canada. *The Journal of Nervous and Mental Disease, 204*(6), 464-470.
- Belsky, J., & Fearon, R. P. (2002). Early attachment security, subsequent maternal sensitivity, and later child development: Does continuity in development depend upon continuity of caregiving? *Attachment and Human Development, 4*(3), 361-387.
- Benn, T., Dagkas, S., & Jawad, H. (2011). Embodied faith: Islam, religious freedom and educational practices in physical education. *Sport, Education and Society, 16*(1), 17-34.
- Bennett, L. R., Shiner, S. K., & Ryan, S. (2006). Using Theraplay in shelter settings with mothers and children who have experienced violence in the home. *Journal of Psychosocial Nursing and Mental Health Services, 44*(10), 38-48.
- Berry, J. W. (1992). Acculturation and adaptation in a new society. *International Migration, 30*(s1), 69-85.
- Bernstein, G. A., Layne, A. E., Egan, E. A., & Tennison, D. M. (2005). School-based interventions for anxious children. *Journal of the American Academy of Child & Adolescent Psychiatry, 44*(11), 1118-1127.
- Berthold, S. M. (2000). War traumas and community violence: Psychological, behavioral, and academic outcomes among Khmer refugee adolescents. *Journal of Multicultural Social Work, 8*(1-2), 15-46.

- Betancourt, T. S., Newnham, E. A., Birman, D., Lee, R., Ellis, B. H., & Layne, C. M. (2017). Comparing trauma exposure, mental health needs, and service utilization across clinical samples of refugee, immigrant, and US-origin children. *Journal of Traumatic Stress, 30*(3), 209-218.
- Betancourt, T. S., Yudron, M., Wheaton, W., & Smith-Fawzi, M. C. (2012). Caregiver and adolescent mental health in Ethiopian Kunama refugees participating in an emergency education program. *Journal of Adolescent Health, 51*(4), 357-365.
- Bhabha, J. (2006). The child: What sort of human? *PMLA, 121*(5), 1526-1535.
- Bhushan, B., & Sathya Kumar, J. (2007). Emotional distress and posttraumatic stress in children surviving the 2004 tsunami. *Journal of Loss and Trauma, 12*(3), 245-257.
- Birleson, P. (1981). The validity of depressive disorder in childhood and the development of a self-rating scale: A research report. *Journal of Child Psychology and Psychiatry, 22*(1), 73-88.
- Birman, D. (2005). Ethical issues in research with immigrants and refugees. *The handbook of ethical research with ethnocultural populations and communities, 155-178.*
- Birman, D., Beehler, S., Harris, E. M., Frazier, S., Atkins, M., Blanton, S., ... & Buwalda, J. (2008). International Family, Adult, and Child Enhancement Services (FACES): A community-based comprehensive services model for refugee children in resettlement. *American Journal of Orthopsychiatry, 78*(1), 121-132.
- Bisson, J. I., & Lewis, C. (2009). Systematic review of psychological first aid. Retrieved from [https://www.researchgate.net/profile/Catrin\\_Lewis2/publication/265069490\\_Systematic\\_Review\\_of\\_Psychological\\_First\\_Aid/links/5450d15f0cf24e8f7375a73c/Systematic-Review-of-Psychological-First-Aid.pdf](https://www.researchgate.net/profile/Catrin_Lewis2/publication/265069490_Systematic_Review_of_Psychological_First_Aid/links/5450d15f0cf24e8f7375a73c/Systematic-Review-of-Psychological-First-Aid.pdf)
- Bittner, A., Egger, H. L., Erkanli, A., Jane Costello, E., Foley, D. L., & Angold, A. (2007). What do childhood anxiety disorders predict? *Journal of Child Psychology and Psychiatry, 48*(12), 1174-1183.

- Bjørknes, R., & Manger, T. (2013). Can parent training alter parent practice and reduce conduct problems in ethnic minority children? A randomized controlled trial. *Prevention Science, 14*(1), 52-63.
- Blackshaw, E., Evans, C., & Cooper, M. (2018). When life gets in the way: Systematic review of life events, socioeconomic deprivation, and their impact on counselling and psychotherapy with children and adolescents. *Counselling and Psychotherapy Research, 18*(2), 143-153.
- Boris, N. W., & Zeanah, C. H. (2005). Practice parameter for the assessment and treatment of children and adolescents with reactive attachment disorder of infancy and early childhood. *Journal of the American Academy of Child & Adolescent Psychiatry, 44*(11), 1206-1219.
- Boufous, S., Silove, D., Bauman, A., & Steel, Z. (2005). Disability and health service utilization associated with psychological distress: The influence of ethnicity. *Mental Health Services Research, 7*(3), 171-179.
- Bowen, D. J., Kreuter, M., Spring, B., Cofta-Woerpel, L., Linnan, L., Weiner, D., ... & Fernandez, M. (2009). How we design feasibility studies. *American Journal of Preventive Medicine, 36*(5), 452-457.
- Bower, R. D., Pahl, L., & Bernstein, M. A. (2004). Case presentation of a tattoo-mutilated, Bosnian torture survivor. *Torture: Quarterly Journal on Rehabilitation of Torture Victims and Prevention of Torture, 14*(1), 16-24.
- Bowlby, J. (1969). Attachment and loss v. 3 (Vol. 1). *Random House*. Furman, W., & Buhrmester, D. (2009). *Methods and measures: The network of relationships inventory: Behavioral systems version. International Journal of Behavioral Development, 33*, 470-478.
- Bronfenbrenner, U. (2005). *Making human beings human: Bioecological perspectives on human development*. Sage.
- Bronfenbrenner, U. (1979). *The ecology of human development*. Harvard University Press.

- Bronfenbrenner, U. (1977). Toward an experimental ecology of human development. *American Psychologist*, 32(7), 513.
- Bronstein, I., & Montgomery, P. (2011). Psychological distress in refugee children: a systematic review. *Clinical child and family psychology review*, 14(1), 44-56.
- Bronstein, I., Montgomery, P., & Ott, E. (2013). Emotional and behavioural problems amongst Afghan unaccompanied asylum-seeking children: results from a large-scale cross-sectional study. *European Child & Adolescent Psychiatry*, 22(5), 285-294.
- Brumariu, L. E., & Kerns, K. A. (2010). Parent–child attachment and internalizing symptoms in childhood and adolescence: A review of empirical findings and future directions. *Development and Psychopathology*, 22(1), 177-203.
- Bruce, A. E., Cole, D. A., Dallaire, D. H., Jacquez, F. M., Pineda, A. Q., & LaGrange, B. (2006). Relations of parenting and negative life events to cognitive diatheses for depression in children. *Journal of Abnormal Child Psychology*, 34(3), 310-322.
- Bryant, R. A., Edwards, B., Creamer, M., O'Donnell, M., Forbes, D., Felmingham, K. L., . . . McFarlane, A. C. (2018). The effect of post-traumatic stress disorder on refugees' parenting and their children's mental health: A cohort study. *The Lancet Public Health*, 3(5), e249-e258.
- Bryman, A. (2016). *Social research methods*. Oxford university press.
- Brymer, M., Layne, C., Jacobs, A., Pynoos, R., Ruzek, J., Steinberg, A., . . . Watson, P. (2006). *Psychological first aid field operations guide*. National Child Traumatic Stress Network.
- Buchanan, Z. E., Abu-Rayya, H. M., Kashima, E., Paxton, S. J., & Sam, D. L. (2018). Perceived discrimination, language proficiencies, and adaptation: Comparisons between refugee and non-refugee immigrant youth in Australia. *International Journal of Intercultural Relations*, 63, 105-112.
- Bussey, K., & Bandura, A. (1999). Social cognitive theory of gender development and differentiation. *Psychological Review*, 106(4), 676.



- Cain, D. S., Plummer, C. A., Fisher, R. M., & Bankston, T. Q. (2010). Weathering the storm: persistent effects and psychological first aid with children displaced by Hurricane Katrina. *Journal of Child & Adolescent Trauma*, 3(4), 330-343.
- Carroll, J. K., Yancey, A. K., Spring, B., Figueroa-Moseley, C., Mohr, D. C., Mustian, K. M., . . . Fiscella, K. (2011). What are successful recruitment and retention strategies for underserved populations? Examining physical activity interventions in primary care and community settings. *Translational Behavioral Medicine*, 1(2), 234-251.
- Carlson, E. A. (1998). A prospective longitudinal study of attachment disorganization/disorientation. *Child Development*, 69(4), 1107-1128.
- Carlson, E. A., Egeland, B., & Sroufe, L. A. (2009). A prospective investigation of the development of borderline personality symptoms. *Development and Psychopathology*, 21(4), 1311-1334.
- Caron, A., Weiss, B., Harris, V., & Catron, T. (2006). Parenting behavior dimensions and child psychopathology: Specificity, task dependency, and interactive relations. *Journal of Clinical Child and Adolescent Psychology*, 35(1), 34-45.
- Carter, A. S., Garrity-Rokous, F. E., Chazan-Cohen, R., Little, C., & Briggs-Gowan, M. J. (2001). Maternal depression and comorbidity: predicting early parenting, attachment security, and toddler social-emotional problems and competencies. *Journal of the American Academy of Child & Adolescent Psychiatry*, 40(1), 18-26.
- Cartwright-Hatton, S., McNally, D., White, C., & Verduyn, C. (2005). Parenting skills training: an effective intervention for internalizing symptoms in younger children? *Journal of Child and Adolescent Psychiatric Nursing*, 18(2), 45-52.
- Castro, J., Toro, J., Van der Ende, J., & Arrindell, W. A. (1993). Exploring the feasibility of assessing perceived parental rearing styles in Spanish children with Theembu. *International Journal of Social Psychiatry*, 39(1), 47-57.
- Catani, C., Kohiladevy, M., Ruf, M., Schauer, E., Elbert, T., & Neuner, F. (2009). Treating children traumatized by war and Tsunami: a comparison between exposure therapy and meditation-relaxation in North-East Sri Lanka. *BMC Psychiatry*, 9(1), 22.

- Chaffin, M., Silovsky, J. F., Funderburk, B., Valle, L. A., Brestan, E. V., Balachova, T., ... & Bonner, B. L. (2004). Parent-child interaction therapy with physically abusive parents: efficacy for reducing future abuse reports. *Journal of Consulting and Clinical Psychology, 72*(3), 500.
- Chan, T. W., & Koo, A. (2010). Parenting style and youth outcomes in the UK. *European sociological review, 27*(3), 385-399.
- Chang, L., Schwartz, D., Dodge, K. A., & McBride-Chang, C. (2003). Harsh parenting in relation to child emotion regulation and aggression. *Journal of Family Psychology, 17*(4), 598.
- Chao, R. K. (1994). Beyond parental control and authoritarian parenting style: Understanding Chinese parenting through the cultural notion of training. *Child Development, 65*(4), 1111-1119.
- Chapman, L., Morabito, D., Ladakakos, C., Schreier, H., & Knudson, M. M. (2001). The effectiveness of art therapy interventions in reducing post-traumatic stress disorder (PTSD) symptoms in pediatric trauma patients. *Art Therapy, 18*(2), 100-104.
- Chatty, D., Crivello, G., & Hundt, G. L. (2005). Theoretical and methodological challenges of studying refugee children in the Middle East and North Africa: Young Palestinian, Afghan and Sahrawi refugees. *Journal of Refugee Studies, 18*(4), 387-409.
- Chemtob, C. M., Gudiño, O. G., & Laraque, D. (2013). Maternal posttraumatic stress disorder and depression in pediatric primary care: association with child maltreatment and frequency of child exposure to traumatic events. *Jama Pediatrics, 167*(11), 1011-1018.
- Child Outcomes Research Consortium. (2017). Child Revised Impact of Events Scale. Retrieved from <http://www.corc.uk.net/outcome-experience-measures/child-revised-impact-of-events-scale/>
- Cicchetti, D., & Doyle, C. (2016). Child maltreatment, attachment and psychopathology: mediating relations. *World Psychiatry, 15*(2), 89-90.
- Cienfuegos, A. J., & Monelli, C. (1983). The testimony of political repression as a therapeutic instrument. *American Journal of Orthopsychiatry, 53*(1), 43.

- Cilga, M. (2017). Syrian Refugees and NGOs in Turkey. Retrieved from <https://graphcommons.com/graphs/0711e621-a8c5-4651-a1d6-33106c7bb3f1>
- Cluxton-Keller, F., Riley, A. W., Noazin, S., & Umoren, M. V. (2015). Clinical effectiveness of family therapeutic interventions embedded in general pediatric primary care settings for parental mental health: a systematic review and meta-analysis. *Clinical Child and Family Psychology Review, 18*(4), 395-412.
- Coad, J. E., & Shaw, K. L. (2008). Is children's choice in health care rhetoric or reality? A scoping review. *Journal of Advanced Nursing, 64*(4), 318-327.
- Coe, R. (2002). *It's the Effect Size, Stupid*. Paper presented at the Annual Conference of the British Educational Research Association, University of Exeter, England.  
<https://www.leeds.ac.uk/educol/documents/00002182.htm>
- Cohen, J. A., Mannarino, A. P., & Deblinger, E. (2016). *Treating trauma and traumatic grief in children and adolescents*. Guilford Publications.
- Cohen, P., West, S. G., & Aiken, L. S. (2014). *Applied multiple regression/correlation analysis for the behavioral sciences*. Psychology Press.
- Cohen, J. A., Berliner, L., & Mannarino, A. (2010). Trauma focused CBT for children with co-occurring trauma and behavior problems. *Child Abuse & Neglect, 34*(4), 215-224.
- Cohen, J. A., Mannarino, A. P., & Deblinger, E. (2016). *Treating trauma and traumatic grief in children and adolescents*. Guilford Publications.
- Cohen, J. A., Mannarino, A. P., Murray, L. K., & Igelman, R. (2006). Psychosocial interventions for maltreated and violence-exposed children. *Journal of Social Issues, 62*(4), 737-766.
- Cohen, J. A., Deblinger, E., Mannarino, A. P., & Steer, R. A. (2004). A multisite, randomized controlled trial for children with sexual abuse-related PTSD symptoms. *Journal of the American Academy of Child & Adolescent Psychiatry, 43*(4), 393-402.
- Cohen, J. A. (1998). Practice parameters for the assessment and treatment of children and adolescents with posttraumatic stress disorder. *Journal of the American Academy of Child & Adolescent Psychiatry, 37*(10), 4S-26S.

- Cohen, J. (1988). *Statistical power analysis for the behavioral sciences* (2nd ed.). Hillsdale, NJ: Lawrence Erlbaum Associates, Inc.
- Coleman, R. (2010). Research findings that support the effectiveness of Theraplay. *Theraplay: Helping parents and children build better relationships through attachment-based play*, 85-97.
- Cook, C., Heath, F., & Thompson, R. L. (2000). A meta-analysis of response rates in web-or internet-based surveys. *Educational and Psychological Measurement*, 60(6), 821-836.
- Cook, A., Spinazzola, J., Ford, J., Lanktree, C., Blaustein, M., Cloitre, M., . . . Liataud, J. (2017). Complex trauma in children and adolescents. *Psychiatric Annals*, 35(5), 390-398.
- Cooper, M. L., Shaver, P. R., & Collins, N. L. (1998). Attachment styles, emotion regulation, and adjustment in adolescence. *Journal of Personality and Social Psychology*, 74(5), 1380.
- Coyne, I., Hayes, E., & Gallagher, P. (2009). Research with hospitalized children: Ethical, methodological and organizational challenges. *Childhood*, 16(3), 413-429.
- Crittenden, P. M. (1995). Attachment and psychopathology. *Attachment theory: Social, developmental, and Clinical Perspectives*, 367-406.
- Cross, D., & Howard, A. (2007). An evaluation of Theraplay with children diagnosed with PDD or mild to moderate autism. In *Third International Theraplay Conference, Chicago, Ill.*
- Czamanski-Cohen, J. (2010). “Oh! Now I remember”: The use of a studio approach to art therapy with internally displaced people. *The Arts in Psychotherapy*, 37(5), 407-413.
- Dalgaard, N. T., Todd, B. K., Daniel, S. I., & Montgomery, E. (2016). The transmission of trauma in refugee families: associations between intra-family trauma communication style, children’s attachment security and psychosocial adjustment. *Attachment & Human Development*, 18(1), 69-89.
- Danielson, M. L., Bitsko, R. H., Ghandour, R. M., Holbrook, J. R., Kogan, M. D., & Blumberg, S. J. (2018). Prevalence of parent-reported ADHD diagnosis and associated

- treatment among US children and adolescents, 2016. *Journal of Clinical Child & Adolescent Psychology*, 47(2), 199-212.
- Dapo, N., & Kolenovic-Dapo, J. (2000). Evaluation of the psychosocial adjustment of displaced children from Srebrenica. *Sarajevo*, 150-54.
- Daradkeh, T. K., Ghubash, R., & El-Rufaie, O. E. (2001). Reliability, validity, and factor structure of the Arabic version of the 12-item General Health Questionnaire. *Psychological Reports*, 89(1), 85-94.
- Dare, C., & Eisler, I. (2000). A multi-family group day treatment programme for adolescent eating disorder. *European Eating Disorders Review: The Professional Journal of the Eating Disorders Association*, 8(1), 4-18.
- Daud, A., & Rydelius, P. A. (2009). Comorbidity/overlapping between ADHD and PTSD in relation to IQ among children of traumatized/non-traumatized parents. *Journal of Attention Disorders*, 13(2), 188-196.
- Davidson, C., O'Hare, A., Mactaggart, F., Green, J., Young, D., Gillberg, C., & Minnis, H. (2015). Social relationship difficulties in autism and reactive attachment disorder: Improving diagnostic validity through structured assessment. *Research in Developmental Disabilities*, 40, 63-72.
- Davidson, N., Skull, S., Burgner, D., Kelly, P., Raman, S., Silove, D., . . . Smith, M. (2004). An issue of access: delivering equitable health care for newly arrived refugee children in Australia. *Journal of Paediatrics and Child Health*, 40(9-10), 569-575.
- Davidson, R. J., & McEwen, B. S. (2012). Social influences on neuroplasticity: stress and interventions to promote well-being. *Nature Neuroscience*, 15(5), 689.
- De Anstiss, H., Ziaian, T., Procter, N., Warland, J., & Baghurst, P. (2009). Help-seeking for mental health problems in young refugees: A review of the literature with implications for policy, practice, and research. *Transcultural Psychiatry*, 46(4), 584-607.
- Deblinger, E., Mannarino, A. P., Cohen, J. A., & Steer, R. A. (2006). A follow-up study of a multisite, randomized, controlled trial for children with sexual abuse-related PTSD

- symptoms. *Journal of the American Academy of Child & Adolescent Psychiatry*, 45(12), 1474-1484.
- Deeba, F., Rapee, R. M., & Prvan, T. (2014). Psychometric properties of the Children's Revised Impact of Events Scale (CRIES) with Bangladeshi children and adolescents. *PeerJ*, 2, e536.
- De Haene, L., Dalgaard, N. T., Montgomery, E., Grietens, H., & Verschueren, K. (2013). Attachment narratives in refugee children: Interrater reliability and qualitative analysis in pilot findings from a two-Site study. *Journal of Traumatic Stress*, 26(3), 413-417.
- De Los Reyes, A., Augenstein, T. M., Wang, M., Thomas, S. A., Drabick, D. A., Burgers, D. E., & Rabinowitz, J. (2015). The validity of the multi-informant approach to assessing child and adolescent mental health. *Psychological Bulletin*, 141(4), 858.
- Derluyn, I., Broekaert, E., & Schuyten, G. (2008). Emotional and behavioural problems in migrant adolescents in Belgium. *European Child & Adolescent Psychiatry*, 17(1), 54-62.
- Derluyn, I., & Broekaert, E. (2007). Different perspectives on emotional and behavioural problems in unaccompanied refugee children and adolescents. *Ethnicity and Health*, 12(2), 141-162.
- Derluyn, I., Mels, C., & Broekaert, E. (2009). Mental health problems in separated refugee adolescents. *Journal of Adolescent Health*, 44(3), 291-297.
- Devilley, G. J. (2002). Eye movement desensitization and reprocessing. *A chronology of its development and scientific standing. The Scientific Review of Mental Health Practice*, 1(2).
- Di Maio, M., & Nandi, T. K. (2013). The effect of the Israeli–Palestinian conflict on child labor and school attendance in the West Bank. *Journal of Development Economics*, 100(1), 107-116.
- Disaster and Emergency Management Authority. (2017). Turkey response to Syria crisis. Retrieved from <https://www.afad.gov.tr/en/2601/Turkey-Response-to-Syria-Crisis>

- Dobkin, B. H. (2009). Progressive staging of pilot studies to improve phase III trials for motor interventions. *Neurorehabilitation and Neural Repair*, 23(3), 197-206.
- Downey, G., & Coyne, J. C. (1990). Children of depressed parents: an integrative review. *Psychological bulletin*, 108(1), 50.
- Dumka, L. E., Garza, C. A., Roosa, M. W., & Stoerzinger, H. D. (1997). Recruitment and retention of high-risk families into a preventive parent training intervention. *Journal of Primary Prevention*, 18(1), 25-39.
- Durà-Vilà, G., Klasen, H., Makatini, Z., Rahimi, Z., & Hodes, M. (2013). Mental health problems of young refugees: Duration of settlement, risk factors and community-based interventions. *Clinical Child Psychology and Psychiatry*, 18(4), 604-623.
- Dybdahl, R. (2001). Children and mothers in war: an outcome study of a psychosocial intervention program. *Child Development*, 72(4), 1214-1230.
- Dyregrov, A., Kuterovac, G., & Barath, A. (1996). Factor analysis of the impact of event scale with children in war. *Scandinavian journal of psychology*, 37(4), 339-350.
- East, P. L., Gahagan, S., & Al-Delaimy, W. K. (2017). The Impact of Refugee Mothers' Trauma, Posttraumatic Stress, and Depression on Their Children's Adjustment. *Journal of Immigrant and Minority Health*. doi: 10.1007/s10903-017-0624-2
- Eaton, L. G., Doherty, K. L., & Widrick, R. M. (2007). A review of research and methods used to establish art therapy as an effective treatment method for traumatized children. *The Arts in Psychotherapy*, 34(3), 256-262.
- Edwards, A. (2016). UNHCR viewpoint: 'Refugee' or 'migrant': Which is right?. Retrieved from <http://www.unhcr.org/uk/news/latest/2016/7/55df0e556/unhcr-viewpoint-refugee-migrant-right.html>
- Ehnholt, K. A., & Yule, W. (2006). Practitioner Review: Assessment and treatment of refugee children and adolescents who have experienced war-related trauma. *Journal of Child Psychology and Psychiatry*, 47(12), 1197-1210.

- Ehnholt, K. A., Smith, P. A., & Yule, W. (2005). School-based cognitive-behavioural therapy group intervention for refugee children who have experienced war-related trauma. *Clinical Child Psychology and Psychiatry, 10*(2), 235-250.
- Eisler, I. (2005). The empirical and theoretical base of family therapy and multiple family day therapy for adolescent anorexia nervosa. *Journal of Family Therapy, 27*(2), 104-131.
- Elbedour, S., Onwuegbuzie, A. J., Ghannam, J., Whitcome, J. A., & Hein, F. A. (2007). Post-traumatic stress disorder, depression, and anxiety among Gaza Strip adolescents in the wake of the second Uprising (Intifada). *Child Abuse & Neglect, 31*(7), 719-729.
- El-Khani, A., Ulph, F., Peters, S., & Calam, R. (2018). Syria: refugee parents' experiences and need for parenting support in camps and humanitarian settings. *Vulnerable Children and Youth Studies, 13*(1), 19-29.
- El-Khani, A., Cartwright, K., Redmond, A., & Calam, R. (2016). Daily bread: a novel vehicle for dissemination and evaluation of psychological first aid for families exposed to armed conflict in Syria. *Global Mental Health, 3*.
- El-Khani, A., Ulph, F., Peters, S., & Calam, R. (2016). Syria: the challenges of parenting in refugee situations of immediate displacement. *Intervention, 14*(2), 99-113.
- Ellis, B. H., Lincoln, A. K., Charney, M. E., Ford-Paz, R., Benson, M., & Strunin, L. (2010). Mental health service utilization of Somali adolescents: religion, community, and school as gateways to healing. *Transcultural Psychiatry, 47*(5), 789-811.
- Ellis, B. H., MacDonald, H. Z., Klunk-Gillis, J., Lincoln, A., Strunin, L., & Cabral, H. J. (2010). Discrimination and mental health among Somali refugee adolescents: the role of acculturation and gender. *American Journal of Orthopsychiatry, 80*(4), 564.
- Ellis, B. H., MacDonald, H. Z., Lincoln, A. K., & Cabral, H. J. (2008). Mental health of Somali adolescent refugees: the role of trauma, stress, and perceived discrimination. *Journal of Consulting and Clinical Psychology, 76*(2), 184.
- Ellis, B. H., Miller, A. B., Abdi, S., Barrett, C., Blood, E. A., & Betancourt, T. S. (2013). Multi-tier mental health program for refugee youth. *Journal of Consulting and Clinical Psychology, 81*(1), 129.



- Eloranta, S. J., Peltonen, K., Palosaari, E., Qouta, S. R., & Punamäki, R. L. (2017). The role of attachment and emotion regulation in the psychosocial intervention among war-affected children. *Journal of Child & Adolescent Trauma, 10*(4), 301-314.
- Emam, M. M., Hilal, M. M. A., Kazem, A. M., & Alkharousi, S. J. (2016). Psychometric properties of the Arabic self-report version of the strengths and difficulties questionnaire. *Research in Developmental Disabilities, 59*, 211-220.
- Eruyar, S., Huemer, J., & Vostanis, P. (2017). How should child mental health services respond to the refugee crisis? *Child and Adolescent Mental Health*.
- Eschenbeck, H., Schmid, S., Schröder, I., Wasserfall, N., & Kohlmann, C. W. (2018). Development of coping strategies from childhood to adolescence. *European Journal of Health Psychology*.
- European Commission. (2017, April). *Turkey: Refugee crisis*. Retrieved from [http://ec.europa.eu/echo/files/aid/countries/factsheets/turkey\\_syrian\\_crisis\\_en.pdf](http://ec.europa.eu/echo/files/aid/countries/factsheets/turkey_syrian_crisis_en.pdf).
- Eurostat. (2017, May 11). Asylum applicants considered to be unaccompanied minors. Retrieved from <http://ec.europa.eu/eurostat/documents/2995521/8016696/3-11052017-AP-EN.pdf/30ca2206-0db9-4076-a681-e069a4bc5290>
- Evans, S. W., Schultz, B. K., & Sadler, J. M. (2008). Psychosocial interventions used to treat children with ADHD: safety and efficacy. *Journal of Psychosocial Nursing and Mental Health Services, 46*(8), 49-57.
- Evason, N. (2016). Syrian Culture: Family. Retrieved from <https://culturalatlas.sbs.com.au/syrian-culture/syrian-culture-family>
- Fatal journeys. (2014). Retrieved from [https://publications.iom.int/system/files/pdf/fataljourneys\\_countingtheuncounted.pdf](https://publications.iom.int/system/files/pdf/fataljourneys_countingtheuncounted.pdf)
- Fazel, M., & Betancourt, T. S. (2017). Preventive mental health interventions for refugee children and adolescents in high-income settings. *The Lancet Child & Adolescent Health*.

- Fazel, M., Doll, H., & Stein, A. (2009). A school-based mental health intervention for refugee children: An exploratory study. *Clinical Child Psychology and Psychiatry, 14*(2), 297-309.
- Fazel, M., Reed, R., & Stein, A. (2015). Refugee, asylum-seeking and internally displaced children and adolescents. *Rutter's Child and Adolescent Psychiatry, 573-585*.
- Fazel, M., Reed, R. V., Panter-Brick, C., & Stein, A. (2012). Mental health of displaced and refugee children resettled in high-income countries: risk and protective factors. *The Lancet, 379*(9812), 266-282.
- Fazel, M., & Stein, A. (2002). The mental health of refugee children. *Archives of Disease in Childhood, 87*(5), 366-370.
- Fazel, M., Wheeler, J., & Danesh, J. (2005). Prevalence of serious mental disorder in 7000 refugees resettled in western countries: a systematic review. *The Lancet, 365*(9467), 1309-1314.
- Field, T. A., Beeson, E. T., & Jones, L. K. (2015). The new ABCs: A practitioner's guide to neuroscience-informed cognitive-behavior therapy. *Journal of Mental Health Counseling, 37*(3), 206-220.
- Field, N. P., Muong, S., & Sochanvimean, V. (2013). Parental styles in the intergenerational transmission of trauma stemming from the Khmer Rouge regime in Cambodia. *American Journal of Orthopsychiatry, 83*(4), 483-494.
- Finkelhor, D., Turner, H., Shattuck, A., Hamby, S., & Kracke, K. (2015). *Children's exposure to violence, crime, and abuse: An update*. Washington, DC: US Department of Justice, Office of Justice Programs, Office of Juvenile Justice and Delinquency Prevention.
- Franklin, J., Moore, E., Howard, A., Purvis, K., Cross, D., & Lindaman, S. (2007). An evaluation of Theraplay using a sample of children diagnosed with pervasive developmental disorder or mild to moderate autism. In *Poster Presentation at American Psychological Association Conference*.

- Fristad, M. A., Goldberg-Arnold, J. S., & Gavazzi, S. M. (2003). Multi-family psychoeducation groups in the treatment of children with mood disorders. *Journal of Marital and Family Therapy*, 29(4), 491-504.
- Frydenberg, E., Lewis, R., Kennedy, G., Ardila, R., Frindte, W., & Hannoun, R. (2003). Coping with concerns: An exploratory comparison of Australian, Colombian, German, and Palestinian adolescents. *Journal of Youth and Adolescence*, 32(1), 59-66.
- Folkman, S., & Lazarus, R. S. (1985). If it changes it must be a process: study of emotion and coping during three stages of a college examination. *Journal of Personality and Social Psychology*, 48(1), 150.
- Follan, M., Anderson, S., Huline-Dickens, S., Lidstone, E., Young, D., Brown, G., & Minnis, H. (2011). Discrimination between attention deficit hyperactivity disorder and reactive attachment disorder in school aged children. *Research in Developmental Disabilities*, 32(2), 520-526.
- Foy, D. W., Madvig, B. T., Pynoos, R. S., & Camilleri, A. J. (1996). Etiologic factors in the development of posttraumatic stress disorder in children and adolescents. *Journal of School Psychology*, 34(2), 133-145.
- Garber, J., Clarke, G. N., Weersing, V. R., Beardslee, W. R., Brent, D. A., Gladstone, T. R., . . . Hollon, S. D. (2009). Prevention of depression in at-risk adolescents: a randomized controlled trial. *Jama*, 301(21), 2215-2224.
- Gardner, F., Burton, J., & Klimes, I. (2006). Randomised controlled trial of a parenting intervention in the voluntary sector for reducing child conduct problems: outcomes and mechanisms of change. *Journal of Child Psychology and Psychiatry*, 47(11), 1123-1132.
- Geist, R., Heinmaa, M., Stephens, D., Davis, R., & Katzman, D. K. (2000). Comparison of family therapy and family group psychoeducation in adolescents with anorexia nervosa. *The Canadian Journal of Psychiatry*, 45(2), 173-178.
- Gelin, Z., Cook-Darzens, S., Simon, Y., & Hendrick, S. (2016). Two models of multiple family therapy in the treatment of adolescent anorexia nervosa: A systematic

- review. *Eating and Weight Disorders-Studies on Anorexia, Bulimia and Obesity*, 21(1), 19-30.
- Geneva Declaration Secretariat. (2015). *Global burden of armed violence 2015: Every body counts*. Cambridge University Press.
- George, C., Kaplan, N., & Main, M. (1996). Adult attachment interview. <http://library.allanschore.com/docs/AAIProtocol.pdf>
- Georgsson, A., Almqvist, K., & Broberg, A. G. (2011). Dissimilarity in vulnerability: Self-reported symptoms among children with experiences of intimate partner violence. *Child Psychiatry & Human Development*, 42(5), 539-556.
- Gewirtz, A., Forgatch, M., & Wieling, E. (2008). Parenting practices as potential mechanisms for child adjustment following mass trauma. *Journal of Marital and Family Therapy*, 34(2), 177-192.
- Giannopoulou, I., Smith, P., Ecker, C., Strouthos, M., Dikaiakou, A., & Yule, W. (2006). Factor structure of the Children's Revised Impact of Event Scale (CRIES) with children exposed to earthquake. *Personality and Individual Differences*, 40(5), 1027-1037.
- GL Assessment. (n.d.). General Health Questionnaire: Identify minor psychiatric disorders. Retrieved from <https://www.gl-assessment.co.uk/products/general-health-questionnaire-ghq/>
- Glossary on Migration N°25. (2011). Retrieved from [https://publications.iom.int/system/files/pdf/iml25\\_1.pdf](https://publications.iom.int/system/files/pdf/iml25_1.pdf)
- Golafshani, N. (2003). Understanding reliability and validity in qualitative research. *The Qualitative Report*, 8(4), 597-606.
- Goldberg, D. P., & Blackwell, B. (1970). Psychiatric illness in general practice: a detailed study using a new method of case identification. *Br med J*, 2(5707), 439-443.
- Goldin, S., Hägglöf, B., Levin, L., & Persson, L. Å. (2008). Mental health of Bosnian refugee children: a comparison of clinician appraisal with parent, child and teacher reports. *Nordic Journal of Psychiatry*, 62(3), 204-216.

- Golding, K. (2003). Helping foster carers, helping children: Using attachment theory to guide practice. *Adoption & Fostering*, 27(2), 64-73.
- Goodkind, J. R. (2005). Effectiveness of a community-based advocacy and learning program for Hmong refugees. *American Journal of Community Psychology*, 36(3-4), 387-408.
- Goodkind, J. R., Hess, J. M., Isakson, B., LaNoue, M., Githinji, A., Roche, N., . . . Parker, D. P. (2014). Reducing refugee mental health disparities: A community-based intervention to address postmigration stressors with African adults. *Psychological services*, 11(3), 333.
- Goodman, R. (1997). The Strengths and Difficulties Questionnaire: a research note. *Journal of Child Psychology and Psychiatry*, 38(5), 581-586.
- Goodman, R. (2001). Psychometric properties of the strengths and difficulties questionnaire. *Journal of the American Academy of Child & Adolescent Psychiatry*, 40(11), 1337-1345.
- Gomez, V., Kılıç, H. N., Oregul, A. C., Demir, M. N., Mert, E. B., Makhlouta, B., . . . Semerci, B. (2017). Evaluation of a school-based, teacher-delivered psychological intervention group program for trauma-affected Syrian refugee children in Istanbul, Turkey. *Psychiatry and Clinical Psychopharmacology*, 27(2), 125-131.
- Graham, H. R., Minhas, R. S., & Paxton, G. (2016). Learning problems in children of refugee background: A systematic review. *Pediatrics*, 137(6), e20153994.
- Green, H., McGinnity, Á., Meltzer, H., Ford, T., & Goodman, R. (2005). *Mental health of children and young people in Great Britain, 2004*: Basingstoke: Palgrave Macmillan.
- Grip, K. K., Almqvist, K., & Broberg, A. G. (2013). Children exposed to intimate partner violence and the reported effects of psychosocial interventions. *Violence and Victims*, 28(4), 635.
- Guerra, N. G., & Slaby, R. G. (1990). Cognitive mediators of aggression in adolescent offenders: II. Intervention. *Developmental psychology*, 26(2), 269.
- Gupta, L., & Zimmer, C. (2008). Psychosocial intervention for war-affected children in Sierra Leone. *The British Journal of Psychiatry*, 192(3), 212-216.

- Gurney-Smith, B., Granger, C., Randle, A., & Fletcher, J. (2010). 'In Time and in Tune'—The fostering attachments group: Capturing sustained change in both caregiver and child. *Adoption & Fostering*, 34(4), 50-60.
- Güvenir, T., Özbek, A., Baykara, B., Arkar, H., Şentürk, B., & İncekaş, S. (2008). Psychometric properties of the Turkish version of the Strengths and Difficulties Questionnaire (SDQ). *Turkish Journal of Child and Adolescent Mental Health*, 15(2), 65-74.
- Hamblen, J., & Barnett, E. (2016, February 23). PTSD in children and adolescents. Retrieved from [https://www.ptsd.va.gov/professional/treatment/children/ptsd\\_in\\_children\\_and\\_adolescents\\_overview\\_for\\_professionals.asp](https://www.ptsd.va.gov/professional/treatment/children/ptsd_in_children_and_adolescents_overview_for_professionals.asp).
- Hankin, B. L. (2005). Childhood maltreatment and psychopathology: Prospective tests of attachment, cognitive vulnerability, and stress as mediating processes. *Cognitive Therapy and Research*, 29(6), 645-671.
- Harper, D. (2007). In *Online etymology dictionary*. Retrieved from <https://www.etymonline.com/word/refugee>
- Hasanović, M., Sinanović, O., & Pavlović, S. (2005). Acculturation and psychological problems of adolescents from Bosnia and Herzegovina during exile and repatriation. *Croatian Medical Journal*, 46(1).
- Hasanović, M., Srabović, S., Rašidović, M., Šehović, M., Hasanbašić, E., Husanović, J., & Hodžić, R. (2009). Psychosocial assistance to students with posttraumatic stress disorder in primary and secondary schools in post-war Bosnia Herzegovina. *Psychiatria Danubina*, 21(4), 463-473.
- Hayat Sağlık ve Sosyal Hizmetler Vakfı. (n.d.). *Ana Sayfa*. Retrieved from <https://hayatvakfi.org.tr/>
- Hazzard, A., Christensen, A., & Margolin, G. (1983). Children's perceptions of parental behaviors. *Journal of Abnormal Child Psychology*, 11(1), 49-59.

- Hechtman, L., Abikoff, H., Klein, R. G., Greenfield, B., Etcovitch, J., Cousins, L., . . .  
Pollack, S. (2004). Children with ADHD treated with long-term methylphenidate and multimodal psychosocial treatment: impact on parental practices. *Journal of the American Academy of Child & Adolescent Psychiatry*, 43(7), 830-838.
- Heller, W., Etienne, M. A., & Miller, G. A. (1995). Patterns of perceptual asymmetry in depression and anxiety: Implications for neuropsychological models of emotion and psychopathology. *Journal of Abnormal Psychology*, 104(2), 327.
- Heptinstall, E., Sethna, V., & Taylor, E. (2004). PTSD and depression in refugee children. *European Child & Adolescent Psychiatry*, 13(6), 373-380.
- Hickman, G. P., Bartholomae, S., & McKenry, P. C. (2000). Influence of parenting style on the adjustment and academic achievement of traditional college freshmen. *Journal of College Student Development*.
- Hjern, A., Angel, B., & Jeppson, O. (1998). Political violence, family stress and mental health of refugee children in exile. *Scandinavian Journal of Social Medicine*, 26(1), 18-25.
- Hobfoll, S. E., Watson, P., Bell, C. C., Bryant, R. A., Brymer, M. J., Friedman, M. J., ... & Maguen, S. (2007). Five essential elements of immediate and mid-term mass trauma intervention: Empirical evidence. *Psychiatry: Interpersonal and Biological Processes*, 70(4), 283-315.
- Hodes, M., Jagdev, D., Chandra, N., & Cunniff, A. (2008). Risk and resilience for psychological distress amongst unaccompanied asylum seeking adolescents. *Journal of Child Psychology and Psychiatry*, 49(7), 723-732.
- Hoexter, M. Q., Fadel, G., Felício, A. C., Calzavara, M. B., Batista, I. R., Reis, M. A., . . .  
Mello, M. F. (2012). Higher striatal dopamine transporter density in PTSD: an in vivo SPECT study with [99m Tc] TRODAT-1. *Psychopharmacology*, 224(2), 337-345.
- Hoffman, K. T., Marvin, R. S., Cooper, G., & Powell, B. (2006). Changing toddlers' and pre-schoolers' attachment classifications: The Circle of Security intervention. *Journal of Consulting and Clinical Psychology*, 74(6), 1017.

- Horowitz, M., Wilner, N., & Alvarez, W. (1979). Impact of Event Scale: a measure of subjective stress. *Psychosomatic Medicine*, 41(3), 209-218.
- Howard, M., & Hodes, M. (2000). Psychopathology, adversity, and service utilization of young refugees. *Journal of the American Academy of Child & Adolescent Psychiatry*, 39(3), 368-377.
- Huemer, J., & Vostanis, P. (2010). Child refugees and refugee families. *Mental Health Of Refugees and Asylum Seekers*, 225.
- Hunsley, J. (2007). Addressing key challenges in evidence-based practice in psychology. *Professional Psychology: Research and Practice*, 38(2), 113.
- İçduygu, A. (2015). Syrian refugees in Turkey: The long road ahead. *Transatlantic Council on Migration, Migration Policy Institute*, 3(8), 2016.
- İçduygu, A., & Şimşek, D. (2016). Syrian refugees in Turkey: Towards integration policies. *Turkish Policy Quarterly*, 15(3), 59-69.
- Idsoe, T., Dyregrov, A., & Idsoe, E. C. (2012). Bullying and PTSD symptoms. *Journal of Abnormal Child Psychology*, 40(6), 901-911.
- Im, H., Caudill, C., & Ferguson, A. B. (2016). From victim to perpetrator of trauma: Lived experiences of gang-involved urban refugee youth in Kenya. *Journal of Aggression, Maltreatment & Trauma*, 25(7), 753-771.
- Im, H., Jettner, J. F., Warsame, A. H., Isse, M. M., Khoury, D., & Ross, A. I. (2017). Trauma-informed psychoeducation for Somali refugee youth in urban Kenya: Effects on PTSD and psychosocial outcomes. *Journal of Child & Adolescent Trauma*, 1-11.
- International Institute for Strategic Studies. (2017). The armed conflict survey. Retrieved from <file:///Z:/Downloads/ACS-2017-Key-Themes.pdf>
- Ives, N. (2007). More than a “good back”: Looking for integration in refugee resettlement. *Refuge: Canada's Journal on Refugees*, 24(2).



- Jaberghaderi, N., Greenwald, R., Rubin, A., Zand, S. O., & Dolatabadi, S. (2004). A comparison of CBT and EMDR for sexually-abused Iranian girls. *Clinical Psychology & Psychotherapy: An International Journal of Theory & Practice*, 11(5), 358-368.
- Jacobsen, K. (1996). Factors influencing the policy responses of host governments to mass refugee influxes. *International Migration Review*, 30(3), 655-678.
- Jaenicke, C., Hammen, C., Zupan, B., Hiroto, D., Gordon, D., Adrian, C., & Burge, D. (1987). Cognitive vulnerability in children at risk for depression. *Journal of Abnormal Child Psychology*, 15(4), 559-572.
- Jakobsen, M., Demott, M. A., & Heir, T. (2014). Prevalence of psychiatric disorders among unaccompanied asylum-seeking adolescents in Norway. *Clinical Practice and Epidemiology in Mental Health: CP & EMH*, 10, 53.
- James, A. A. C. J., Soler, A., & Weatherall, R. (2005). Cognitive behavioural therapy for anxiety disorders in children and adolescents. <http://cochranelibrary-wiley.com/doi/10.1002/14651858.CD004690.pub4/full>
- Javanbakht, A., Rosenberg, D., Haddad, L., & Arfken, C. L. (2018). Mental health in Syrian refugee children resettling in the United States: War trauma, migration, and the role of parental stress. *Journal of the American Academy of Child & Adolescent Psychiatry*, 57(3), 209-211. e202.
- Jensen, T. K., Fjermestad, K. W., Granly, L., & Wilhelmsen, N. H. (2015). Stressful life experiences and mental health problems among unaccompanied asylum-seeking children. *Clinical Child Psychology and Psychiatry*, 20(1), 106-116.
- Jones, C., Hiddleston, T., & McCormick, C. (2014). Lessons from introducing a livelihood project for unaccompanied children into an existing child protection programme in the Dadaab refugee camps in Kenya. *Children and Youth Services Review*, 47, 239-245.
- Jordans, M. J. D., Komproe, I. H., Tol, W. A., Susanty, D., Vallipuram, A., Ntamatumba, P., ... & De Jong, J. T. V. M. (2011). Practice-driven evaluation of a multi-layered psychosocial care package for children in areas of armed conflict. *Community Mental Health Journal*, 47(3), 267-277.

- Jordans, M. J., Pigott, H., & Tol, W. A. (2016). Interventions for children affected by armed conflict: a systematic review of mental health and psychosocial support in low-and middle-income countries. *Current Psychiatry Reports*, *18*(1), 9.
- Jordans, M. J., Tol, W., Ndayisaba, A., & Komproe, I. (2013). A controlled evaluation of a brief parenting psychoeducation intervention in Burundi. *Social Psychiatry and Psychiatric Epidemiology*, *48*(11), 1851-1859.
- Jouriles, E. N., McDonald, R., Rosenfield, D., Stephens, N., Corbitt-Shindler, D., & Miller, P. C. (2009). Reducing conduct problems among children exposed to intimate partner violence: a randomized clinical trial examining effects of Project Support. *Journal of Consulting and Clinical Psychology*, *77*(4), 705.
- Juffer, F., Bakermans-Kranenburg, M. J., & Van Ijzendoorn, M. H. (Eds.). (2012). *Promoting Positive Parenting: An Attachment-Based Intervention*. New York, NY: Routledge.
- Kaminer, Y., Burleson, J. A., & Goldberger, R. (2002). Cognitive-behavioral coping skills and psychoeducation therapies for adolescent substance abuse. *The Journal of Nervous and Mental Disease*, *190*(11), 737-745.
- Kangaslampi, S., Garoff, F., & Peltonen, K. (2015). Narrative exposure therapy for immigrant children traumatized by war: study protocol for a randomized controlled trial of effectiveness and mechanisms of change. *BMC Psychiatry*, *15*(1), 127.
- Kalantari, M., Yule, W., Dyregrov, A., Neshatdoost, H., & Ahmadi, S. (2012). Efficacy of writing for recovery on traumatic grief symptoms of Afghani refugee bereaved adolescents: A randomized control trial. *OMEGA-Journal of Death and Dying*, *65*(2), 139-150.
- Karadag, M., Gokcen, C., Dandil, F., & Calisgan, B. (2018). Our experience with Syrian refugee patients at the child and adolescent psychiatry clinic in Gaziantep, Turkey. *International Journal of Psychiatry in Clinical practice*, *22*(2), 157-159.
- Karam, E. G., Friedman, M. J., Hill, E. D., Kessler, R. C., McLaughlin, K. A., Petukhova, M., ... & De Girolamo, G. (2014). Cumulative traumas and risk thresholds: 12-month PTSD in the World Mental Health (WMH) surveys. *Depression and Anxiety*, *31*(2), 130-142.

- Karavasilis, L., Doyle, A. B., & Markiewicz, D. (2003). Associations between parenting style and attachment to mother in middle childhood and adolescence. *International Journal of Behavioral Development, 27*(2), 153-164.
- Kassam-Adams, N., Garcia-Espana, J. F., Miller, V. A., & Winston, F. (2006). Parent-child agreement regarding children's acute stress: The role of parent acute stress reactions. *Journal of the American Academy of Child & Adolescent Psychiatry, 45*(12), 1485-1493.
- Kaufmann, D., Gesten, E., Santa Lucia, R. C., Salcedo, O., Rendina-Gobioff, G., & Gadd, R. (2000). The relationship between parenting style and children's adjustment: The parents' perspective. *Journal of Child and Family Studies, 9*(2), 231-245.
- Kazdin, A. E. (2011). Evidence-based treatment research: Advances, limitations, and next steps. *American Psychologist, 66*(8), 685.
- Kazdin, A. E., Siegel, T. C., & Bass, D. (1992). Cognitive problem-solving skills training and parent management training in the treatment of antisocial behavior in children. *Journal of Consulting and Clinical Psychology, 60*(5), 733.
- Kelley, K., Clark, B., Brown, V., & Sitzia, J. (2003). Good practice in the conduct and reporting of survey research. *International Journal for Quality in Health Care, 15*(3), 261-266. doi: 10.1093/intqhc/mzg031
- Kendall, P. C., Hudson, J. L., Gosch, E., Flannery-Schroeder, E., & Suveg, C. (2008). Cognitive-behavioral therapy for anxiety disordered youth: A randomized clinical trial evaluating child and family modalities. *Journal of Consulting and Clinical Psychology, 76*(2), 282.
- Kerns, K. A., Brumariu, L. E., & Seibert, A. (2011). Multi-method assessment of mother-child attachment: Links to parenting and child depressive symptoms in middle childhood. *Attachment & Human Development, 13*(4), 315-333.
- Kerns, K. A., Klepac, L., & Cole, A. (1996). Peer relationships and preadolescents' perceptions of security in the child-mother relationship. *Developmental Psychology, 32*(3), 457.

- Kerns, K. A., Schlegelmilch, A., Morgan, T. A., & Abraham, M. M. (2005). Assessing attachment in middle childhood. *Attachment in Middle Childhood*, 46-70.
- Kerns, K. A., Tomich, P. L., Aspelmeier, J. E., & Contreras, J. M. (2000). Attachment-based assessments of parent–child relationships in middle childhood. *Developmental Psychology*, 36(5), 614.
- Khamis, V. (2016). Does parent’s psychological distress mediate the relationship between war trauma and psychosocial adjustment in children?. *Journal of Health Psychology*, 21(7), 1361-1370.
- Khamis, V. (2015). Coping with war trauma and psychological distress among school-age Palestinian children. *American Journal of Orthopsychiatry*, 85(1), 72.
- Khamis, V. (2005). Post-traumatic stress disorder among school age Palestinian children. *Child abuse & neglect*, 29(1), 81-95.
- Khan, I. M., & Laaser, U. (2002). Burden of tuberculosis in Afghanistan: update on a war-stricken country. *Croatian Medical Journal*, 43(2), 245-247.
- Kia-Keating, M., & Ellis, B. H. (2007). Belonging and connection to school in resettlement: Young refugees, school belonging, and psychosocial adjustment. *Clinical Child Psychology and Psychiatry*, 12(1), 29-43.
- Kien, C., Sommer, I., Faustmann, A., Gibson, L., Schneider, M., Krczal, E., ... & Brattström, P. (2018). Prevalence of mental disorders in young refugees and asylum seekers in European Countries: A systematic review. *European Child and Adolescent Psychiatry*, 1-16.
- Kilpatrick, D. G., Ruggiero, K. J., Acierno, R., Saunders, B. E., Resnick, H. S., & Best, C. L. (2003). Violence and risk of PTSD, major depression, substance abuse/dependence, and comorbidity: results from the National Survey of Adolescents. *Journal of Consulting and Clinical Psychology*, 71(4), 692.
- Kim, D., Bae, H., & Chon Park, Y. (2008). Validity of the subjective units of disturbance scale in EMDR. *Journal of EMDR Practice and Research*, 2(1), 57-62.

- Kočovská, E., Puckering, C., Follan, M., Smillie, M., Gorski, C., Barnes, J., . . . Pritchett, R. (2012). Neurodevelopmental problems in maltreated children referred with indiscriminate friendliness. *Research in Developmental Disabilities, 33*(5), 1560-1565.
- Kos, A. M., & Zemljak, B. (2007). Psychosocial support for children, families and teachers in Iraq. *Intervention, 5*(2), 150-158.
- Kovacev, L., & Shute, R. (2004). Acculturation and social support in relation to psychosocial adjustment of adolescent refugees resettled in Australia. *International Journal of Behavioral Development, 28*(3), 259-267.
- Krešić Ćorić, M., Klarić, M., Petrov, B., & Mihić, N. (2016). Psychological and behavioral problems in children of war veterans with Post Traumatic Stress Disorder. *The European Journal of Psychiatry, 30*(3), 219-230.
- Kumpfer, K. L., & Alvarado, R. (2003). Family-strengthening approaches for the prevention of youth problem behaviors. *American psychologist, 58*(6-7), 457.
- Kumpfer, K. L., Alvarado, R., Tait, C., & Turner, C. (2002). Effectiveness of school-based family and children's skills training for substance abuse prevention among 6-8-year-old rural children. *Psychology of Addictive Behaviors, 16*(4S), S65.
- Lamborn, S. D., Mounts, N. S., Steinberg, L., & Dornbusch, S. M. (1991). Patterns of competence and adjustment among adolescents from authoritative, authoritarian, indulgent, and neglectful families. *Child Development, 62*(5), 1049-1065.
- Lange-Nielsen, I. I., Kolltveit, S., Thabet, A. A. M., Dyregrov, A., Pallesen, S., Johnsen, T. B., & Laberg, J. C. (2012). Short-term effects of a writing intervention among adolescents in Gaza. *Journal of Loss and Trauma, 17*(5), 403-422.
- Laybourne, G., Andersen, J., & Sands, J. (2008). Fostering attachments in looked after children: Further insight into the group-based programme for foster carers. *Adoption & Fostering, 32*(4), 64-76.
- Layne, C. M., Pynoos, R. S., Saltzman, W. R., Arslanagić, B., Black, M., Savjak, N., ... & Djapo, N. (2001). Trauma/grief-focused group psychotherapy: School-based postwar

- intervention with traumatized Bosnian adolescents. *Group Dynamics: Theory, Research, and Practice*, 5(4), 277.
- Lehmann, S., Heiervang, E. R., Havik, T., & Havik, O. E. (2014). Screening foster children for mental disorders: Properties of the strengths and difficulties questionnaire. *PloS one*, 9(7), e102134.
- Leon, A. C., Davis, L. L., & Kraemer, H. C. (2011). The role and interpretation of pilot studies in clinical research. *Journal of Psychiatric Research*, 45(5), 626-629.
- Lindaman, S., & Lender, D. (2009). Theraplay with adopted children. *Applications of Family and Group Theraplay (Eds E Munns)*, 57-68.
- Leschied, A. W., Chiodo, D., Whitehead, P. C., & Hurley, D. (2005). The relationship between maternal depression and child outcomes in a child welfare sample: Implications for treatment and policy. *Child & Family Social Work*, 10(4), 281-291.
- Lieberman, A. F. (2004). Traumatic stress and quality of attachment: Reality and internalization in disorders of infant mental health. *Infant Mental Health Journal: Official Publication of the World Association for Infant Mental Health*, 25(4), 336-351.
- Lieberman, M., Doyle, A. B., & Markiewicz, D. (1999). Developmental patterns in security of attachment to mother and father in late childhood and early adolescence: Associations with peer relations. *Child Development*, 70(1), 202-213.
- Lim, S. L., & Ogawa, Y. (2014). "Once I had kids, now I am raising kids": Child-Parent Relationship Therapy (CPRT) with a Sudanese refugee family—A case study. *International Journal of Play Therapy*, 23(2), 70.
- Lindencrona, F., Ekblad, S., & Hauff, E. (2008). Mental health of recently resettled refugees from the Middle East in Sweden: The impact of pre-resettlement trauma, resettlement stress and capacity to handle stress. *Social Psychiatry and Psychiatric Epidemiology*, 43(2), 121-131.
- Lorek, A., Ehntholt, K., Nesbitt, A., Wey, E., Githinji, C., Rossor, E., & Wickramasinghe, R. (2009). The mental and physical health difficulties of children held within a British immigration detention center: A pilot study. *Child Abuse and Neglect*, 33(9), 573-585.

- Lundberg, A. (2011). The best interests of the child principle in Swedish asylum cases: The marginalization of children's rights. *Journal of Human Rights Practice*, 3(1), 49-70.
- Lustig, S. L., Kia-Keating, M., Knight, W. G., Geltman, P., Ellis, H., Kinzie, J. D., ... & Saxe, G. N. (2004). Review of child and adolescent refugee mental health. *Journal of the American Academy of Child and Adolescent Psychiatry*, 43(1), 24-36.
- Lustig, S. L., Weine, S. M., Saxe, G. N., & Beardslee, W. R. (2004). Testimonial psychotherapy for adolescent refugees: A case series. *Transcultural Psychiatry*, 41(1), 31-45.
- Luthar, S. S. (2015). Resilience in development: A synthesis of research across five decades. *Developmental Psychopathology: Volume Three: Risk, Disorder, and Adaptation*, 739-795.
- Lyons-Ruth, K. (1996). Attachment relationships among children with aggressive behavior problems: The role of disorganized early attachment patterns. *Journal of Consulting and Clinical Psychology*, 64(1), 64.
- Lyons-Ruth, K., & Block, D. (1996). The disturbed caregiving system: Relations among childhood trauma, maternal caregiving, and infant affect and attachment. *Infant Mental Health Journal: Official Publication of the World Association for Infant Mental Health*, 17(3), 257-275.
- Lyshak-Stelzer, F., Singer, P., Patricia, S. J., & Chemtob, C. M. (2007). Art therapy for adolescents with posttraumatic stress disorder symptoms: A pilot study. *Art Therapy*, 24(4), 163-169.
- Maccoby, E. E., & Martin, J. A. (1983). Socialization in the context of the family: Parent-child interaction. In P. H. Mussen (Series Ed.) & E. M. Hetherington (Vol. Ed.), *Handbook of child psychology: Vol. 4. Socialization, personality, and social development* (4th ed., pp. 1-101) New York: Wiley
- Mace, A. O., Mulheron, S., Jones, C., & Cherian, S. (2014). Educational, developmental and psychological outcomes of resettled refugee children in Western Australia: A review of school of special educational needs: Medical and mental health input. *Journal of Paediatrics and Child Health*, 50(12), 985-992.

- Magiati, I., Charman, T., & Howlin, P. (2007). A two-year prospective follow-up study of community-based early intensive behavioural intervention and specialist nursery provision for children with autism spectrum disorders. *Journal of Child Psychology and Psychiatry*, 48(8), 803-812.
- Majumder, P., O'Reilly, M., Karim, K., & Vostanis, P. (2015). 'This doctor, I not trust him, I'm not safe': The perceptions of mental health and services by unaccompanied refugee adolescents. *International Journal of Social Psychiatry*, 61(2), 129-136.
- Malchiodi, C. (2014). *Breaking the silence: Art therapy with children from violent homes*. Routledge.
- Malchiodi, C. A. (2008). Creative interventions and childhood trauma. *Creative interventions with traumatized children*, 3-21.
- Mari, J. D. J., & Williams, P. (1985). A comparison of the validity of two psychiatric screening questionnaires (GHQ-12 and SRQ-20) in Brazil, using Relative Operating Characteristic (ROC) analysis. *Psychological Medicine*, 15(3), 651-659.
- Markus, M. T., Lindhout, I. E., Boer, F., Hoogendijk, T. H., & Arrindell, W. A. (2003). Factors of perceived parental rearing styles: the EMBU-C examined in a sample of Dutch primary school children. *Personality and Individual Differences*, 34(3), 503-519.
- Marrus, M. R. (2001). *The Unwanted: European Refugees From 1st World War* (2nd ed.). Philadelphia PA, United States: Temple University Press, U.S.
- Martin, C. R., & Newell, R. J. (2005). Is the 12-item General Health Questionnaire (GHQ-12) confounded by scoring method in individuals with facial disfigurement? *Psychology & Health*, 20(5), 651-659.
- Marshall, M. N. (1996). Sampling for qualitative research. *Family Practice*, 13(6), 522-526.
- Masten, A. S., & Coatsworth, J. D. (1998). The development of competence in favorable and unfavorable environments: Lessons from research on successful children. *American Psychologist*, 53(2), 205.
- McGrath, P. J., Sourander, A., Lingley-Pottie, P., Ristkari, T., Cunningham, C., Huttunen, J., . . . Hinkka-Yli-Salomäki, S. (2013). Remote population-based intervention for disruptive



- behavior at age four: study protocol for a randomized trial of Internet-assisted parent training (Strongest Families Finland-Canada). *BMC Public Health*, 13(1), 985.
- McGregor, L. S., Melvin, G. A., & Newman, L. K. (2015). Differential accounts of refugee and resettlement experiences in youth with high and low levels of posttraumatic stress disorder (PTSD) symptomatology: A mixed-methods investigation. *American Journal of Orthopsychiatry*, 85(4), 371.
- McIntyre, L. L. (2008). Parent training for young children with developmental disabilities: Randomized controlled trial. *American Journal on Mental Retardation*, 113(5), 356-368.
- McKay, D., Sookman, D., Neziroglu, F., Wilhelm, S., Stein, D. J., Kyrios, M., ... & Veale, D. (2015). Efficacy of cognitive-behavioral therapy for obsessive-compulsive disorder. *Psychiatry Research*, 225(3), 236-246.
- McLaughlin, K. A., Zeanah, C. H., Fox, N. A., & Nelson, C. A. (2012). Attachment security as a mechanism linking foster care placement to improved mental health outcomes in previously institutionalized children. *Journal of Child Psychology and Psychiatry*, 53(1), 46-55.
- McLeroy, K. R., Norton, B. L., Kegler, M. C., Burdine, J. N., & Sumaya, C. V. (2003). Community-based interventions. *American Journal of Public Health*, 93(4), 529-533.
- McLoyd, V. C., & Wilson, L. (1990). Maternal behavior, social support, and economic conditions as predictors of distress in children. *New Directions for Child and Adolescent Development*, 1990(46), 49-69.
- McFarlane, W. R., Dixon, L., Lukens, E., & Lucksted, A. (2003). Family psychoeducation and schizophrenia: A review of the literature. *Journal of Marital and Family Therapy*, 29(2), 223-245.
- Mellor, D. (2004). Furthering the use of the strengths and difficulties questionnaire: reliability with younger child respondents. *Psychological Assessment*, 16(4), 396.

- Mels, C., Derluyn, I., Broekaert, E., & Rosseel, Y. (2010). The psychological impact of forced displacement and related risk factors on Eastern Congolese adolescents affected by war. *Journal of Child Psychology and Psychiatry*, *51*(10), 1096-1104.
- Meyer, S. R., Steinhaus, M., Bangirana, C., Onyango-Mangen, P., & Stark, L. (2017). The influence of caregiver depression on adolescent mental health outcomes: Findings from refugee settlements in Uganda. *BMC Psychiatry*, *17*(1), 405.
- Migrant Fatalities Worldwide. (2016). Latest global figures. Retrieved from <https://missingmigrants.iom.int/latest-global-figures>
- Miles, G. M. (2000). Drawing together hope: 'listening' to militarised children. *Journal of Child Health Care*, *4*(4), 137-142.
- Milevsky, A., Schlechter, M., Netter, S., & Keehn, D. (2007). Maternal and paternal parenting styles in adolescents: Associations with self-esteem, depression and life-satisfaction. *Journal of Child and Family Studies*, *16*(1), 39-47.
- Miller, K. E., & Jordans, M. J. (2016). Determinants of children's mental health in war-torn settings: Translating research into action. *Current Psychiatry Reports*, *18*(6), 58.
- Miller, K. E., & Rasmussen, A. (2010). War exposure, daily stressors, and mental health in conflict and post-conflict settings: Bridging the divide between trauma-focused and psychosocial frameworks. *Social Science & Medicine*, *70*(1), 7-16.
- Minnis, H., & Devine, C. (2001). The effect of foster carer training on the emotional and behavioural functioning of looked after children. *Adoption & Fostering*, *25*(1), 44-54.
- Minnis, H., Green, J., O'Connor, T. G., Liew, A., Glaser, D., Taylor, E., . . . Gillberg, C. (2009). An exploratory study of the association between reactive attachment disorder and attachment narratives in early school-age children. *Journal of Child Psychology and Psychiatry*, *50*(8), 931-942.
- Minnis, H., Macmillan, S., Pritchett, R., Young, D., Wallace, B., Butcher, J., ... & Gillberg, C. (2013). Prevalence of reactive attachment disorder in a deprived population. *The British Journal of Psychiatry*, *202*(5), 342-346.

- Minnis, H., Reekie, J., Young, D., O'CONNOR, T., Ronald, A., Gray, A., & Plomin, R. (2007). Genetic, environmental and gender influences on attachment disorder behaviours. *The British Journal of Psychiatry*, *190*(6), 490-495.
- Möhlen, H., Parzer, P., Resch, F., & Brunner, R. (2005). Psychosocial support for war-traumatized child and adolescent refugees: evaluation of a short-term treatment program. *Australian and New Zealand Journal of Psychiatry*, *39*(1-2), 81-87.
- Möhrle, B., Dölitzsch, C., Fegert, J. M., & Keller, F. (2016). Verhaltensauffälligkeiten und Lebensqualität bei männlichen unbegleiteten minderjährigen Flüchtlingen in Jugendhilfe einrichtungen in Deutschland. *Kindheit und Entwicklung*.
- Montazeri, A., Harirchi, A. M., Shariati, M., Garmaroudi, G., Ebadi, M., & Fateh, A. (2003). The 12-item General Health Questionnaire (GHQ-12): Translation and validation study of the Iranian version. *Health and Quality of Life Outcomes*, *1*(1), 66.
- Montgomery, E. (2008). Long-term effects of organized violence on young Middle Eastern refugees' mental health. *Social Science & Medicine*, *67*(10), 1596-1603.
- Montgomery, E. (1998). Refugee children from the Middle East. *Scandinavian Journal of Social Medicine. Supplementum*, *54*, 1-152.
- Montgomery, E., & Foldspang, A. (2006). Validity of PTSD in a sample of refugee children: can a separate diagnostic entity be justified?. *International Journal of Methods in Psychiatric Research*, *15*(2), 64-74.
- Moran, K. (2014). *A study of Reactive Attachment Disorder symptoms in the youth justice population*. (Doctoral dissertation, University of Glasgow).
- Morgan, A. (2000). *What is narrative therapy?* (p. 116). Adelaide: Dulwich Centre Publications.
- Morgos, D., Worden, J. W., & Gupta, L. (2008). Psychosocial effects of war experiences among displaced children in Southern Darfur. *OMEGA-Journal of Death and Dying*, *56*(3), 229-253.
- Morrall, A. R., McCaffrey, D. F., & Ridgeway, G. (2004). Effectiveness of community-based treatment for substance-abusing adolescents: 12-month outcomes of youths entering

- phoenix academy or alternative probation dispositions. *Psychology of Addictive Behaviors*, 18(3), 257.
- Morris, E., Le Huray, C., Skagerberg, E., Gomes, R., & Ninteman, A. (2014). Families changing families: The protective function of multi-family therapy for children in education. *Clinical Child Psychology and Psychiatry*, 19(4), 617-632.
- Morris, A. S., Silk, J. S., Steinberg, L., Myers, S. S., & Robinson, L. R. (2007). The role of the family context in the development of emotion regulation. *Social Development*, 16(2), 361-388.
- Morris, A. S., Silk, J. S., Steinberg, L., Sessa, F. M., Avenevoli, S., & Essex, M. J. (2002). Temperamental vulnerability and negative parenting as interacting predictors of child adjustment. *Journal of Marriage and Family*, 64(2), 461-471.
- Moss, E., Dubois-Comtois, K., Cyr, C., Tarabulsky, G. M., St-Laurent, D., & Bernier, A. (2011). Efficacy of a home-visiting intervention aimed at improving maternal sensitivity, child attachment, and behavioral outcomes for maltreated children: A randomized control trial. *Development and Psychopathology*, 23(1), 195-210.
- Motamed, S., Ghorbanshiroudi, S., Khalatbari, J., Maddahi, M. E., & Keikhayfarzaneh, M. M. (2011). The effectiveness of positive parenting skills training group for parents of children with attention deficit disorder-hyperactivity on behavior disorders in their children. *Indian Journal of Science and Technology*, 4(10), 1358-1361.
- Muhtz, C., von Alm, C., Godemann, K., Wittekind, C., Jelinek, L., Yassouridis, A., & Kellner, M. (2011). Long-term consequences of flight and expulsion in former refugee children. *Psychotherapie, Psychosomatik, Medizinische Psychologie*, 61(5), 233-238.
- Mukaddes, N. M., Bilge, S., Alyanak, B., & Kora, M. E. (2000). Clinical characteristics and treatment responses in cases diagnosed as reactive attachment disorder. *Child Psychiatry and Human Development*, 30(4), 273-287.
- Munns, E. (2017). Group theraplay. *Attachment Theory in Action: Building Connections Between Children and Parents*, 105.

- Nash, J. K., Fraser, M. W., Galinsky, M. J., & Kupper, L. L. (2003). Early development and pilot testing of a problem-solving skills-training program for children. *Research on Social Work Practice, 13*(4), 432-450.
- National Collaborating Centre for Mental Health. (2005). *Post-traumatic stress disorder: The management of PTSD in adults and children in primary and secondary care* (No. 26). Retrieved from <https://www.nice.org.uk/guidance/cg26/evidence/full-guideline-including-appedices-113-193442221>
- National Institute for Health and Care Excellence. (2013). *Antisocial behaviour and conduct disorders in children and young people: recognition, intervention and management* (Vol. 158): RCPsych Publications.
- National Institute for Health and Care Excellence. (2018). *Attention deficit hyperactivity disorder* (NICE Quality Standard No. 39). Retrieved from <https://www.nice.org.uk/guidance/qs39>
- National Institute of Mental Health. (2017). *Major depression with severe impairment among adolescents*. Retrieved from <https://www.nimh.nih.gov/health/statistics/major-depression.shtml>
- National Institute for Health Research. (2012). NIHR Evaluation, Trials and Studies Coordination Centre: Glossary. Retrieved from <https://www.nihr.ac.uk/glossary?letter=F&postcategory=-1>
- National Research Council. (2009). *Preventing mental, emotional, and behavioral disorders among young people: Progress and possibilities*: National Academies Press. Retrieved from
- Neuner, F., Catani, C., Ruf, M., Schauer, E., Schauer, M., & Elbert, T. (2008). Narrative exposure therapy for the treatment of traumatized children and adolescents (KidNET): from neurocognitive theory to field intervention. *Child and Adolescent Psychiatric Clinics, 17*(3), 641-664.
- Nock, M. K., & Ferriter, C. (2005). Parent management of attendance and adherence in child and adolescent therapy: A conceptual and empirical review. *Clinical Child and Family Psychology Review, 8*(2), 149-166.

- Nunnally, J. C. (1978). *Psychometric Theory* (2nd ed.). New York: McGraw-Hill.
- O'Callaghan, P., Branham, L., Shannon, C., Betancourt, T. S., Dempster, M., & McMullen, J. (2014). A pilot study of a family focused, psychosocial intervention with war-exposed youth at risk of attack and abduction in north-eastern Democratic Republic of Congo. *Child Abuse & Neglect*, *38*(7), 1197-1207.
- O'Connor, T. G., Marvin, R. S., Rutter, M., Olrick, J. T., Britner, P. A., English, & Team, R. A. S. (2003). Child–parent attachment following early institutional deprivation. *Development and Psychopathology*, *15*(1), 19-38.
- O'Connor, T. G., & Zeanah, C. H. (2003). Attachment disorders: Assessment strategies and treatment approaches. *Attachment & Human Development*, *5*(3), 223-244.
- Okello, J., Nakimuli-Mpungu, E., Musisi, S., Broekaert, E., & Derluyn, I. (2014). The association between attachment and mental health symptoms among school-going adolescents in northern Uganda: the moderating role of war-related trauma. *PloS One*, *9*(3), e88494.
- Ondersma, S. J., Delaney-Black, V., Covington, C. Y., Nordstrom, B., & Sokol, R. J. (2006). The association between caregiver substance abuse and self-reported violence exposure among young urban children. *Journal of Traumatic Stress*, *19*(1), 107-118.
- Onyut, L. P., Neuner, F., Schauer, E., Ertl, V., Odenwald, M., Schauer, M., & Elbert, T. (2005). Narrative Exposure Therapy as a treatment for child war survivors with posttraumatic stress disorder: Two case reports and a pilot study in an African refugee settlement. *BMC Psychiatry*, *5*(1), 7.
- Oras, R., Ezpeleta, S. C. d., & Ahmad, A. (2004). Treatment of traumatized refugee children with eye movement desensitization and reprocessing in a psychodynamic context. *Nordic journal of psychiatry*, *58*(3), 199-203.
- Orsmond, G. I., & Cohn, E. S. (2015). The distinctive features of a feasibility study: Objectives and guiding questions. *OTJR: Occupation, Participation and Health*, *35*(3), 169-177.

- Osman, F., Flacking, R., Schön, U.-K., & Klingberg-Allvin, M. (2017). A support program for Somali-born parents on children's behavioral problems. *Pediatrics*, e20162764.
- Osman, F., Salari, R., Klingberg-Allvin, M., Schön, U.-K., & Flacking, R. (2017). Effects of a culturally tailored parenting support programme in Somali-born parents' mental health and sense of competence in parenting: a randomised controlled trial. *BMJ Open*, 7(12), e017600.
- Özer, S., Sirin, S. R., & Oppedal, B. (2016). *Bahçeşehir study of Syrian refugee children in Turkey*: Bahçeşehir Üniversitesi.
- Pacione, L., Measham, T., & Rousseau, C. (2013). Refugee children: Mental health and effective interventions. *Current Psychiatry Reports*, 15(2), 341.
- Pallant, J. (2013). *SPSS survival manual*. McGraw-Hill Education (UK).
- Palosaari, E., Punamäki, R.-L., Peltonen, K., Diab, M., & Qouta, S. R. (2016). Negative Social Relationships Predict Posttraumatic Stress Symptoms Among War-Affected Children Via Posttraumatic Cognitions. *Journal of Abnormal Child Psychology*, 44(5), 845-857. doi: 10.1007/s10802-015-0070-3
- Panter-Brick, C., Eggerman, M., Gonzalez, V., & Safdar, S. (2009). Violence, suffering, and mental health in Afghanistan: a school-based survey. *The Lancet*, 374(9692), 807-816.
- Panter-Brick, C., Grimon, M. P., & Eggerman, M. (2014). Caregiver—Child mental health: A prospective study in conflict and refugee settings. *Journal of Child Psychology and Psychiatry*, 55(4), 313-327.
- Panter-Brick, C., Hadfield, K., Dajani, R., Eggerman, M., Ager, A., & Ungar, M. (2017). Resilience in Context: A Brief and Culturally Grounded Measure for Syrian Refugee and Jordanian Host-Community Adolescents. *Child Development*.
- Papageorgiou, V., Frangou-Garunovic, A., Iordanidou, R., Yule, W., Smith, P., & Vostanis, P. (2000). War trauma and psychopathology in Bosnian refugee children. *European Child & Adolescent Psychiatry*, 9(2), 84-90.
- Parent-Boursier, C., & Hébert, M. (2015). Security in father-child relationship and behavior problems in sexually abused children. *Journal of Family Violence*, 30(1), 113-122.

Pastor, P. N., Reuben, C. A., Duran, C. R., & Hawkins, L. D. (2015). Association between Diagnosed ADHD and Selected Characteristics among Children Aged 4-17 Years: United States, 2011-2013. NCHS Data Brief. Number 201. *Centers for Disease Control and Prevention*.

Pat-Horenczyk, R., Qasrawi, R., Lesack, R., Haj-Yahia, M., Peled, O., Shaheen, M., ... & Abdeen, Z. (2009). Posttraumatic symptoms, functional impairment, and coping among adolescents on both sides of the Israeli–Palestinian conflict: A cross-cultural approach. *Applied Psychology, 58*(4), 688-708.

Patrick, J. H., Pruchno, R. A., & Rose, M. S. (1998). Recruiting research participants: a comparison of the costs and effectiveness of five recruitment strategies. *The Gerontologist, 38*(3), 295-302.

Patterson, J., Barlow, J., Mockford, C., Klimes, I., Pyper, C., & Stewart-Brown, S. (2002). Improving mental health through parenting programmes: block randomised controlled trial. *Archives of Disease in Childhood, 87*(6), 472-477.

Pawson, R., & Tilley, N. (1997). An introduction to scientific realist evaluation. In E. Chelmsky & W. R. Shadish (Eds.), *Evaluation for the 21st century: A handbook* (pp. 405-418). Thousand Oaks, CA, US: Sage Publications, Inc.

<http://dx.doi.org/10.4135/9781483348896.n29>

Perrin, S., Meiser-Stedman, R., & Smith, P. (2005). The Children's Revised Impact of Event Scale (CRIES): Validity as a screening instrument for PTSD. *Behavioural and Cognitive Psychotherapy, 33*(4), 487-498.

Perris, C., Jacobsson, L., Linndström, H., von Knorring, L., & Perris, H. (1980). Development of a new inventory for assessing memories of parental rearing behaviour. *Acta Psychiatrica Scandinavica, 61*(4), 265-274.

Perry, B. D. (2014). *Creative interventions with traumatized children*. Guilford Publications.

Penelo, E., Viladrich, C., & Domènech, J. M. (2010). Perceived parental rearing style in childhood: internal structure and concurrent validity on the Egna Minnen Beträffande



- Uppfostran—Child Version in clinical settings. *Comprehensive Psychiatry*, 51(4), 434-442.
- Pennebaker, J. W. (1997). Writing about emotional experiences as a therapeutic process. *Psychological Science*, 8(3), 162-166.
- Pevalin, D. J. (2000). Multiple applications of the GHQ-12 in a general population sample: an investigation of long-term retest effects. *Social Psychiatry and Psychiatric Epidemiology*, 35(11), 508-512.
- Pfeiffer, E., & Goldbeck, L. (2017). Evaluation of a Trauma-Focused Group Intervention for Unaccompanied Young Refugees: A Pilot Study. *Journal of Traumatic Stress*, 30(5), 531-536.
- Pifalo, T. (2002). Pulling out the thorns: Art therapy with sexually abused children and adolescents. *Art Therapy*, 19(1), 12-22.
- Pina, A. A., Zerr, A. A., Gonzales, N. A., & Ortiz, C. D. (2009). Psychosocial interventions for school refusal behavior in children and adolescents. *Child Development Perspectives*, 3(1), 11-20.
- Porter, M., & Haslam, N. (2005). Predisplacement and postdisplacement factors associated with mental health of refugees and internally displaced persons: a meta-analysis. *Jama*, 294(5), 602-612.
- Pottie, K., Dahal, G., Georgiades, K., Premji, K., & Hassan, G. (2015). Do first generation immigrant adolescents face higher rates of bullying, violence and suicidal behaviours than do third generation and native born?. *Journal of Immigrant and Minority Health*, 17(5), 1557-1566.
- Power, K. G., Simpson, R. J., Swanson, V., Wallace, L. A., Feistner, A. T. C., & Sharp, D. (1990). A controlled comparison of cognitive-behaviour therapy, diazepam, and placebo, alone and in combination, for the treatment of generalised anxiety disorder. *Journal of Anxiety Disorders*, 4(4), 267-292.
- Pretorius, G., & Pfeifer, N. (2010). Group art therapy with sexually abused girls. *South African Journal of Psychology*, 40(1), 63-73.

- Puffer, E. S., Annan, J., Sim, A. L., Salhi, C., & Betancourt, T. S. (2017). The impact of a family skills training intervention among Burmese migrant families in Thailand: A randomized controlled trial. *PloS One*, *12*(3), e0172611.
- Punamäki, R.-L., Palosaari, E., Diab, M., Peltonen, K., & Qouta, S. R. (2015). Trajectories of posttraumatic stress symptoms (PTSS) after major war among Palestinian children: Trauma, family-and child-related predictors. *Journal of Affective Disorders*, *172*, 133-140.
- Pynoos, R. S., Steinberg, A. M., & Piacentini, J. C. (1999). A developmental psychopathology model of childhood traumatic stress and intersection with anxiety disorders. *Biological Psychiatry*, *46*(11), 1542-1554.
- Pynoos, R. S., Steinberg, A. M., & Wraith, R. (1995). A developmental model of childhood traumatic stress. In D. Cicchetti & D. J. Cohen (Eds.), *Wiley series on personality processes. Developmental Psychopathology, Vol. 2. Risk, disorder, and adaptation* (pp. 72-95). Oxford, England: John Wiley & Sons.
- Quinlan, R., Schweitzer, R. D., Khawaja, N., & Griffin, J. (2016). Evaluation of a school-based creative arts therapy program for adolescents from refugee backgrounds. *The Arts in Psychotherapy*, *47*, 72-78.
- Qouta, S. R., Palosaari, E., Diab, M., & Punamäki, R. L. (2012). Intervention effectiveness among war-affected children: A cluster randomized controlled trial on improving mental health. *Journal of Traumatic Stress*, *25*(3), 288-298.
- Qouta, S., Punamäki, R.-L., & El Sarraj, E. (2003). Prevalence and determinants of PTSD among Palestinian children exposed to military violence. *European Child & Adolescent Psychiatry*, *12*(6), 265-272.
- Qouta, S., Punamäki, R.-L., & El Sarraj, E. (2005). Mother-child expression of psychological distress in war trauma. *Clinical Child Psychology and Psychiatry*, *10*(2), 135-156.
- Qouta, S., Punamäki, R. L., Miller, T., & El-Sarraj, E. (2008). Does war beget child aggression? Military violence, gender, age and aggressive behavior in two Palestinian samples. *Aggressive Behavior: Official Journal of the International Society for Research on Aggression*, *34*(3), 231-244.

- Qouta, S., Punamäki, R. L., Montgomery, E., & El Sarraj, E. (2007). Predictors of psychological distress and positive resources among Palestinian adolescents: Trauma, child, and mothering characteristics. *Child Abuse & Neglect, 31*(7), 699-717.
- Ramirez, M., Harland, K., Frederick, M., Shepherd, R., Wong, M., & Cavanaugh, J. E. (2013). Listen protect connect for traumatized schoolchildren: a pilot study of psychological first aid. *BMC Psychology, 1*(1), 26.
- Reed, R. V., Fazel, M., Jones, L., Panter-Brick, C., & Stein, A. (2012). Mental health of displaced and refugee children resettled in low-income and middle-income countries: risk and protective factors. *The Lancet, 379*(9812), 250-265.
- Refugee. (2018). In *Oxford English dictionary*. Retrieved from <https://en.oxforddictionaries.com/definition/refugee>
- Renner, W., Banninger-Huber, E., & Peltzer, K. (2011). Culture-Sensitive and Resource Oriented Peer (CROP)-Groups as a community based intervention for trauma survivors: A randomized controlled pilot study with refugees and asylum seekers from Chechnya. *Human Sciences Research Council*
- Reupert, A., Maybery, D., Nicholson, J., Göpfert, M., & Seeman, M. V. (2015). *Parental psychiatric disorder: Distressed parents and their families*: Cambridge University Press.
- Reynolds, C. R. (1980). Concurrent validity of What I Think and Feel: The Revised Children's Manifest Anxiety Scale. *Journal of Consulting and Clinical Psychology, 48*(6), 774.
- Rieder, H., & Elbert, T. (2013). The relationship between organized violence, family violence and mental health: Findings from a community-based survey in Muhanga, Southern Rwanda. *European Journal of Psychotraumatology, 4*(1), 21329.
- Robson, C. (2011). *Real world research: A resource for users of social research methods in applied settings* (3rd ed.). Cornwall, UK: Wiley.
- Romero, S., Birmaher, B., Axelson, D., Goldstein, T., Goldstein, B. I., Gill, M. K., . . . Esposito-Smythers, C. (2009). Prevalence and correlates of physical and sexual abuse in

- children and adolescents with bipolar disorder. *Journal of Affective Disorders*, 112(1), 144-150.
- Rousseau, C., & Drapeau, A. (2003). Are refugee children an at-risk group? A longitudinal study of Cambodian adolescents. *Journal of Refugee Studies*, 16(1), 67-81.
- Rousseau, C., Drapeau, A., Lacroix, L., Bagilishya, D., & Heusch, N. (2005). Evaluation of a classroom program of creative expression workshops for refugee and immigrant children. *Journal of Child Psychology and Psychiatry*, 46(2), 180-185.
- Rowe, R., Maughan, B., Pickles, A., Costello, E. J., & Angold, A. (2002). The relationship between DSM-IV oppositional defiant disorder and conduct disorder: Findings from the Great Smoky Mountains Study. *Journal of Child Psychology and Psychiatry*, 43(3), 365-373.
- Ruf, M., Schauer, M., Neuner, F., Catani, C., Schauer, E., & Elbert, T. (2010). Narrative exposure therapy for 7-to 16-year-olds: A randomized controlled trial with traumatized refugee children. *Journal of Traumatic Stress*, 23(4), 437-445.
- Rutter, M. (1985). Resilience in the face of adversity: Protective factors and resistance to psychiatric disorder. *The British Journal of Psychiatry*, 147(6), 598-611.
- Rutter, M., & Brown, G. W. (1966). The reliability and validity of measures of family life and relationships in families containing a psychiatric patient. *Social Psychiatry*, 1(1), 38-53.
- Rutter, M., & Quinton, D. (1984). Parental psychiatric disorder: Effects on children. *Psychological Medicine*, 14(4), 853-880.
- Sack, W. H., Clarke, G., Him, C., Dickason, D., Goff, B., Lanham, K., & Kinzie, J. D. (1993). A 6-year follow-up study of Cambodian refugee adolescents traumatized as children. *Journal of the American Academy of Child & Adolescent Psychiatry*, 32(2), 431-437.
- Sack, W. H., Clarke, G. N., & Seeley, J. (1995). Posttraumatic stress disorder across two generations of Cambodian refugees. *Journal of the American Academy of Child & Adolescent Psychiatry*, 34(9), 1160-1166.
- Sack, W. H., Clarke, G. N., & Seeley, J. (1996). Multiple forms of stress in Cambodian adolescent refugees. *Child Development*, 67(1), 107-116.

- Sack, W. H., Him, C., & Dickason, D. (1999). Twelve-year follow-up study of Khmer youths who suffered massive war trauma as children. *Journal of the American Academy of Child & Adolescent Psychiatry, 38*(9), 1173-1179.
- Sale, J. E., Lohfeld, L. H., & Brazil, K. (2002). Revisiting the quantitative-qualitative debate: Implications for mixed-methods research. *Quality and Quantity, 36*(1), 43-53.
- Samuelson, K. W., Krueger, C. E., & Wilson, C. (2012). Relationships between maternal emotion regulation, parenting, and children's executive functioning in families exposed to intimate partner violence. *Journal of Interpersonal Violence, 27*(17), 3532-3550.
- Sánchez-López, M. d. P., & Dresch, V. (2008). The 12-Item General Health Questionnaire (GHQ-12): reliability, external validity and factor structure in the Spanish population. *Psicothema, 20*(4).
- Sanders, M. R., Bor, W., & Morawska, A. (2007). Maintenance of treatment gains: A comparison of enhanced, standard, and self-directed Triple P-Positive Parenting Program. *Journal of Abnormal Child Psychology, 35*(6), 983.
- Sanders, M. R., & McFarland, M. (2000). Treatment of depressed mothers with disruptive children: A controlled evaluation of cognitive behavioral family intervention. *Behavior Therapy, 31*(1), 89-112.
- Sangalang, C. C., Jager, J., & Harachi, T. W. (2017). Effects of maternal traumatic distress on family functioning and child mental health: An examination of Southeast Asian refugee families in the US. *Social Science & Medicine, 184*, 178-186.
- Sapmaz, Ş. Y., Tanrıverdi, B. U., Öztürk, M., Gözaçanlar, Ö., Ülker, G. Y., & Özkan, Y. (2017). Immigration-related mental health disorders in refugees 5–18 years old living in Turkey. *Neuropsychiatric Disease and Treatment, 13*, 2813.
- Savin, D., Sack, W. H., Clarke, G. N., Meas, N., & Richart, I. (1996). The Khmer Adolescent Project: III. A study of trauma from Thailand's Site II refugee camp. *Journal of the American Academy of Child & Adolescent Psychiatry, 35*(3), 384-391.

- Saxe, G. N., Ellis, B. H., Fogler, J., Hansen, S., & Sorkin, B. (2017). Comprehensive Care for Traumatized Children: An open trial examines treatment using trauma systems therapy. *Psychiatric Annals*, *35*(5), 443-448.
- Schaal, S., Elbert, T., & Neuner, F. (2009). Narrative exposure therapy versus interpersonal psychotherapy. *Psychotherapy and Psychosomatics*, *78*(5), 298-306.
- Scharf, M., Kerns, K. A., Rousseau, S., & Kivenson-Baron, I. (2016). Mother-child attachment and social anxiety: Associations with friendship skills and peer competence of Arab children. *School Psychology International*, *37*(3), 271-288.
- Schauer, E., Neuner, F., Elbert, T., Ertl, V., Onyut, L. P., Odenwald, M., & Schauer, M. (2004). Narrative exposure therapy in children: a case study. *Intervention*, *2*(1), 18-32.
- Scheeringa, M. S., & Zeanah, C. H. (2001). A relational perspective on PTSD in early childhood. *Journal of Traumatic Stress: Official Publication of the International Society for Traumatic Stress Studies*, *14*(4), 799-815.
- Scholz, M., Rix, M., Scholz, K., Gantchev, K., & Thömke, V. (2005). Multiple family therapy for anorexia nervosa: concepts, experiences and results. *Journal of Family Therapy*, *27*(2), 132-141.
- Schore, A. N. (2001a). Effects of a secure attachment relationship on right brain development, affect regulation, and infant mental health. *Infant Mental Health Journal: Official Publication of the World Association for Infant Mental Health*, *22*(1-2), 7-66.
- Schore, A. N. (2001b). The effects of early relational trauma on right brain development, affect regulation, and infant mental health. *Infant Mental Health Journal*, *22*(1-2), 201-269.
- Schottelkorb, A. A., Dumas, D. M., & Garcia, R. (2012). Treatment for childhood refugee trauma: A randomized, controlled trial. *International Journal of Play Therapy*, *21*(2), 57.
- Schreiber, M., Gurwitch, R., & Wong, M. (2006). Listen, Protect, Connect--Model & Teach: Psychological First Aid (PFA) for Students and Teachers. *US Department of Homeland Security*.

- Shapiro, F. E. (2002). *EMDR as an integrative psychotherapy approach: Experts of diverse orientations explore the paradigm prism*. American Psychological Association.
- Shapiro, F. (1989). Efficacy of the eye movement desensitization procedure in the treatment of traumatic memories. *Journal of traumatic stress, 2*(2), 199-223.
- Shapiro, F., & Laliotis, D. (2011). EMDR and the adaptive information processing model: Integrative treatment and case conceptualization. *Clinical Social Work Journal, 39*(2), 191-200.
- Signorelli, R., Gluckman, N., Hassan, N., Coello, M., & Momartin, S. (2017). Relationship building, collaboration and flexible service delivery: The path to engagement of refugee families and communities in early childhood trauma recovery services. *Children Australia, 42*(3), 142-158.
- Silverman, W. K., Kurtines, W. M., Jaccard, J., & Pina, A. A. (2009). Directionality of change in youth anxiety treatment involving parents: an initial examination. *Journal of Consulting and Clinical psychology, 77*(3), 474.
- Silverman, W. K., Pina, A. A., & Viswesvaran, C. (2008). Evidence-based psychosocial treatments for phobic and anxiety disorders in children and adolescents. *Journal of Clinical Child & Adolescent Psychology, 37*(1), 105-130.
- Simich, L., Hamilton, H., & Baya, B. K. (2006). Mental distress, economic hardship and expectations of life in Canada among Sudanese newcomers. *Transcultural Psychiatry, 43*(3), 418-444.
- Simpson, J. H. (1938). The refugee problem. *International Affairs (Royal Institute of International Affairs 1931-1939)*, 607-628.
- Singh, S. P. (2009). Transition of care from child to adult mental health services: the great divide. *Current Opinion in Psychiatry, 22*(4), 386-390.
- Siu, A. F. (2009). Theraplay in the Chinese world: An intervention program for Hong Kong children with internalizing problems. *International Journal of Play Therapy, 18*(1), 1.
- Slayton, S. C., D'Archer, J., & Kaplan, F. (2010). Outcome studies on the efficacy of art therapy: A review of findings. *Art Therapy, 27*(3), 108-118.

- Slobodin, O., & de Jong, J. T. (2015). Mental health interventions for traumatized asylum seekers and refugees: What do we know about their efficacy? *International Journal of Social Psychiatry*, *61*(1), 17-26.
- Slodnjak, V., Kos, A., & Yule, W. (2002). Depression and parasuicide in refugee and Slovenian adolescents. *Crisis: The Journal of Crisis Intervention and Suicide Prevention*, *23*(3), 127.
- Slone, M., & Mann, S. (2016). Effects of war, terrorism and armed conflict on young children: a systematic review. *Child Psychiatry & Human Development*, *47*(6), 950-965.
- Smith, M. (2004). Parental mental health: disruptions to parenting and outcomes for children. *Child & Family Social Work*, *9*(1), 3-11.
- Salmon, P., & Young, B. (2009). Dependence and caring in clinical communication: the relevance of attachment and other theories. *Patient Education and Counseling*, *74*(3), 331-338.
- Sourander, A. (1998). Behavior problems and traumatic events of unaccompanied refugee minors 1. *Child Abuse & Neglect*, *22*(7), 719-727.
- Southall, D. P., & O'Hare, B. A. (2002). Empty arms: the effect of the arms trade on mothers and children. *BMJ: British Medical Journal*, *325*(7378), 1457.
- Söderbäck, M., Coyne, I., & Harder, M. (2011). The importance of including both a child perspective and the child's perspective within health care settings to provide truly child-centred care. *Journal of Child Health Care*, *15*(2), 99-106.
- Spera, C. (2005). A review of the relationship among parenting practices, parenting styles, and adolescent school achievement. *Educational Psychology Review*, *17*(2), 125-146.
- Spinazzola, J., Ford, J. D., Zucker, M., van der Kolk, B. A., Silva, S., Smith, S. F., & Blaustein, M. (2017). Survey Evaluates: Complex Trauma Exposure, Outcome, and Intervention Among Children and Adolescents. *Psychiatric Annals*, *35*(5), 433-439.
- Sroufe, L. A. (2005). Attachment and development: A prospective, longitudinal study from birth to adulthood. *Attachment & Human Development*, *7*(4), 349-367.



- Sroufe, L. A., Carlson, E. A., Levy, A. K., & Egeland, B. (1999). Implications of attachment theory for developmental psychopathology. *Development and Psychopathology, 11*(1), 1-13.
- Stallard, P. (2005). *A clinician's guide to think good-feel good: Using CBT with children and young people*. John Wiley & Sons.
- Steel, Z., Chey, T., Silove, D., Marnane, C., Bryant, R. A., & Van Ommeren, M. (2009). Association of torture and other potentially traumatic events with mental health outcomes among populations exposed to mass conflict and displacement: A systematic review and meta-analysis. *Jama, 302*(5), 537-549.
- Steinberg, L., & Darling, N. (2017). Parenting style as context: An integrative model. In *Interpersonal Development* (pp. 161-170). Routledge.
- Stein, B. D., Jaycox, L. H., Kataoka, S. H., Wong, M., Tu, W., Elliott, M. N., & Fink, A. (2003). A mental health intervention for schoolchildren exposed to violence: a randomized controlled trial. *Jama, 290*(5), 603-611.
- Stepakoff, S., Hubbard, J., Katoh, M., Falk, E., Mikulu, J. B., Nkhoma, P., & Omagwa, Y. (2006). Trauma healing in refugee camps in guinea: A psychosocial program for Liberian and Sierra Leonean survivors of torture and war. *American Psychologist, 61*(8), 921.
- Stormshak, E. A., Bierman, K. L., McMahon, R. J., & Lengua, L. J. (2000). Parenting practices and child disruptive behavior problems in early elementary school. *Journal of Clinical Child Psychology, 29*(1), 17-29.
- Sujoldžić, A., Peternel, L., Kulenović, T., & Terzić, R. (2006). Social determinants of health—A comparative study of Bosnian adolescents in different cultural contexts. *Collegium Antropologicum, 30*(4), 703-711.
- Sümer, N., & Sendag, M. A. (2009). Orta çocukluk döneminde ebeveynlere bağlanma, benlik algisi ve kaygı/Attachment to parents during middle childhood, self-perceptions, and anxiety. *Türk Psikoloji Dergisi, 24*(63), 86.

- Tam, S. Y., Houlihan, S., & Melendez-Torres, G. (2015). A systematic review of longitudinal risk and protective factors and correlates for posttraumatic stress and its natural history in forcibly displaced children. *Trauma, Violence, & Abuse*, 1524838015622437.
- Tamres, L. K., Janicki, D., & Helgeson, V. S. (2002). Sex differences in coping behavior: A meta-analytic review and an examination of relative coping. *Personality and Social Psychology Review*, 6(1), 2-30.
- Taft, A. J., Small, R., & Hoang, K. A. (2008). Intimate partner violence in Vietnam and among Vietnamese diaspora communities in western societies: A comprehensive review. *Journal of Family Studies*, 14(2-3), 167-182.
- Taylor, M. (1825). *Reciprocal duties of parents and children*. James Loring, No. 132 Washington Street.
- Telch, M. J., & Lucas, R. A. (1994). Combined pharmacological and psychological treatment of panic disorder: Current status and future directions. In B. E. Wolfe & J. D. Maser (Eds.), *Treatment of panic disorder: A consensus development conference* (pp. 177-197). Arlington, VA, US: American Psychiatric Association.
- Teti, D. M., Gelfand, D. M., Messinger, D. S., & Isabella, R. (1995). Maternal depression and the quality of early attachment: An examination of infants, preschoolers, and their mothers. *Developmental Psychology*, 31(3), 364.
- Thabane, L., Ma, J., Chu, R., Cheng, J., Ismaila, A., Rios, L. P., ... & Goldsmith, C. H. (2010). A tutorial on pilot studies: The what, why and how. *BMC Medical Research Methodology*, 10(1), 1.
- Thabet, A. A. M., Abed, Y., & Vostanis, P. (2004). Comorbidity of PTSD and depression among refugee children during war conflict. *Journal of Child Psychology and Psychiatry*, 45(3), 533-542.
- Thabet, A., Ibraheem, A., Shivram, R., Winter, E., & Vostanis, P. (2009). Parenting support and PTSD in children of a war zone. *International Journal of Social Psychiatry*, 55(3), 226-237.

- Thabet, A., Matar, S., Carpintero, A., Bankart, J., & Vostanis, P. (2011). Mental health problems among labour children in the Gaza Strip. *Child: Care, Health and Development*, 37(1), 89-95.
- Thabet, A. A., Tawahina, A., El Sarraj, E., Henely, D., Pelleick, H., & Vostanis, P. (2011). Post-traumatic stress disorder and attention-deficit hyperactivity disorder in Palestinian children affected by the war on Gaza. *International Psychiatry*, 8(4), 84-85.
- Thabet, A. A. M., & Vostanis, P. (2015). Impact of trauma on Palestinian children's and the role of coping strategies. *British Journal of Medicine and Medical Research*, 5(3), 330.
- Thabet, A. A. M., & Vostanis, P. (1999). Post-traumatic stress reactions in children of war. *Journal of Child Psychology and Psychiatry*, 40(3), 385-391.
- Thabet, A. A., Vostanis, P., & Karim, K. (2005). Group crisis intervention for children during ongoing war conflict. *European Child & Adolescent Psychiatry*, 14(5), 262-269.
- Thabet, A. M., Thabet, S. S., & Vostanis, P. (2016). The relationship between war trauma, PTSD, depression, and anxiety among Palestinian children in the Gaza Strip. *Health Science Journal*.
- The Theraplay Institute. (2017). Group Theraplay®. Retrieved from <https://theraplay.org/index.php/what-is-theraplay-3/group-theraplay>
- Tickle-Degnen, L. (2013). Nuts and bolts of conducting feasibility studies. *American Journal of Occupational Therapy*, 67(2), 171-176.
- Tingvold, L., Hauff, E., Allen, J., & Middelthon, A. L. (2012). Seeking balance between the past and the present: Vietnamese refugee parenting practices and adolescent well-being. *International Journal of Intercultural Relations*, 36(4), 563-574.
- Titus, S., Rose, J. L., & Roman, N. V. (2015). The effect of parenting styles on adjustment in adulthood. In *Parenting: Behaviors, Cultural Influences and Impact on Childhood Health and Well-Being*. Cape Town: NOVA Science Publishers
- Tol, W. A., Komproe, I. H., Susanty, D., Jordans, M. J., Macy, R. D., & De Jong, J. T. (2008). School-based mental health intervention for children affected by political violence in Indonesia: a cluster randomized trial. *Jama*, 300(6), 655-662.

- Tol, W. A., Song, S., & Jordans, M. J. (2013). Annual research review: Resilience and mental health in children and adolescents living in areas of armed conflict—a systematic review of findings in low-and middle-income countries. *Journal of Child Psychology and Psychiatry*, 54(4), 445-460.
- Tolan, P. E., Szapocznik, J. E., & Sambrano, S. E. (2007). *Preventing youth substance abuse: Science-based programs for children and adolescents*: American Psychological Association.
- Toth, S. L., Maughan, A., Manly, J. T., Spagnola, M., & Cicchetti, D. (2002). The relative efficacy of two interventions in altering maltreated preschool children's representational models: Implications for attachment theory. *Development and Psychopathology*, 14(4), 877-908.
- Toth, S. L., Rogosch, F. A., Manly, J. T., & Cicchetti, D. (2006). The efficacy of toddler-parent psychotherapy to reorganize attachment in the young offspring of mothers with major depressive disorder: a randomized preventive trial. *Journal of Consulting and Clinical Psychology*, 74(6), 1006.
- Trickey, D., Siddaway, A. P., Meiser-Stedman, R., Serpell, L., & Field, A. P. (2012). A meta-analysis of risk factors for post-traumatic stress disorder in children and adolescents. *Clinical Psychology Review*, 32(2), 122-138.
- Tyrer, R. A., & Fazel, M. (2014). School and community-based interventions for refugee and asylum seeking children: A systematic review. *PloS One*, 9(2), e89359.
- Ugurlu, N., Akca, L., & Acarturk, C. (2016). An art therapy intervention for symptoms of post-traumatic stress, depression and anxiety among Syrian refugee children. *Vulnerable Children and Youth Studies*, 11(2), 89-102.
- UN General Assembly, *Convention on the Rights of the Child*, 20 November 1989, United Nations, Treaty Series, vol. 1577, p. 3, available at: <http://www.refworld.org/docid/3ae6b38f0.html> [accessed 31 July 2018]
- UN General Assembly, *Protocol Relating to the Status of Refugees*, 31 January 1967, United Nations, Treaty Series, vol. 606, p. 267, available at: <http://www.refworld.org/docid/3ae6b3ae4.html> [accessed 30 July 2018]

- UN General Assembly, *Convention Relating to the Status of Refugees*, 28 July 1951, United Nations, Treaty Series, vol. 189, p. 137, available at:  
<http://www.refworld.org/docid/3be01b964.html> [accessed 30 July 2018]
- United Nations High Commissioner for Refugees. (2018, July 29). Syria regional refugee response. Retrieved from <https://data2.unhcr.org/en/situations/syria>
- United Nations High Commissioner for Refugees. (2017). Europe: Syrian asylum applications. Retrieved 11 Dec, 2017, from  
<http://data.unhcr.org/syrianrefugees/asylum.php>
- United Nations High Commissioner for Refugees. (2017b). Syria Regional Refugee Response. Retrieved from <http://data.unhcr.org/syrianrefugees/country.php?id=224>
- United Nations High Commissioner for Refugees. (2016). Forced displacement in 2016. *Global Trends*. Retrieved from  
<http://www.unhcr.org/uk/statistics/unhcrstats/5943e8a34/global-trends-forced-displacement-2016.html>
- United Nations High Commissioner for Refugees. (2013). Mental health and psychosocial support. Retrieved from <https://emergency.unhcr.org/entry/114017/mental-health-and-psychosocial-support>
- UNICEF. (2016). *Five-fold increase in number of refugee and migrant children traveling alone since 2010*. Retrieved from <https://www.unicef.org.uk/press-releases/five-fold-increase-number-refugee-migrant-children-traveling-alone-since-2010-unicef/>
- UNICEF. (2009). *Machel study 10-year strategic review: Children and conflict in a changing world*: UNICEF.
- UNICEF. (2017). Syrian crisis. Retrieved from <https://www.unicef.org/emergencies/syria/>
- Unterhitzberger, J., & Rosner, R. (2014). Lessons from writing sessions: A school-based randomized trial with adolescent orphans in Rwanda. *European Journal of Psychotraumatology*, 5(1), 24917.

- Vaage, A. B., Garløv, I., Hauff, E., & Thomsen, P. H. (2007). Psychiatric symptoms and service utilization among refugee children referred to a child psychiatry department: a retrospective comparative case note study. *Transcultural Psychiatry*, 44(3), 440-458.
- Van Dijk, J. A., Schoutrop, M. J., & Spinhoven, P. (2003). Testimony therapy: Treatment method for traumatized victims of organized violence. *American Journal of Psychotherapy*, 57(3), 361-373.
- van Ee, E., Kleber, R. J., Jongmans, M. J., Mooren, T. T., & Out, D. (2016). Parental PTSD, adverse parenting and child attachment in a refugee sample. *Attachment & Human Development*, 18(3), 273-291.
- van Ommeren, M., de Jong, J. T., Sharma, B., Komproe, I., Thapa, S. B., & Cardena, E. (2001). Psychiatric disorders among tortured Bhutanese refugees in Nepal. *Archives of General Psychiatry*, 58(5), 475-482.
- van Ryzin, M. J., & Leve, L. D. (2012). Validity evidence for the security scale as a measure of perceived attachment security in adolescence. *Journal of adolescence*, 35(2), 425-431.
- van Westrhenen, N., & Fritz, E. (2014). Creative arts therapy as treatment for child trauma: An overview. *The Arts in Psychotherapy*, 41(5), 527-534.
- Verduyn, C., Barrowclough, C., Roberts, J., Tarrrier, N., & Harrington, R. (2003). Maternal depression and child behaviour problems: Randomised placebo-controlled trial of a cognitive-behavioural group intervention. *The British Journal of Psychiatry*, 183(4), 342-348.
- Verlinden, E., Meijel, E. P., Opmeer, B. C., Beer, R., Roos, C., Bicanic, I. A., . . . Lindauer, R. J. (2014). Characteristics of the Children's Revised Impact of Event Scale in a clinically referred Dutch sample. *Journal of Traumatic Stress*, 27(3), 338-344.
- Verma, P., & Talebi, B. Z. (2007). Aggression and attachment security. *Iranian Journal of Psychiatry*, 2(2), 72-77.
- Vervoort, E., Doumen, S., Bosmans, G., & Verschueren, K. (2011, August). Assessing behavioural characteristics of attachment disorders: Validation of the Relationship

- Problems Questionnaire. In *Poster presented at the 15th European Conference on Developmental Psychology*. Bergen, Norway.
- Vollmer, H. (1937). The grandmother: A problem in child-rearing. *American Journal of Orthopsychiatry*, 7(3), 378.
- Vostanis, P. (2016). New approaches to interventions for refugee children. *World Psychiatry*, 15(1), 75-77.
- Vostanis, P., Graves, A., Meltzer, H., Goodman, R., Jenkins, R., & Brugha, T. (2006). Relationship between parental psychopathology, parenting strategies and child mental health. *Social Psychiatry and Psychiatric Epidemiology*, 41(7), 509-514.
- Wahoush, E. O. (2009). Equitable health-care access: the experiences of refugee and refugee claimant mothers with an ill pre-schooler. *CJNR (Canadian Journal of Nursing Research)*, 41(3), 186-206.
- Waldon, E. G. (2001). The effects of group music therapy on mood states and cohesiveness in adult oncology patients. *Journal of Music Therapy*, 38(3), 212-238.
- Waters, E., Merrick, S., Treboux, D., Crowell, J., & Albersheim, L. (2000). Attachment security in infancy and early adulthood: A twenty-year longitudinal study. *Child Development*, 71(3), 684-689.
- Weine, S. M. (1999). *When history is a nightmare: Lives and memories of ethnic cleansing in Bosnia-Herzegovina*: Rutgers University Press.
- Weine, S., Kulauzovic, Y., Klebic, A., Besic, S., Mujagic, A., Muzurovic, J., . . . Feetham, S. (2008). Evaluating A Multiple-Family Group Access Intervention for Refugees with PTSD. *Journal of Marital and Family Therapy*, 34(2), 149-164.
- Weine, S. M., Kulenovic, A. D., Pavkovic, I., & Gibbons, R. (1998). Testimony psychotherapy in Bosnian refugees: A pilot study. *American Journal of Psychiatry*, 155(12), 1720-1726.
- Weine, S., Muzurovic, N., Kulauzovic, Y., Besic, S., Lezic, A., Mujagic, A., . . . Ware, N. (2004). Family consequences of refugee trauma. *Family process*, 43(2), 147-160.

- Weine, S. M., Raina, D., Zhubi, M., Delesi, M., Huseni, D., Feetham, S., . . . Rolland, J. (2003). The TAFES multi-family group intervention for Kosovar refugees: A feasibility study. *The Journal of Nervous and Mental disease*, 191(2), 100-107.
- Wells, S. R. (1866). *New physiognomy: Or, signs of character as manifested through temperament and external forms, and especially in" the Human Face Divine"*. Fowler and Wells.
- Werner, E. E. (2012). Children and war: Risk, resilience, and recovery. *Development and Psychopathology*, 24(02), 553-558.
- Wettig, H. H., Coleman, A., & Geider, F. J. (2011). Evaluating the effectiveness of Theraplay in treating shy, socially withdrawn children. *International Journal of Play Therapy*, 20(1), 26.
- Wetting, H. H. G, Franke, U. and Fjordbak, B. S. 2006. "Evaluating the effectiveness of Theraplay". In *Contemporary play therapy*, Edited by: Schaefer, C. E. and Kaduson, H. G. New York, NY: Guilford Press.
- Whittington, C. J., Kendall, T., & Pilling, S. (2005). Are the SSRIs and atypical antidepressants safe and effective for children and adolescents? *Current Opinion in Psychiatry*, 18(1), 21-25.
- Wieling, E., Mehus, C., Möllerherm, J., Neuner, F., Achan, L., & Catani, C. (2015). Assessing the feasibility of providing a parenting intervention for war-affected families in Northern Uganda. *Family & Community Health*, 38(3), 252-267.
- Williams, N. (2010). Establishing the boundaries and building bridges: a literature review on ecological theory: implications for research into the refugee parenting experience. *Journal of Child Health Care*, 14(1), 35-51.
- Wilson, S. L. (2009). Understanding and promoting attachment. *Journal of psychosocial Nursing and Mental Health Services*, 47(8), 23-27.
- Wilson, S. J., Lipsey, M. W., & Derzon, J. H. (2003). The effects of school-based intervention programs on aggressive behavior: A meta-analysis. *Journal of Consulting and Clinical Psychology*, 71(1), 136.



- Wolchik, S. A., Ma, Y., Tein, J.-Y., Sandler, I. N., & Ayers, T. S. (2008). Parentally bereaved children's grief: Self-system beliefs as mediators of the relations between grief and stressors and caregiver–child relationship quality. *Death Studies, 32*(7), 597-620.
- World Health Organization. (1993). *The ICD-10 classification of mental and behavioural disorders: diagnostic criteria for research* (Vol. 2): World Health Organization.
- World Health Organization. (2013). *Guidelines for the management of conditions that are specifically related to stress*: World Health Organization.
- World migration report. (2015). *Migrants and cities: New partnerships to manage mobility*. Retrieved from [http://publications.iom.int/system/files/wmr2015\\_en.pdf](http://publications.iom.int/system/files/wmr2015_en.pdf)
- Yahav, R. (2007). The relationship between children's and adolescents' perceptions of parenting style and internal and external symptoms. *Child: Care, Health And Development, 33*(4), 460-471.
- Yalin, Ş., Özbek, A., Güvenir, T., & Baydur, H. (2013). The advanced psychometric properties of Turkish strengths and difficulties questionnaire (SDQ). *Turkish Journal of Child and Adolescent Mental Health, 20*(1), 23-32.
- Youth in Mind. (2012). What is the SDQ?. Retrieved from <http://www.sdqinfo.com/a0.html>
- Yule, W., Dyregrov, A., Neuner, F., Pennebaker, J., Raundalen, M., & van Emmerik, A. (2005). *Writing for recovery: A manual for structured writing after disaster and war*. Bergen: *Children and War Foundation*.
- Yule, W., Ten Bruggencate, S., & Joseph, S. (1994). Principal components analysis of the Impact of Events Scale in adolescents who survived a shipping disaster. *Personality and Individual Differences, 16*(5), 685-691.
- Yule, W., & Udwin, O. (1991). Screening child survivors for post-traumatic stress disorders: Experiences from the 'Jupiter' sinking. *British Journal of Clinical Psychology, 30*(2), 131-138.
- Yule, W., & Williams, R. M. (1990). Post-traumatic stress reactions in children. *Journal of Traumatic Stress, 3*(2), 279-295.

- Yurtbay, T., Alyanak, B., Abali, O., Kaynak, N., & Durukan, M. (2003). The psychological effects of forced emigration on Muslim Albanian children and adolescents. *Community Mental Health Journal, 39*(3), 203-212.
- Zaghrou-Hodali, M., Alissa, F., & Dodgson, P. W. (2008). Building resilience and dismantling fear: EMDR group protocol with children in an area of ongoing trauma. *Journal of EMDR Practice and Research, 2*(2), 106-113.
- Zeanah, C. H., Berlin, L. J., & Boris, N. W. (2011). Practitioner review: Clinical applications of attachment theory and research for infants and young children. *Journal of Child Psychology and Psychiatry, 52*(8), 819-833.
- Zeanah, C. H., Scheeringa, M., Boris, N. W., Heller, S. S., Smyke, A. T., & Trapani, J. (2004). Reactive attachment disorder in maltreated toddlers. *Child Abuse & Neglect, 28*(8), 877-888.
- Zeanah, C. H., Smyke, A. T., Koga, S. F., Carlson, E., & Group, B. E. I. P. C. (2005). Attachment in institutionalized and community children in Romania. *Child Development, 76*(5), 1015-1028.

## Appendices

## **APPENDIX A**

### **Ethics Approval from the gatekeeper for Study I**

To University of Leicester, School of Psychology, Ethics Committee

Letter of Consent from Suriye Can Schools

It has been contacted with Seyda Erucar who is a Phd student in University of Leicester. In the light of given information about her study on trauma exposed children, and agreed on obtaining the data from children and their parents if they consent in two of our primary schools.

Kindly submitted for your information

The owner of the schools

Selma Akdağ

(imz)



Suriye Can Okulları

Adress: Piyale Pasa mahallesi yildirim Beyazit sk no 17

Istanbul/Turkiye

No:

## **APPENDIX B**

**Ethics approval from the gatekeeper  
for Study II**

9.02.2016

To Whom It May Concern,

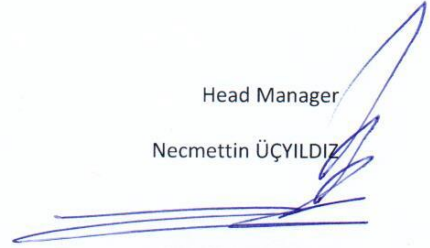
As the Genç Düşün NGO, we are informed on the Theraplay intervention that will be conducted for

10 weeks period (one day a week) with Syrian refugee children in our NGO.

We have no concerns on the project, so that we are happy to give our consent.

Head Manager

Necmettin ÜÇYILDIZ



**GENÇDÜŞÜN**  
İstanbul Gençlik ve Düşünce Kültürü Derneği  
Atikali Mh. Mehmetoğlu Hermanı Sk.No:20  
Fatih / İSTANBUL Tel: (0212) 532 30 78  
Fatih V.D.: 481 058 0045

## **APPENDIX C**

### **Information Sheet and Consent form for Parents of Study I**



Greenwood Institute of Child Health  
Westcotes House  
Westcotes Drive  
Leicester  
LE3 0QU  
T: +44 (0)116 225 2885  
E: [jrw19@le.ac.uk](mailto:jrw19@le.ac.uk) (Unit Administrator)

### **Information Sheet & Invitation Letter**

#### **School of Psychology at University of Leicester**

We are writing to invite you and your child to take part in a research study. Before you decide whether you wish to take part, you need to understand the purpose of the research and what it would involve for you and for your child. Please take your time to read the following information carefully and please contact us if anything is not clear, or if you would like to have any further information before you make your decision.

**Research topic:** *The role of parental in refugee children's mental health.*

You are being invited to take part in a research study that tries to understand the relationship between being exposed to war trauma and mental health among children; and how different family factors can protect children, thus finding ways of helping families in the future. You will be asked to answer questions about your child's mental health, the relationship between you and him/her, your own mental health, and any stressful situations when looking after your child.

This study is led by Seyda Eruyar, who is a PhD student at the University of Leicester and by Professor Panos Vostanis as the supervisor. This study has been approved by the Psychology Research Ethics Committee at the University of Leicester and by the Turkish Ministry of Education.

In this study, you will be asked to complete three questionnaires and your child will be asked to fill five questionnaires that describe the issues described above. These questionnaires have been used many times before and in different countries, and are meant to collect information in a standard way without causing distress.



**TIME COMMITMENT**

The study typically takes between 45 and 50 minutes for you. The questionnaires which will be completed by your child will take a class hour (between 50 and 60 minutes). Your child will be with her/his friends and teachers in the class during his/her participation. I will be happy to help you and/or your child in explaining or answering any questions.

**PARTICIPANTS' RIGHTS**

You may decide to stop your participation at any time. You have the right to ask that any data supplied to that point be withdrawn or destroyed.

Please feel free to ask questions at any point.

**BENEFITS AND RISKS**

Taking part in this research is important to be able to understand which factors protect children from developing mental health problems, thus support families. Although there may be no direct benefit to your family at this point, this research will help many other families in the future.

There is no identified risk to the participants. Questionnaires will be obtained by myself and by an Arabic speaking psychologist in classroom and teachers will also be present should the child need any assistance. If your child expresses any concerns while filling the questionnaires, both their teacher and myself will make sure that she/he gets appropriate help, and can advise you on who would be the most appropriate person for this.

**COST, REIMBURSEMENT AND COMPENSATION**

Your participation in this study is voluntary and not taking part will not affect in any way the services your child and family receive in the future.

**CONFIDENTIALITY/ANONYMITY**

The data we collect will only be seen by the researcher and his supervisors, and will not be linked to any identifying information (e.g., name, address, email) that you supplied. The collected information will be used in academic publications. A brief anonymised report will be sent to the Ministry of Education and the school. Neither yours nor your child's information will be identifiable, and I will be delighted to give you a copy of this report too.

**FOR FURTHER INFORMATION**

If you would like to request any further information or talk to a member of the research team at the University of Leicester, then please contact in the first instance: the principal investigator for this research programme:

*Seyda Eruyar*

*PhD Researcher*

*University of Leicester,*

*School of Psychology*

*Email: se131@le.ac.uk*

You can also contact the supervisor:

*Professor Panos Vostanis,*

*Professor of Child Psychiatry,*

*Greenwood Institute of Child Health*

*Email: pv11@le.ac.uk*



Greenwood Institute of Child Health  
Westcotes House  
Westcotes Drive  
Leicester  
LE3 0QU  
T: +44 (0)116 225 2885  
E: [jrw19@le.ac.uk](mailto:jrw19@le.ac.uk) (Unit Administrator)

### ***School of Psychology Consent Form***

***Research topic: The role of parental factors in refugee children's mental health.***

By signing below, you are agreeing that:

- (1) you have read and understood the Participant Information Sheet,
- (2) questions about you and your child's participation in this study have been answered satisfactorily, and
- (3) you are willing for your child and yourself to take part in this voluntary research study voluntarily.

\_\_\_\_\_  
Parent's Name:

\_\_\_\_\_  
Parent's signature\*

Today's Date

\_\_\_\_\_  
Name of person obtaining consent

\_\_\_\_\_  
Signature of person obtaining consent

*\*Participants wishing to preserve some degree of anonymity may use their initials (from the British Psychological Society Guidelines for Minimal Standards of Ethical Approval in Psychological Research)*

## **APPENDIX D**

**Information sheet and consent form for younger children (8-12 years old)  
of Study I**



Greenwood Institute of Child Health  
Westcotes House  
Westcotes Drive  
Leicester  
LE3 0QU  
T: +44 (0)116 225 2885  
E: [jrw19@le.ac.uk](mailto:jrw19@le.ac.uk) (Unit Administrator)

## **Information Sheet & Invitation Letter**

### **School of Psychology at University of Leicester**

**Research topic:** *The role of family factors in refugee children's mental health.*

#### **What is research? Why is this project being done?**

Research is how we find out the answers to the questions.

#### **Why have I been asked to take part?**

This research is about children who experienced war like you. We are asking questions to understand how you are feeling, and how you are doing at school and at home at the moment.

#### **Did anybody else check that the study is Ok to do?**

This research has been checked by a group of people called the Psychology Research Ethics Committee at University of Leicester in England, and also by the Turkish Ministry of Education. They have made sure that the research is safe for you to take part in.

#### **Do I have to take part?**

You can decide whether you would like to answer the questions on the sheets that Seyda Eruyar will give you soon. To not taking part will not affect in any way the marks you receive in the school exams or your teachers' opinion about you in the future.

**What will happen to me if I take part in the research?**

If you decide to help us with our research Seyda Eruyar will give you some sheets with questions about what it is like being you, how you are feeling, how you are doing at school and at home, and which bad events you had in Syria.

You do not have to worry about giving the wrong answers, because there are no right or wrong answers to any of the questions. This is not an exam, we just want to know about what you think, and this includes good things and bad things.

**Will taking part upset me?**

There can be some upsetting questions. You will be with an experienced researcher, an Arabic speaking psychologist, and your teacher in case of you do not feel good while answering the questions. They will help and support you. But if you do not want to answer, you can just tell Seyda or your teacher that you do not want to answer those questions on the sheets. If you need to talk to someone after the research, we will suggest who is the best person to you and your parents.

**Will joining in help me?**

We hope that you will like to answer those questions to help us understanding you. Moreover, your answers may help us to find ways of helping other children and their families in the future. But we cannot promise that filling these sheets will make you any happier than you are now.

**What if I don't want to do the research anymore?**

If you change your mind and decide to not continue to study anymore, that is OK. Just tell Seyda you want to stop doing the research.

**What if something goes wrong with the project?**

If you feel unhappy about those questions, then please tell either Seyda or tell your Mum/Dad or teacher.

**Will anyone else know I'm doing this?**

Nobody will know your answers apart from Seyda. But your Mum/Dad or teacher know that you will answer them. Your Mum/Dad and teacher have already told us that they are happy for us to doing this research.



Greenwood Institute of Child Health  
 Westcotes House  
 Westcotes Drive  
 Leicester  
 LE3 0QU  
 T: +44 (0)116 225 2885  
 E: [jrw19@le.ac.uk](mailto:jrw19@le.ac.uk) (Unit Administrator)

**Research topic:** *The role of family factors in refugee children’s mental health.*

Assent Form

Please tick the yes box if you agree with what the words say:

I understand why this research is being done                      Yes  No

I have asked any questions that I want to                      Yes  No

I understand what will happen next                      Yes  No

I am happy to take part                      Yes  No

If you are happy to join this research please write your name below. If any of your answers are ‘no’ or if you do not want to join this research then do not write your name below.

My name  
 is.....  
 .....

Date.....



## **APPENDIX E**

**Information sheet and consent form for older children (13-18 years old)  
of Study I**



Greenwood Institute of Child Health  
Westcotes House  
Westcotes Drive  
Leicester  
LE3 0QU  
T: +44 (0)116 225 2885  
E: [jrw19@le.ac.uk](mailto:jrw19@le.ac.uk) (Unit Administrator)

## **Information Sheet & Invitation Letter**

### **School of Psychology at University of Leicester**

We are writing to invite you to take part in a research study. Please read the information below before you decide to participate and feel free to ask me if anything is not clear.

**Research topic:** *The role of family factors in refugee children's mental health.*

This study is about children who experienced war like you. Questions will be given to you and it will be asked to answer them. We are asking questions to understand your experiences, and how you are feeling and coping at present. We hope your answers help us to find ways of helping other children and their families in the future.

This study is conducting by me- Seyda Eruyar who is a PhD student in University of Leicester in England – and my supervisor Professors Panos Vostanis. It has been approved by the Psychology Research Ethics Committee at the University of Leicester and by the Turkish Ministry of Education.

In this study, you will be asked to complete five questionnaires that describe the areas mentioned above. These questionnaires have been used many times before and in different countries, and are meant to collect information in a standard way without causing distress.

### **TIME COMMITMENT**

The study will take a class hour (between 50 and 60 minutes). You will be with your classmates and your teacher in the class during your participation. I will be happy to help you in explaining or answering any questions.

### **PARTICIPANTS' RIGHTS**

You may decide to stop your participation at any time without any explanation. You have the right to ask that any data supplied to that point be withdrawn or destroyed.

Feel free to ask questions at any point. If you have any questions as a result of reading this information sheet, you may ask the researcher, Seyda, before the study begins.

### **BENEFITS AND RISKS**

Taking part in this study is important to be able to understand on the experiences and problems of children like yourself. In the future, this information can be used to understand in what ways we can help refugee children and their families.

There is no identified risk to you. Questionnaires will be obtained from an experienced researcher. An Arabic speaking psychologist and your teacher will be present in case of you do not feel good while filling the questionnaires. They will make sure that you get appropriate help, and can advise you on who would be the most appropriate person for this.

### **COST, REIMBURSEMENT AND COMPENSATION**

Your participation in this study is voluntary, and not taking part will not affect in any way the marks you receive in the school exams or your teachers' opinion about you in the future.

### **CONFIDENTIALITY/ANONYMITY**

The information we collect will only be seen by the researcher and supervisors, and will not be linked to any identifying information (e.g., name, address, email) that you gave. The information gathered will be presented at conferences and in academic publications, however, we will only present data averaged over many participants. Neither you family nor your teachers will not know anything about your answers. We will also prepare a

brief anonymised report for your school and the Ministry of Education. We can send you a copy of this report if you wish to.

### **FOR FURTHER INFORMATION**

If you would like to want any further information or talk to a member of the research team at the University of Leicester, then please contact in the first instance:

The researcher for this study:

*Seyda Eruyar*

*PhD Researcher*

*University of Leicester,*

*School of Psychology*

*Email: se131@le.ac.uk*

*You can also contact the supervisor :*

*Professor Panos Vostanis,*

*Professor of Child Psychiatry,*

*Greenwood Institute of Child Health*

*Email: pv11@le.ac.uk*



Greenwood Institute of Child Health  
 Westcotes House  
 Westcotes Drive  
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 T: +44 (0)116 225 2885  
 E: [jrw19@le.ac.uk](mailto:jrw19@le.ac.uk) (Unit Administrator)

**Research topic:** *The role of family factors in refugee children’s mental health.*

Assent Form

Please tick the yes box if you agree with what the words say:

I understand why this research is being done                      Yes  No

I have asked any questions that I want to                      Yes  No

I understand what will happen next                      Yes  No

I am happy to take part                      Yes  No

If you are happy to join this research please write your name below. If any of your answers are ‘no’ or if you do not want to join this research then do not write your name below

My name is.....

Date.....

.....

## **APPENDIX F**

**Information & invitation forms  
for parents of Study II**



Centre for Medicine  
Department of NPB  
15 Lancaster Rd, Leicester, LE1 7HA  
Leicester  
UK

### **Information Sheet and Invitation letter for Parents**

My name is Seyda Eruyar and I am a student on the PhD Psychology course at the University of Leicester in the UK. I am writing to invite you and your child to take part in a research study. Before you decide whether you wish to take part, you need to understand the purpose of the research and what it would involve for you and for your child. Please take your time to read the following information carefully and please contact us if anything is not clear, or if you would like to have any further information before you make your decision.

#### **The purpose of this study**

The aim of this course and study is to help children deal with worries.

#### **Why you have been chosen**

We conducted a study involving Syrian children and their parents last year, on how their relationships might be protective in terms of children's mental health. Results showed that a positive relationship with their caregivers is essential for children to be protected from emotional or behavioural problems. For this reason, we developed group playing activities for children with such difficulties. The findings of the first study suggested that parents also need to be actively involved, such that they can continue to help their children at home and in other similar situations. Your involvement will, therefore, be more about educating you on how to help children to manage better with their concerns.

Your feedback on the study will help us to understand how best to help children in similar circumstances.

### **What will I have to do?**

Please I would like to invite you to participate in the study. At the beginning, you will complete a questionnaire about your child's reactions to others. If you score below a certain point, he/she would not normally require any help on mental health issues and there is nothing else you will need to do, although we would still like to analyse your child's scores in comparison with other children of the same age.

If your child scores above a certain point, it does not necessarily mean that he/she has a mental health problem, but rather that he/she might benefit from some additional help in dealing with their feelings. To that effect, we will be providing group playing activities that have been found to help other children. One group of children will attend the sessions straightaway, while another group after ten weeks, to help us understand how it best helps. During the sessions a psychologist whose name is Seyma will be the instructor. The playing activities will be administered in the charity and will consist of ten weeks group sessions that last about 45-60 minutes.

At the beginning of the course, you and all other parents will attend a group facilitated by a trained psychologist on how to best help your child in the future. You will be also requested to fill out some questionnaires related to your child's behaviour and everyday life, as well as on how you have been feeling recently.

After the ten sessions are completed, I will request for your feedback on what you think may have been useful to your child and whether you observed any changes in your child's behaviour.

If during the period of the study you ask for additional help for your child, I will advise you and your family who would be the best person to talk to.

### **Do I have to take part?**

No. It is your decision to take part or not in this research. However, if you agree to participate then please you must sign the permission letter. If you initially decide to participate, but would prefer to withdraw after you have started the course, you may do so at any time without providing a reason. Researcher will also answer any questions your child may have and they can also say if they do not want to take part. A decision



to withdraw will not affect other types of help your child will receive in any way. Once you withdraw, your data will not be used. You will be offered the chance to have a brief report of the findings, so that you can see how the data has been used. However, you cannot withdraw once the findings have been published.

**Confidentiality/Anonymity**

The data we collect will only be seen by the researcher and her supervisor, and will not be linked to any identifying information (e.g., name, address, email) that you supplied. The collected information will be used in academic publications. A brief anonymized report will be sent to the charity, Genc Dusun. Neither yours nor your child's information will be identifiable, and I will be delighted to give you a copy of this report too. It will be ensured that you and your child receive guidance on getting additional support from a mental health professional if require

**FOR FURTHER INFORMATION**

If you would like to request any further information or talk to a member of the research team at the University of Leicester, then please contact in the first instance the principal investigator for this research programme:

*Miss Seyda Eruyar*

*University of Leicester*

*Centre for Medicine*

*15 Lancaster Rd, Leicester, LE1 7HA*

*Email: [se131@leicester.ac.uk](mailto:se131@leicester.ac.uk)*

**My supervisor's contact information:**

*Panos Vostanis*

*Professor of Child Mental Health*

*University of Leicester*

*Centre for Medicine*

*15 Lancaster Rd, Leicester, LE1 7HA*

*Email: [pv11@leicester.ac.uk](mailto:pv11@leicester.ac.uk)*

## **APPENDIX G**

**Information & invitation form for children  
of Study II**

Centre for Medicine  
Department of NPB  
15 Lancaster Rd, Leicester, LE1 7HA  
Leicester  
England

### **Information Sheet & Invitation Letter**

My name is Miss Seyda Eruyar. I am a student on the PhD Psychology course at the University of Leicester in England. I would very much like to invite you to take part in this study which I am doing. Before you decide, it is important for you to understand why the research is being done and what it will involve. Please take as much time as you need to read the following information carefully. You can discuss it with others if you wish. Please feel free to contact me if there is anything that is not clear, or if you would need more information on the study before deciding to participate. Please decide whether or not you wish to take part.

#### **What is research? Why is this research being done?**

Research is how we find out the answers to the questions. The aim of this research is to help children deal with worries through a group playing activity.

#### **Why have I been asked to take part?**

Many children in contact with your charity will be invited to participate. We will first find out how you are feeling from yourself and your parents by asking questions. If you have concerns such as sadness and worries that might benefit from group playing activities, we will then invite you to participate in a group. If you decide to be in the group, your experiences and views of the activities will be important in understanding how similar programmes can help other young people in the future. If you do not express any such concerns, there is no need to be involved any further in the research.

#### **What will happen to me if I take part in the research?**

If you decide to help us with our research, I will give you some sheets with questions about how you have been feeling. You do not have to worry about giving the wrong answers, because there are no right or wrong answers to any of the questions. This is not an exam, we just want to know about what you think, and this includes happy and sad things.

During the play group, a professional person whose name is Seyma will be the instructor. You will either attend the group activities straightaway with other children or with another group after ten weeks, to help us understand how it best helps.

The activities will take place once a week 45 minutes at your charity, Genc Dusun. They will be delivered either in the morning before your classes, or in the evening after classes, to give you enough time for your normal school learning. After ten weeks you will complete the same questionnaires, and also give feedback on the group. Your parents will take part in this study as well by receiving information and advice on how to best help you, and will also give us feedback on what they have found useful. If during the course or the period of the study you ask for additional help, I will advise you and your family who would be the best person to talk to.

### **Did anybody else check that the study is Ok to do?**

This research has been checked by a group of people called the Psychology Research Ethics Committee at University of Leicester in England, and also by the head of your charity, Genc Dusun. They have made sure that the research is safe for you to take part in.

### **Do I have to take part?**

You can decide whether you would like to answer the questions on the sheets that I will give you soon. To not taking part will not affect in any way the marks you receive in the school exams or your teachers' opinion about you in the future.

### **Will taking part upset me?**

There can be some upsetting questions. You will be with an experienced researcher and your teacher in case of you do not feel good while answering the questions. They will help and support you. But if you do not want to answer, you can just tell Seyda or your teacher that you do not want to answer those questions on the sheets. If you need to talk

to someone after the research, we will suggest who is the best person to you and your parents.

### **Will joining in help me?**

We hope that the activities will help you feel better. Also, your attendance may help us to find ways of helping other children and their families in the future. But we cannot promise that filling these sheets or joining playing activities will make you any happier than you are now.

### **What if I don't want to do the research anymore**

If you change your mind and decide to not continue to study anymore, that is OK. Just tell Seyda you want to stop doing the research.

### **What if something worries me about research?**

If you feel worried about those questions, then please tell either Seyda or tell your Mum/Dad or teacher.

### **Will anyone else know I'm doing this?**

Nobody will know your answers, apart from Seyda. But your Mum/Dad or teacher know that you will answer them. Your Mum/Dad and teacher have already told us that they are happy for us to doing this research.

If you have any questions please feel free to contact me or my supervisor at any time. The contact information is as follows:

Miss Seyda Eruyar  
University of Leicester  
Centre for Medicine  
15 Lancaster Rd, Leicester, LE1 7HA  
England  
Email: [se131@leicester.ac.uk](mailto:se131@leicester.ac.uk)  
Professor Panos Vostanis  
University of Leicester  
15 Lancaster Rd, Leicester, LE1 7HA  
Email: [pv11@leicester.ac.uk](mailto:pv11@leicester.ac.uk)

## **APPENDIX H**

### **Stressful Life Events Checklist (Bean et al., 2004)**

## Stressful Life Events Checklist (Bean et al., 2004b)

Something bad happens to people sometimes. Below, there are questions about these things. Please read them and tick up the “yes” if you have experienced this event before. If you want to add something else, please write down after completing the questions

Thanks you

	<b>Stressful Life Events concerning the family</b>	Yes	No
1	Have there been drastic changes in your family during the last year?	Yes	No
2	Have you ever been separated from your family against your will? (By a stranger, police officer, soldier, fleeing your homeland)	Yes	No
3	Has someone died in your life that you really cared about?	Yes	No
	<b>Experiences with illness, accidents and disasters</b>	Yes	No
4	Have you had a life threatening medical problem?	Yes	No
5	Have you been involved in a serious accident? (for example involving a car)	Yes	No
6	Have you ever been involved in a disaster? (For example: flood, hurricane, fire, tornado, avalanche, earthquake, hostage situation, chemical disaster?)	Yes	No
	<b>War</b>	Yes	No
7	Have you ever experienced a war or an armed military conflict going on around you in your country of birth?	Yes	No
	<b>Physical mistreatment</b>	Yes	No
8	Has someone ever hit, kicked, shot at or some other way tried to physically hurt you?	Yes	No
9	Did you ever see it happen to someone else in real life?(Not just on television or in a film?)	Yes	No
	<b>Other</b>	Yes	No
10	Did you experience any other very stressful life events where you thought that you were in great danger?	Yes	No
11	Did you experience any other very stressful life event where you thought that someone else was in great danger?	yes	No

12. Not listed above but you found the event very frightening:.....  
 .....  
 .....  
 .....



## **APPENDIX I**

### **Children's Revised Impact of Event Scale (Horowitz et al., 1979)**

Below is a list of comments made by people after stressful life events. Please tick each item showing how frequently these comments were true for you *during the past seven days*. If they did not occur during that time please tick the 'not at all' box.

Name: .....

Date: .....

	<b>Not at all</b>	<b>Rarely</b>	<b>Sometimes</b>	<b>Often</b>
1. Do you think about it even when you don't mean to?	[ ]	[ ]	[ ]	[ ]
2. Do you try to remove it from your memory	[ ]	[ ]	[ ]	[ ]
3. Do you have waves of strong feelings about it	[ ]	[ ]	[ ]	[ ]
4. Do you stay away from reminders of it (e.g. places or situations)	[ ]	[ ]	[ ]	[ ]
5. Do you try not talk about it	[ ]	[ ]	[ ]	[ ]
6. Do pictures about it pop into your mind?	[ ]	[ ]	[ ]	[ ]
7. Do other things keep making you think about it?	[ ]	[ ]	[ ]	[ ]
8. Do you try not to think about it?	[ ]	[ ]	[ ]	[ ]

## **APPENDIX J**

### **Strengths and Difficulties Questionnaire for Children (SDQ-child) (Goodman, 1997)**

## Strengths and Difficulties Questionnaire

For each item, please mark the box for Not True, Somewhat True or Certainly True.  
Please give your answers on the basis of how things have been for you over the last six months.

	Not True	Somewhat True	Certainly True
<b>I try to be nice to other people. I care about their feelings</b>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
I am restless, I cannot stay still for long	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
<b>I get a lot of headaches, stomach-aches or sickness</b>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
I usually share with others (food, games, pens etc.)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
<b>I get very angry and often lose my temper</b>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
I am usually on my own. I generally play alone or keep to myself	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
<b>I usually do as I am told</b>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
I worry a lot	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
<b>I am helpful if someone is hurt, upset or feeling ill</b>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
I am constantly fidgeting or squirming	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
<b>I have one good friend or more</b>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
I fight a lot. I can make other people do what I want	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
<b>I am often unhappy, down-hearted or tearful</b>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Other people my age generally like me	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
<b>I am easily distracted, I find it difficult to concentrate</b>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
I am nervous in new situations. I easily lose confidence	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
<b>I am kind to younger children</b>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
I am often accused of lying or cheating	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
<b>Other children or young people pick on me or bully me</b>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
I often volunteer to help others (parents, teachers, children)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
<b>I think before I do things</b>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
I take things that are not mine from home, school or elsewhere	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
<b>I get on better with adults than with people my own age</b>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
I have many fears, I am easily scared	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
<b>I finish the work I'm doing. My attention is good</b>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

## **APPENDIX K**

### **Strengths and Difficulties Questionnaire for Parents (SDQ-parent) (Goodman, 1997)**

## Strengths and Difficulties Questionnaire

For each item, please mark the box for Not True, Somewhat True or Certainly True.  
Please give your answers on the basis of how things have been for you over the last six months.

	Not True/Somewhat True/Certainly True		
<b>Considerate of other people's feelings</b>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Restless, overactive, cannot stay still for long	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
<b>Often complains of headaches, stomach-aches or sickness</b>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Shares readily with other children (treats, toys, pencils etc.)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
<b>Often has temper tantrums or hot tempers</b>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Rather solitary, tends to play alone	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
<b>Generally obedient, usually does what adults request</b>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Many worries, often seems worried	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
<b>Helpful if someone is hurt, upset or feeling ill</b>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Constantly fidgeting or squirming	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
<b>Has at least one good friend</b>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Often fights with other children or bullies them	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
<b>Often unhappy, down-hearted or tearful</b>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Generally liked by other children	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
<b>Easily distracted, concentration wanders</b>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Nervous or clingy in new situations, easily loses confidence	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
<b>Kind to younger children</b>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Often lies or cheats	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
<b>Picked on or bullied by other children</b>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Often volunteers to help others (parents, teachers, other children)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
<b>Thinks things out before acting</b>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Steals from home, school or elsewhere	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
<b>Gets on better with adults than with other children</b>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Many fears, easily scared	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
<b>Sees tasks through to the end, good attention span</b>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

## **APPENDIX L**

### **Security Scale (Kern's et al., 1996)**

## Kerns Attachment Security Scale (1996)

We are going to ask you some questions about you and your mother. Please tick just one box for each sentence. Moreover, this questionnaire should be filled in a different way. Two different children have been described on the left and the right of the “BUT” for each sentence. Firstly, read these children and decide which one you are like. Then go to the side that you chose. If you think you are really like this children, tick the box of “really true”; if you think you are a little bit like this children, then tick the box of “sort of true”.

**Think about your mother..**

1	Really true	Sort of true	Some kids find it easy to trust their mom	<b>BUT</b>	Other kids are not sure if they can trust their mum	Sort of true	Really true
---	-------------	--------------	---	------------	---	--------------	-------------

2	Really true	Sort of true	Some kids feel like their moms butt in a lot when they are trying to do things	<b>BUT</b>	Other kids feel like their moms let them do things on their own	Sort of true	Really true
---	-------------	--------------	--	------------	---	--------------	-------------

3	Really true	Sort of true	Some kids find it easy to count on their moms for help	<b>BUT</b>	Other kids think it's hard to count on their moms	Sort of true	Really true
---	-------------	--------------	--	------------	---	--------------	-------------

4	Really true	Sort of true	Some kids think their moms spend enough time with them	<b>BUT</b>	Other kids think their moms do not spend enough time with them	Sort of true	Really true
---	-------------	--------------	--	------------	--	--------------	-------------

5	Really true	Sort of true	Some kids do not really like telling their moms what they are thinking or feeling	<b>BUT</b>	Other kids do like telling their moms what they are thinking or feeling	Sort of true	Really true
---	-------------	--------------	---	------------	---	--------------	-------------

6	Really true	Sort of true	Some kids do not really need their moms for much	<b>BUT</b>	Other kids need their moms for a lot of things	Sort of true	Really true
---	-------------	--------------	--	------------	--	--------------	-------------

7
---



Really true	Sort of true	Some kids wish they were closer to their moms	<b>BUT</b>	Other kids are happy with how close they are to their moms.	Sort of true	Really true
-------------	--------------	---	------------	---	--------------	-------------

8	Really true	Sort of true	Some kids worry that their moms do not really love them	<b>BUT</b>	Other kids are really sure that their moms love them	Sort of true	Really true
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9	Really true	Sort of true	Some kids feel like their moms really understand them	<b>BUT</b>	Other kids feel like their moms do not really understand them	Sort of true	Really true
---	-------------	--------------	---	------------	---	--------------	-------------

10	Really true	Sort of true	Some kids are really sure their moms would not leave them	<b>BUT</b>	Other kids sometimes wonder if their moms might leave them.	Sort of true	Really true
----	-------------	--------------	---	------------	---	--------------	-------------

11	Really true	Sort of true	Some kids worry that their moms might not be there when they need her	<b>BUT</b>	Other kids are sure their moms will be there when they need her	Sort of true	Really true
----	-------------	--------------	---	------------	---	--------------	-------------

12	Really true	Sort of true	Some kids think their moms do not listen to them	<b>BUT</b>	Other kids do think their moms listen to them.	Sort of true	Really true
----	-------------	--------------	--	------------	--	--------------	-------------

13	Really true	Sort of true	Some kids go to their moms when they are upset	<b>BUT</b>	Other kids do not go to their moms when they are upset.	Sort of true	Really true
----	-------------	--------------	--	------------	---	--------------	-------------

14	Really true	Sort of true	Some kids wish their moms would help them more with their problems	<b>BUT</b>	Other kids think their moms help them enough	Sort of true	Really true
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15	Really true	Sort of true	Some kids feel better when their moms are around	<b>BUT</b>	Other kids do not feel better when their moms are around.	Sort of true	Really true
----	-------------	--------------	--	------------	---	--------------	-------------

Think about your father..

1	Really true	Sort of true	Some kids find it easy to trust their dad	<b>BUT</b>	Other kids are not sure if they can trust their dad	Sort of true	Really true
---	-------------	--------------	---	------------	---	--------------	-------------

2	Really true	Sort of true	Some kids feel like their dads butt in a lot when they are trying to do things	<b>BUT</b>	Other kids feel like their dads let them do things on their own	Sort of true	Really true
---	-------------	--------------	--	------------	---	--------------	-------------

3	Really true	Sort of true	Some kids find it easy to count on their dads for help	<b>BUT</b>	Other kids think it's hard to count on their dads	Sort of true	Really true
---	-------------	--------------	--	------------	---	--------------	-------------

4	Really true	Sort of true	Some kids think their dads spend enough time with them	<b>BUT</b>	Other kids think their dads do not spend enough time with them	Sort of true	Really true
---	-------------	--------------	--	------------	--	--------------	-------------

5	Really true	Sort of true	Some kids do not really like telling their dads what they are thinking or feeling	<b>BUT</b>	Other kids do like telling their dads what they are thinking or feeling	Sort of true	Really true
---	-------------	--------------	---	------------	---	--------------	-------------

6	Really true	Sort of true	Some kids do not really need their dads for much	<b>BUT</b>	Other kids need their dads for a lot of things	Sort of true	Really true
---	-------------	--------------	--	------------	--	--------------	-------------

7	Really true	Sort of true	Some kids wish they were closer to their dads	<b>BUT</b>	Other kids are happy with how close they are to their dads.	Sort of true	Really true
---	-------------	--------------	---	------------	---	--------------	-------------

8	Really true	Sort of true	Some kids worry that their dads do not really love them	<b>BUT</b>	Other kids are really sure that their dads love them	Sort of true	Really true
---	-------------	--------------	---	------------	--	--------------	-------------

9

Really true	Sort of true	Some kids feel like their dads really understand them	<b>BUT</b>	Other kids feel like their dads do not really understand them	Sort of true	Really true
-------------	--------------	---	------------	---	--------------	-------------

10

Really true	Sort of true	Some kids are really sure their dads would not leave them	<b>BUT</b>	Other kids sometimes wonder if their dads might leave them.	Sort of true	Really true
-------------	--------------	---	------------	---	--------------	-------------

11

Really true	Sort of true	Some kids worry that their dads might not be there when they need him	<b>BUT</b>	Other kids are sure their dads will be there when they need him	Sort of true	Really true
-------------	--------------	---	------------	---	--------------	-------------

12

Really true	Sort of true	Some kids think their dads do not listen to them	<b>BUT</b>	Other kids do think their dads listen to them.	Sort of true	Really true
-------------	--------------	--	------------	--	--------------	-------------

13

Really true	Sort of true	Some kids go to their dads when they are upset	<b>BUT</b>	Other kids do not go to their dads when they are upset.	Sort of true	Really true
-------------	--------------	--	------------	---	--------------	-------------

14

Really true	Sort of true	Some kids wish their dads would help them more with their problems	<b>BUT</b>	Other kids think their dads help them enough mum	Sort of true	Really true
-------------	--------------	--	------------	--	--------------	-------------

15

Really true	Sort of true	Some kids feel better when their dads are around	<b>BUT</b>	Other kids do not feel better when their dads are around.	Sort of true	Really true
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## **Appendix M**

**EMBU-C (Markus et al., 2003)**

## Parental Rearing Style

(EMBU-C)

(Egna Minnen Beträffande Uppfostran)

1 = Never,

2 = Rarely,

3 = Sometimes,

4 = Always

	My Mother				My Father			
	1	2	3	4	1	2	3	4
Do your parents show that they love you?								
Do your parents spoil you more than they do your brothers and sisters? (By brothers and sisters, we mean all the children who live at your house.)								
Do you think your parents love you?								
Do your parents punish you for minor things?								
Are you sometimes disappointed in your parents because they won't give you what you want?								
Do your parents give you things you want, but not your brothers and sisters? (By brothers and sisters, we mean all the children who live at your house.)								
If your parents punish you, are they always fair?								
Do you think that your parents are too firm with you?								
If you have done something stupid, can you then make it up to your parents?								
Do you get a cuddle from your parents every now and then?								
Do your parents forbid you to do things that your classmates are allowed to do because they are afraid of something happening to you?								
Do your parents sometimes tell you off or hit you when there others around?								
Are your parents concerned about what you do after school hours?								
If things aren't going right for you, do your parents try to comfort or help you?								
Are your parents very concerned about your physical health?								
Do your parents hit you more than you deserve?								

If your parents ask you to help with the daily chores and you don't do this, do they get angry?								
If you have done something that you should not have, does this make your parents so unhappy that you start feeling bad/guilty?								
Do you have the impression that your parents love you more than they do your brothers and sisters? (By brothers and sisters, we mean all the children who live at your house.)								
Are your parents interested in your school mark?								
Do you think that your parents would help you if you had something really difficult to do?								
Do your parents blame you for everything?								
Do your parents ever say things like you are too big to be still doing things like that?								
If your parents are sad, do you sometimes think it's your fault?								
Do your parents make it obvious that they love you?								
Do you feel that your parents take account of your opinions?								
When you have a secret, do your parents want to know it too?								
Do you have the feeling that your parents like being with you?								
Do your parents sometimes say things like "it would make me really unhappy if you did that"?								
Do you think that parents are trying to make growing up a happy time for you and one in which you learn lots of things(by, for example, give you good books, going on outings you to camps and so on?)								
Do your parents sometimes tell you that you've done well?								
Do you sometimes think you are bad because you've done things your parents didn't want you to do?								
Do you think your parents have high expectations as far as your school results; sports achievements and so on are concerned?								
Do your parents sometimes make a fuss about the mess you make or that you're sloppy about the way you do things?								
Do your parents try to help you and to be understanding when you feel unhappy?								
Do your parents sometimes punish you even though you have not done anything wrong?								
Is it important for your parents what sort of friends you've got?								
If something goes wrong at home, are you the one who usually gets blamed for it?								

Do your parents like you the way you are?								
Are your parents sometimes harsh and unkind to you?								
Do your parents sometimes punish you for minor things?								
Do your parents sometimes give you a slap when you don't expect it?								
Are your parents interested in your hobbies and the things you like? (For example, do you sometimes do things together, do your parents come along when you're playing sport, do they enjoy listening to what you have to say?)								
Do your parents sometimes hit you?								
Do your parents sometimes make you feel really little?								
Do your parents sometimes give your brothers and sisters things that you don't get? (By brothers and sisters, we mean all the children who live at your house.)								
Do you think that your parents are too worried about things happening to you?								
Do you have the feeling that you and your parents really like each other?								
Are your parents sometimes angry or unhappy about you without telling you why?								
If you do something really well, do your parents seem to be very proud of you?								
Are you allowed to do more than your brothers and sisters are allowed to do? (By brothers and sisters, we mean all the children who live at your house.)								
Do your parents show you that they love you by hugging you or giving you a cuddle?								
Subscale 1: Emotional Warmth 1-3-7-9-10-14-20-21-25-26-28-30-31-35-39-43-48-50-52. Subscale 2: Rejection 4-5-8-12-16-17-22-23-36-38-40-41-42-44-45-46-49. Subscale 3: Overprotection 11-13-15-18-24-27-29-32-33-34-37-47. Subscale 4: Favouring Subject 2-6-19-51								

## **Appendix N**

### **General Health Questionnaire (Goldberg & Blackwell, 1970)**



### General Health Questionnaire (12 items)

Please answer the questions below by scoring 0 to three according to;

much more than usual= 3

rather more than usual= 2

no more than usual = 1

not at all = 0

**“Have you recently...”**

	<b>0</b>	<b>1</b>	<b>2</b>	<b>3</b>
Been able to concentrate on what you're doing				
Lost much sleep over worry				
Felt you were playing a useful part in things				
Felt capable of making decisions about things				
Felt constantly under strain				
Felt you couldn't overcome your difficulties				
Been able to enjoy your normal day-to-day activities				
Been able to face up to your problems				
Been feeling unhappy and depressed				
Been losing confidence in yourself				
Been thinking of yourself as a worthless person.				
Been feeling reasonably happy, all things considered				
Been able to concentrate on what you're doing				

## **Appendix O**

**The Parent Perception Inventory - Child (Hazzard et al., 1983)**

### The Parent Perception Inventory (PPI-child)

Read the child the following directions: WE WOULD LIKE TO KNOW HOW MUCH YOU THINK YOUR MOM/DAD DOES CERTAIN THINGS AT HOME. WE WILL NOT TALK TO YOUR PARENT(S) ABOUT WHAT YOU TELL US, SO PLEASE TELL US WHAT YOU REALLY THINK.

"HOW OFTEN DOES YOUR MOM/DAD..."	Never	A Little	Some times	Pretty Much
1. Thank you for doing things, tell you when he/she likes what you did, give you something or let you do something special when you're good?				
2. Take away things when you misbehave (like not letting you watch TV or ride your bike or stay up late or eat dessert)?				
3. Talk to you when you feel bad and help you to feel better, help you with your problems, comfort you?				
4. Tell you you're no good, tell you that you messed up or didn't do something right, criticize you?				
5. Talk to you, listen to you, have a good conversation with you?				
6. Order you around, tell you what to do, give commands?				
7. Let you help decide what to do, let you help figure out how to solve problems?				
8. Spank you, slap you, hit you?				
9. Play with you, spend time with you, do things with you which you like?				
10. Get mad at you, yell at you, holler at you, scream at you, shout at you?				
11. Say nice things to you, tell you that you're a good boy/girl, compliment you?				
12. Threaten you, tell you that you'll get in trouble if you do something wrong, warn you?				
13. Let you do what other kids your age do, let you do things on your own?				
14. Send you to a room or corner when you do something wrong?				
15. Help you when you need it (with a hard job, with homework, when you can't do something by yourself)?				
16. Nag you, tell you what to do over and over again, keep after you to do thing?				
17. Hug you, kiss you, tickle you, smile at you?				
18. Ignore you, not pay any attention to you, not talk to you or look at you?				

## **Appendix P**

### **The Parent Perception Inventory – Parent (Chaffin et al., 2004)**

### PPI- Parent

Following is a list of ways in which parents typically interact with their children at home. Every parent feels that he or she does some things better than other things with his or her children. we would like you to be as honest and accurate as possible in answering the following questions about how often certain behaviours occur in your household with respect to your son/daughter.

	Never	A Little	Some times	Pretty Much
1. How often do you say thank you to you son/daughter for doing things, tell your son/daughter when you like what he/she did, give something to or let your son/daughter do something special when he/ she is good?				
2. How often do you take things away from you son/daughter when he/she misbehaves (for example, not letting him/her watch TV, stay up late or eat dessert)?				
3. How often do you talk to your son/daughter when he/she feels bad and help him/her to feel better, to solve problems and feel comforted?				
4. How often do you tell your son/daughter that he/she is “no good,” that he/she messed up or didn’t do something right, criticize him/her?				
5. How often do you talk to your son/daughter, just listen, or have a good conversation with him/her?				
6. How often do you order your son/daughter around, tell him/her what to do or give commands?				
7. How often do you let your son/daughter help decide what to do or let him/her help figure out how to solve problems?				
8. How often do you spank, slap, hit your son/daughter?				
9. How often do you play with your son/daughter, spend time together, do things together which your son/daughter like?				
10. How often do you get mad at your son/daughter, yell, holler, scream, or shout at him/her?				
11. How often do you say nice things, compliment your son/daughter or tell him/her that he/she is a good person?				
12. How often do you threaten or warn your son/daughter or tell him/her that he/she will get in trouble if he/she does something wrong?				
13. How often do you let your son/daughter do what other kids his/her age do or let your son/daughter do things on his/her own?				
14. How often do you send your son/daughter to his/her room (or the corner) when he/she does something wrong?				
15. How often do you help your son/daughter with something when he/she needs it (with a hard job, with homework, with something he/she can’t do)?				
16. How often do you nag, tell your son/daughter what to do over and over again, or keep after him/her to do things?				
17. How often do you hug, kiss, tickle, or smile at your son/daughter?				
18. How often do you ignore, not pay any attention to, or not talk to your son/daughter?				
19. How often do you give reasons or explain why, when you tell your son/daughter that he/she is supposed to do something or not do something?				
20. How often do you give unfair punishments that are worse than your son/daughter deserves, or which she/he doesn’t deserve at all?				

## **Appendix Q**

### **The Relationship Problems Questionnaire (Minnis et al., 2007)**

## The RPQ

*Please tick the statement that best describes your child.*

	<b>Exactly like my child</b>	<b>Like my child</b>	<b>A bit Like my child</b>	<b>Not at all like my child</b>
Gets too physically close to strangers				
Gets too physically close to strangers				
Is too cuddly with people s/he does not know well				
Often asks personal questions even though s/he does not mean to be rude				
Can be aggressive towards him/herself e.g. using bad language about him/herself, head banging, cutting etc				
Has no conscience				
Is too friendly with strangers				
Sometimes looks frozen with fear without an obvious reason				
If you approach him/her, s/he often runs away or refuses to be approached				
There is a false quality to the affection s/he gives				
If you approach him/her, you never know whether s/he will be friendly or unfriendly				

## **Appendix R**

**Information e-mail from the Ministry  
on the ethics approval for Study II**



İstanbul Gençlik ve Düşünce Kulübü Derneği Suriyeli Çocukların Terapisi - Message (HTML)

FILE MESSAGE

Ignore Delete Reply Reply All Forward Quick Steps Move Assign Policy Categorize Mark Unread Follow Up Translate Zoom

Thu 02/03/2017 10:49

Strateji Geliştirme <ist.sgb34@gmail.com>  
İstanbul Gençlik ve Düşünce Kulübü Derneği Suriyeli Çocukların Terapisi


To info@gendlikkulubu.org

Click here to download pictures. To help protect your privacy, Outlook prevented automatic download of some pictures in this message.

Sayın Necmettin ÜÇYILDIZ,

İstanbul Millî Eğitim Müdürlüğüne yapmış olduğunuz 22/02/2017 tarih ve 5 sayılı başvurunuz Müdürlüğümüz İnceleme Komisyonu tarafından değerlendirilmiş olup, Millî Eğitim Müdürlüğümüze bağlı GEM'lere Bakanlığımız tarafından rehber ataması gerçekleştirilecektir, ayrıca İl Millî Eğitim Müdürlüğümüz ve İl Aile ve Sosyal Politikalar Müdürlüğü arasında başvurunuzda konu olan çalışmalar planlanmakta olduğundan talebiniz uygun görülmemiştir.

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## **APPENDIX S**

### **Feasibility Questions for parents and children of Study II**

## Questions for Children

Please we would like to have your views and experiences about the course. It is important you keep in mind that there are no “right” or “wrong” answers to any of the views you will give. What really matters is your experience about the course.

In order for us to understand your views and thoughts about this course, please could you comment on the following:

- 1) Please tell us if the instructions were easy or simple to understand during the play activities?
- 2) To what extent were the play activities easy and fun to do?
- 3) How did you find the time you had for the play activities? Too short? Too long?
- 4) How did you find the place?
- 5) Did the questionnaires give you enough opportunity to express how you felt? Were they easy to understand? Were they appropriate for your culture?
- 6) Have you experienced any problems by taking part in the play activities?
- 7) Which parts of the play activities were relevant to your culture and which were not? Why?
- 8) Please let us know in your own opinion which play activities were helpful, and which were not helpful? Why?
- 9) Would recommend play activities to other children in similar situations?
- 10) What changes would improve the course?

Please comment on any other points we may not have thought about.

Thank you!...

### **Questions for Parents:**

Please we would like to have your views and experiences about the course. It is important that you keep in mind that there are no “right” or “wrong” answers to any of the views you will give. What really matters is your experience about the course.

In order for us to understand your views and thoughts about this course, please could you comment on the following:

- 1) What do you think about the group you attended? Was it clear to understand?
- 2) To what extent was it informative and useful in terms of your and your child’s needs?
- 3) Did the questionnaires completed before the course gave you enough opportunity to express how you felt? Were they easy to understand? Were they appropriate for your culture?
- 4) How did you find the time allocated for your child’s play sessions? Has it created a burden?
- 5) Have you recognized behavioural changes in your child, if any?
- 6) Which parts of the play activities were relevant to your culture and which were not? Why?
- 7) Please let us know of your own opinion on which parts of the course were most and least helpful to you and your child? Why?
- 8) Would you recommend this course for other families in similar situations.
- 9) What would improve the course in the future?

Thank you!

## **APPENDIX T**

**Letter from the Turkish National Ministry of Education on the status of the schools for Study I**



T.C.  
İSTANBUL VALİLİĞİ  
İl Millî Eğitim Müdürlüğü

Sayı : 59090411-44-E.9394748  
Konu: Anket İzni

18.09.2015

Sayın: Seda ERUYAR

İlgi: a) 09.09.2015 tarihli dilekçeniz.

b) Millî Eğitim Araştırma ve Anket Komisyonunun 18.09.2015 tarihli tutanağı.

*"Kendisi Yada Ailesi Savaşa Maruz Kalmış ve Türkiye'ye Sığınmış Suriyeli Göçmen Çocuklarının Aile İlişkileri ve Bu İlişkilerin Duygusal ve Davranışsal Dünyalarına Etkisi"* konulu tezinize ilişkin ilgi (a) dilekçeniz ve ekleri Müdürlüğümüz Değerlendirme Komisyonunca incelenmiştir.

Ancak yapılan incelemede, örneklem olarak seçmiş olduğunuz okulun Müdürlüğümüze bağlı olmadığı anlaşılmış olup; söz konusu talebinize herhangi işlem yapılmamıştır.

Bilgilerinize rica ederim

Murat ADALI  
Şube Müdürü

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Bu evrak güvenli elektronik imza ile imzalanmıştır. <http://evraksorgu.meb.gov.tr> adresinden e612-5b82-3321-bb9f-ff4e kodu ile teyit edilebilir.