Refugee and Forced Migration: The Concept of Resilience

A Scoping Review

Refugee and Forced Migration: The Concept of Resilience

A Scoping Review

By RASHA MANSOUR, (B.Pharm)

A Thesis Submitted to the School of Graduate Studies in Partial Fulfillment

of the Requirements for the Degree Master of Science (Global Health)

McMaster University MASTER OF SCIENCE (2019) Hamilton, Ontario (Global Health)

TITLE: Refugee and Forced Migration: The Concept of Resilience - *A Scoping Review*

AUTHOR: Rasha Mansour (B.Pharm)

SUPERVISOR: Dr. Andrea Baumann

COMMITTEE MEMBER: Laura Banfield

NUMBER OF PAGES: XIV, 129

TABLE OF CONTENT

ABSTRACT

Background: Since the 1980s, there has been a growing interest in research to focus on positive mental health instead of narrowing attention toward risk factors and to foster resilience instead of treating trauma. There is substantial empirical evidence that despite being exposed to the same risk; individuals react differently to the same stimuli. The ability of some people to successfully cope and adapt despite adversity is what constitutes resilience. In the context of forced migration, resilience research examines the elements that ameliorate wellbeing and positive adjustment rather than focusing on the pathological consequences of trauma. However, little is known about how the construct of resilience is conceptualized within the field of forced migration research. This research aims to critically appraise and map the existing literature on resilience in the forced migration population, and to analyze how the concept of resilience is defined, operationalized, and applied in refugee research.

Methods: Arksey and O'Malley scoping review framework was followed to search 5 online databases (Medline, PsycINFO, CINAHEL, Embase, and Web of Science). Numerical and thematic analysis were both conducted to examine the breadth of the literature and to chart the relevant data.

Results: A total of 20 studies were selected for the scoping review (18 through database search and 2 through references search). The findings included a description of the literature regarding geographic distribution, recruited methods, and targeted populations. In addition, the results investigated definitions of resilience, measures used to

operationalize resilience, the relationship between resilience and mental health illnesses, internal and external protective factors contributing to fostering resilience processes, and resilience across cultures and languages.

Conclusion: There is an increase in interest to understand the concept of resilience through synthesizing both qualitative and quantitative data. However, longitude and evaluation studies remain the exception. Further research is needed to validate resilience instruments across cultures and languages. The interactions between mental health illnesses and resilience should be better understood in the context of forced migration as well.

Keywords: Resilience, Psychological adaptation, Refugee, Forced migration, Displacement, Scoping review, Global Health

ACKNOWLEDGEMENT

I would like to express my sincere appreciation to my supervisor, Dr. Andrea Baumann, for her guidance and encouragement throughout this project. Her support along the way contributed greatly to this master's thesis.

Additionally, I would like to extend my gratitude for my supervising committee member, Laura Banfield, for her valuable input and feedback. I would also like to thank my defense chair, Michael Ladouceur for his comments during the initial and the final stages of this project.

Lastly, I want to thank my family for their unconditional love and support that kept me going. Without you I would never have been able to reach this goal. Thank you

LIST OF TABLES AND FIGURES

TABLES

FIGURES

LIST OF ABBREVIATIONS AND SYMBOLS

AARS	Acculturation and Resilience Scale
APA	American Psychological Association
ARS	Adolescent Resilience Scale
BPFI	The Baruth Protective Factors Inventory
BRS	The Brief Resilience Scale
CD-RISC	Connor-Davidson Resilience Scale
CYRM	Child and Youth Resilience Measure
DRS	Dispositional Resilience Scale
IDPs	Internally Displaced Persons
IASFM	International Association of Studies of Forced Migration
PTG	Post Traumatic Growth
PTSD	Post-traumatic Stress Disorder
MAOA	Monoamine Oxidase A
MTRR	Multidimensional Trauma Recovery and Resilience Scale
NGO	Non-governmental organizations
OHCHR	Office of the United Nations High Commissioner for Human Rights

R-MATS	Resilience Questionnaire for Middle-Adolescents in Township Schools
RS	Resilience Scale
RSA	Resilience Scale for Adults
SDQ	Strengths and Difficulties Questionnaire
SEM	Social Ecological Model
SOC	Sense of Coherence
UN	United Nations
UNDP	United Nations Development Programme
UNEP	United Nations Environment Programme
UNESCO	United Nations Educational, Scientific and Cultural Organization
UNHCR	United Nations High Commissioner for Refugees
WHO	World Health Organization
YR:ADS	Youth Resiliency: Assessing Developmental Strengths

DECLARATION OF ACADEMIC ACHIEVEMENT

The following is a declaration that the content of the research in this document has been completed by Rasha Mansour and recognizes the contributions of Dr. Andrea Baumann and Laura Banfield in both the research process and the completion of the thesis.

CHAPTER I: INTRODUCTION

1.1 General Overview

Currently, more people are displaced nowadays than ever. The United Nations High Commissioner for Refugees (UNHCR) had declared the 21st century as the century of people on the move referring to the patterns of mass forced migration (UNHCR, 2011). Refugees, asylum seekers, internally displaced persons (IDPs), and returnees encounter a great deal of hardships before, during and after their displacement journey. With that in mind, the orthodox forced migration discourse referred to refugees as a vulnerable population and focused on potential risk factors, psychopathology and trauma. This has led to the conceptualization of "refugee as an identity" implying that displacement is the onset and the beginning of a series of traumatic events. However, this conceptualization ignores the potential of survival, positive adaptation and resilience. Till date, studies that have explored the factors contributing to positive mental health in the forced displacement area are not the norm. Resilience research adopts the health model rather than the disease one with the purpose of better understanding factors and strategies facilitating the resilience experience.

It is a well-known fact that there are great individual differences in the way people respond to stress (Fazel, Reed, Panter-Brick, & Stein, 2012). Researchers in psychology, social science, and medical anthropology are trying to solve why some people thrive despite adversity while others do not. Little is known about how the concept of resilience is conceptualized in the forced migration research area. Therefore, there is a pressing

need for identifying the key players in the resilience process for refugees and IDPs not only on the individual level but also on the community and institutional levels.

1.2 Research Questions

Little is known about the conceptualization of the construct of resilience in the field of forced migration and the factors contributing to resilience among this population. This study aims to summarize and systematically map the existing body of literature on resilience in the forcibly displaced population. The findings of this thesis contribute to the ongoing theoretical debate in resilience research. The following thesis is trying to answer the following research questions:

1. How the concept of resilience is defined and operationalized in the forced migration population?
2. In the context of forced displacement, what is the relationship between resilience and mental health disorders, and what are the protective factors facilitating the resilience process?

1.3 Objectives

The goal of this research is to critically appraise the literature that has been conducted on resilience in refugees, IDPs, asylum seekers and returnees between the years 2000 to 2019. Resilience research and forced migration research are subject to heavy debate with no consensus among researchers regarding their boundaries. This master's thesis aims to appraise the discussion currently initiated around these concepts. The results of this study will shed light on the vibrant debate within the rapidly expanding

field of resilience research. The goal of this study is to clarify key issues in what is considered a quite ambiguous area of research. Lastly, this thesis aims to summarize pieces of evidence that support refugees to become self-reliant rather than passive receivers of humanitarian aid.

CHAPTER II: BACKGROUND AND LITERATURE REVIEW

This chapter will introduce the topics that steer the scope of this study. First, the concept of resilience will be explored, starting with a historical introduction, followed by the salutogenic model, and the social ecology framework. Then, an in-depth analysis of definitions and measures will be given. Second, the demographic population of interest will be discussed focusing on refugee and forced migration population.

2.1 The Concept of Resilience

2.1.1 Historical Review

The word "resilience" is derived from the Latin verb "resilire" meaning to "jump back" or "recoil" suggesting going back to a prior position (Bourbeau, 2018). Resilience is considered a relatively new concept as the history of resilience goes back only a few centuries. Some recourses argue that the term "resilience" first appeared in 1626 in Francis Bacon's book *Sylva Sylvarum* (Bourbeau, 2018). In this context, resilience was used to describe the ability of an echo to reflect sounds implying a capacity to "bounce back" (Bourbeau, 2018). According to the Merriam-Webster dictionary the concept of "resilience" was first used in 1807 by physics scientist Thomas Young who discussed the concept of materials' resilience (Merriam-Webster, n.d.). In this regard, the Merriam-Webster defines resilience as the "capability of a strained body to recover its size and shape after deformation caused especially by compressive stress." This definition describes a characteristic of elastic materials (such as rubber) to "bound but not break" by absorbing energy when a stress force is applied and releasing the energy back when the stress is removed (Merriam-Webster, n.d.). By doing so, the resilient material stretches

and then bounces back to its original shape. It is important to note that materials' resilience could be calculated precisely by using Young's model which proposes that resilience is "measured by the product of the mass and the square of the velocity of a body capable of breaking it" (Love, 1944).

This ability to "bounce back" inspired authors to utilize this concept so as to describe individuals who demonstrate an ability to "bounce back" from stressful events. Merriam Webster dictionary refers to resilience in this context as "an ability to recover from or adjust easily to misfortune or change" (Merriam-Webster's, n.d.). P.G. Wodehouse may be the first author to apply the term resilience to a person. Is his 1922 novel *The Adventure of Sally* he writes:

"There is in certain men a quality of resilience, a sturdy refusal to acknowledge defeat, which aids them as effectively in affairs of the heart as in encounters of a sterner and more practical kind" (Woodhouse, 1922).

The concept of resilience then appeared within the field of psychology in the 1940s (Bourbeau, 2018). The term was used to describe children with an ability to thrive despite encountering stressful circumstances during their development stages. In this regard, resilience started to appear slowly but surely in the middle of the twentieth century in the context of World War II and the Holocaust. In this context, resilience referred to the capacity of certain individuals, but not others, to survive traumatic events (Bourbeau, 2018).

In psychology, the root of the construct can be found in the field of developmental psychology, notably in the work of Garmezy. Beginning in the 1980s, Garmezy studied

children raised by severely mentally ill parents. Despite the significant exposure to trauma these children managed to develop normally, performed well academically, and achieved positive emotional and social adjustment. This study attempted to understand factors contributing to positive mental health contradicting orthodox research that previously focused on the negative consequences of trauma (Garmezy, 1974). The term "invulnerable" was used to describe these children (Anthony, 1987). This new model paved the way for a new approach in the paradigm of psychopathology research (Panter-Brick, 2014). As a result, this orientation marked "a shift from efforts to appraise risk or vulnerability, towards more concerted efforts to enhance strength or capability" (Panter-Brick & Leckman, 2013). An enhanced understanding of resilience resulted from the work of the following researchers including Werner, Masten, Rutter and Ungar.

Werner and Smith undertook a 40-year longitudinal study of all the children born and raised on the Hawaiian island Kauai in 1955. About one-third of the 689 children they followed were exposed to high-risk conditions including chronic poverty, alcoholic parents, and violent environment (Werner, 1993). To the researchers' surprise, around one-third of the cohort defied the odds and grew up to be objectively competent, successful adults. They demonstrated resilient characteristics and were "vulnerable, but invincible" (Werner & Smith, 1997). In their observations, Werner and Smith concluded that resilient individuals had better access to protective factors that helped them deal with setbacks and adversity. These factors included supportive extended family, a strong bond with a nonparent caretaker, involvement in extracurricular activities, and better access to healthcare services (Werner, 2000).

Rutter (1979), attempted to understand the elements that ameliorate wellbeing and tried to identify the common characteristic that "resilient" children shared. He noted that limiting risk exposure and building self-esteem are of the core protective factors that helped the children defy the odds and succeed despite hardships. Masten (1989), was one of Garmezy students, continued working in the field of resilience so as to solve the paradox of "successful adaptation despite the odds against good development" (Masten, Karin, & Garmezy, 1990). She noted that resilience is a common phenomenon and that it could be expected as a result of well-adapted systems. The set of collective factors that protect children's critical development is the secret ingredient for the resilience recipe (Masten, 2001). Masten called the resilience phenomenon "the ordinary magic" to suggest that when protection strategies are applied; people will be able to thrive despite adversity (Masten, 2001). However, Masten also noted that, when protective elements are absent, maladaptation is more likely to occur. The accumulation of risk factors on different ecological levels in addition to stresses will negatively influence the healthy adjustment and impede the resilience experience (Masten & Coatsworth, 1998).

2.1.2 Antonovsky's Salutogenic Model (1987)

"In developmental psychopathy, it is assumed that normal and abnormal development are both critical parts of understanding human behaviour and that the study of one informs our knowledge of the other" (Masten & Braswell, 1991). However, studies of response to trauma were traditionally dominated by the pathogenesis model. This model focuses on illness, distress and risks and thus ignores the study of health and protective factors.

As a response to the disease model, Antonovsky proposed the salutogenic model (meaning the origin of health) as an attempt to understand the relationships between health, stress and coping pathways. The theory of salutogenesis conceptualizes health and disease as ends of a continuum. Within this paradigm, the occurrence of protective and risk factors predicts where every individual -at any given time- is placed on this spectrum (Antonovsky, 1984). The salutogenic framework aims to explore how people maintain a healthy status and to identify factors that contribute to wellbeing rather than emphasizing aspects of the illness experience. As Antonovskly puts it "the study of responses to trauma must include the study of resilience and health." (Antonovsky, 1987). In his book *Unraveling the Mystery of Health* published in 1987, Antonovsky tried to answer the question "how people manage stress and stay well?" In an attempt to answer this question, he interviewed Holocaust survivors and tried to identify common pathways among these subjects who were able to successfully adapt to hardships. A shared theme he identified was that the survivors all had a strong sense of coherence (Antonovsky, 1987). To operationalize this theory, he also developed the sense of coherence scale (SOC).

According to Antonovsky, the sense of coherence is "a global orientation that expresses the extent to which one has a pervasive, enduring though dynamic feeling of confidence that (1) the stimuli deriving from one's internal and external environments in the course of living are structured, predictable, and explicable; (2) the resources are available to one to meet the demands posed by these stimuli; and (3) these demands are challenges, worthy of investment and engagement" (Antonovsky, 1993). In other words,

health is influenced by the way individuals conceptualize their lived experiences. People who view the world around them as a coherent place and have an ability to give meaning to the traumatic events they encounter have a stronger sense of coherence, and thus, are better equipped to cope with stress.

There are three fundamental components to this theory: 1- Comprehensibility: meaning the individuals' ability to make sense of the things happening in their surrounding environment in a consistent rather than a chaotic way. 2- Manageability: the individual's ability to utilize available resources effectively to aid their response to stresses. 3- Meaningfulness: the value one gives to their lived experiences in a way that stresses are seen as challenges rather than a burden or unbearable situation. These three elements collectively enable individuals to sustain their health and wellbeing in the face of stresses and challenges. The theory of salutogenesis serves as a milestone in the development of the resilience construct. The SOC scale was used to measure resilience in numerous studies (Antonovsky, 1996).

2.1.3 The Ecology of Human Development (Bronfenbrenner, 1979)

To fully comprehend how resilience factors influence individuals, it is important to understand the multi-level interactions occurring between humans and their surrounding environment. The best way to look at these interactions is by adopting the ecology of the human development framework. This theory-based framework proposed by Bronfenbrenner in 1979 aims to understand the complex nature of relationships between humans and their communities. This framework known as the Social Ecological Model (SEM) suggested that individuals interact with their environment on multi

hierarchical levels (Bronfenbrenner & Morris, 1998). These levels compose five nested layers -the individual, micro-, meso-,exo-, and macro-systems (figure 1). A detailed description of every level is presented in (table 1).

Figure 1. Socio-Ecological Model of Human Development (Bronfenbrenner, 1979)
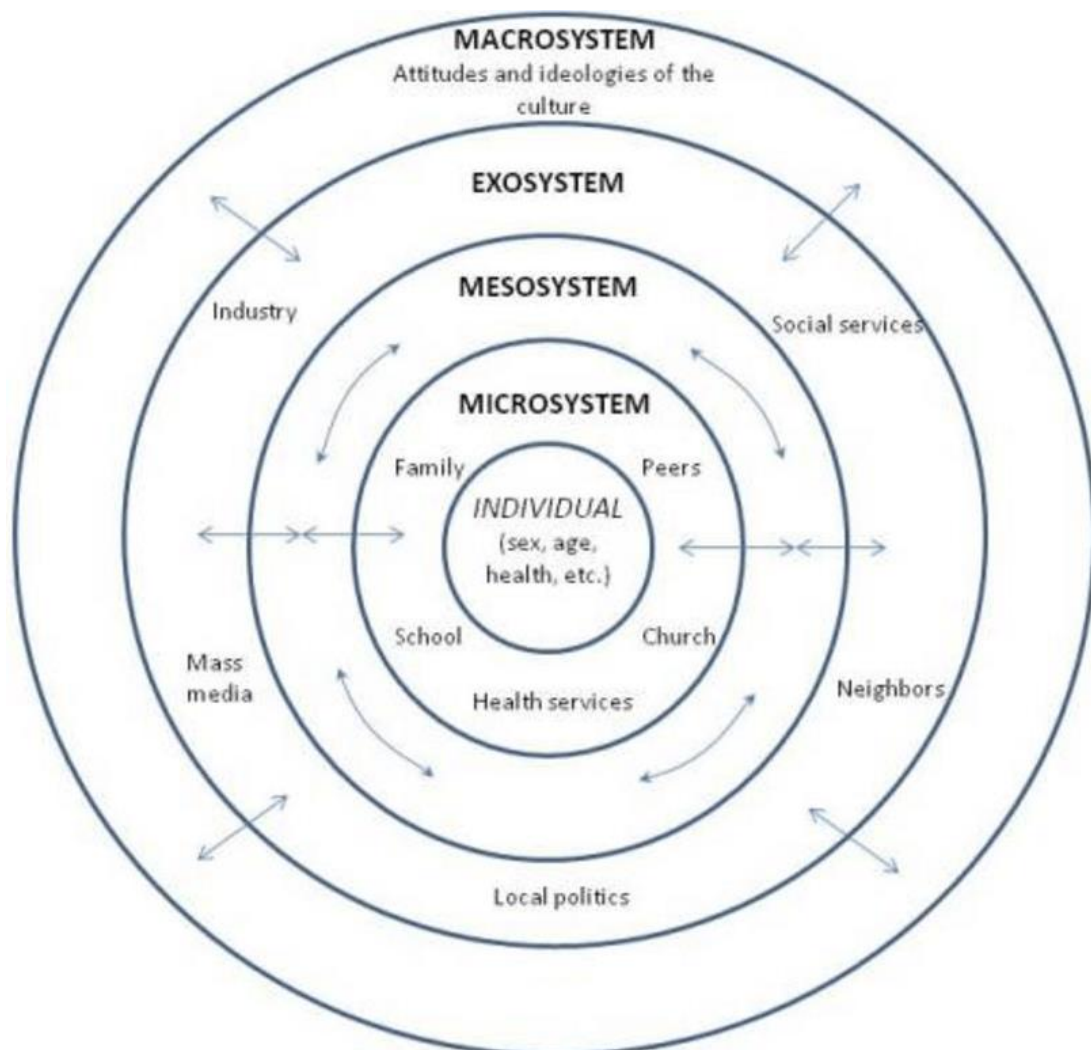
Table 1. A Description of Social Ecological Model (SEM) Levels.

SEM level	Description
Individual	This represents the core of the SEM. This level stands for the individual psychological makeup. Things at this level include knowledge, age, gender, economic status, personal beliefs, values, attitudes and behaviours.
Microsystem	The second level includes the individual's immediate surroundings and direct relationships with the closest social network. Parents, close family members, peers, school, workplace, and neighbourhood all fall under this category. This level includes the closest and most influential relationships.
Mesosystem	This layer contains relationships at the outer community levels such as with extended family members, religious leaders and community representatives.
Exosystem	This level covers dynamic interrelation happening between individuals and the larger surrounding environment. Included in this level are local institutions, social organizations and local policies.
Macrosystem	This forms the outer level in the framework. It includes interactions at the larger societal scale. Included in this layer are cultural beliefs, values and norms, traditions and customs, national laws, legislations, resource allocations and healthcare coverage. This level has an impact on all other levels.

Protective factors that foster the resilience process can happen at any given level of the SEM. Resilience research in its early days only looked at operations that happens at the core individual level. These factors included the ability to solve problems effectively, social competence and a high sense of purpose. However, when greater understanding

was introduced, researchers and practitioners started to give greater attention to social and environmental factors, as they started to observe the instrumental role supportive environments play in promoting resilience (Ungar, 2011). Examples of the social factors that occur on the outer levels are healthy relationships with caregivers, availability of economic resources, and well-structured social systems (Bronfenbrenner & Morris, 1998). The synergy of protective factors piling up on all of SEM levels is what fosters resilience outcomes (Ungar, Ghazinour, & Richter, 2013).

2.1.4 Resilience Definitions

The concept of resilience has always been referred to as having a definitional ambiguity with no consensus among resilience researchers on a solo definition (Ungar, 2011). Resilience might be understood as the ability to bend but not break. It may also be described as the ability to bounce back after encountering adversity (Prince-Embury & Saklofske, 2012). The American Psychological Association (APA) defines resilience as "the process of adapting well in the face of adversity, trauma, tragedy, threats or even significant sources of stress" (APA, 2014). Resilience is also considered to be the "adult capacity to maintain healthy, symptom-free functioning following potentially traumatic events"(Bonanno, Galea, Bucciarelli, & Vlahov, 2006). Rutter (2006) referred to resilience "as a relative resistance to environmental risk experiences, the overcoming of stress or adversity". These definitions have been critiqued for oversimplifying the resilience process and ignoring the complex nature of it (Ungar, 2011).

According to Westphal and Bonanno, posttraumatic growth implies positive growth following a period of negative functioning due to trauma consequences, where

resilience suggests limited or no effect of trauma on functioning whatsoever (Westphal & Bonanno, 2007).

Another definition by Yates, Egeland, and Sroufe (2003) suggested that resilience reflects the way people utilize the available resources and harness them to positively adjust to life challenges. As per this definition, resilience is conceptualized as a process that will lead to positive outcomes rather than the quality of individuals. A clear social-ecological interpretation of resilience is hypothesized as:

"In the context of exposure to significant adversity, resilience is both the capacity of individuals to navigate their way to the psychological, social, cultural, and physical resources that sustain their wellbeing, and their capacity individually and collectively to negotiate for these resources to be provided and experienced in culturally meaningful ways." (Ungar, 2008).

2.1.5 Resilience as a Multi-facet Construct

In the early work of the resilience research, resilience was conceptualized as a set of mere individualistic personality traits such as hardiness, invulnerability, and high self-esteem (Anthony, 1974; Kobasa; 1979; Rutter, 1987). Within this paradigm, individuals who have a constellation of resilient characteristics can simply bloom from within regardless of the traumatic events they encounter. However, this approach was critiqued later by Luthar, Cicchetti, and Becke (2000) as it was regarded to oversimplify the resilience phenomenon into a set of protective factors that, when plugged into a system, resilient outcomes would be achieved. Furthermore, it has been suggested by Wagnild

and Young (1993) that the presence or absence of certain protective factors will determine individuals' destiny. New pieces of evidence as demonstrated by Ungar (2011) no longer supported this mono-dimensional model of resilience. As a response to the aforementioned new findings, the concept itself underwent a paradigm shift in order to align with the more comprehensive understanding of the phenomenon (Rutter, 2012). This new orientation of the construct addressed factors assisting individuals to cope with adversity. In addition to good individual qualities such as self-reliance and personal competence, a strong bond with parents, peer support, and cultural sense of belonging were all introduced as elements promoting the resilience process. This framework of the social ecology of resilience aims to understand the "social determinants of resilience" (Ungar, 2011). It recognizes external capacities such as a protective environment and robust community support as essential components that facilitate individuals' resilience and help them achieve their potentials (Ungar, 2012).

Luthar et al., (2000) argue that resilience can be conceptualized as a dynamic process of adaptation that occurs as a response to stressor events. Within this context, resilience reflects the conditions happened before, during and after the occurrence of adversity that destabilizes the individual's life. Not only protective factors happen on the individual level but also on the other socio-ecological levels including peers, family, and community. Cultural beliefs, religious rituals, social practices, and community support influence the process of resilience. Within this paradigm, the resilience phenomenon becomes an outcome of the robust collective positive factors nested in the micro, meso, exo, and macro systems. According to this framework, resilience factors are embedded in

the individual, family, peers, and community levels. High sense of agency, healthy bond

with parents and caregivers, positive connections with peers, good network support,

effective school and community organization support and a robust social system all form

a constellation of protective agents that act together as a buffer in the face of

maladaptation (Masten & Powell, 2003).

2.1.6 Resilience across Cultures

Culture can be regarded as "the set of distinctive spiritual, material, intellectual

and emotional features of society or a social group, and that it encompasses, in addition to

art and literature, lifestyles, ways of living together, value systems, traditions and beliefs"

(United Nations Educational, Scientific and Cultural Organization, [UNESCO] 2001).

The concept of resilience is of a context-sensitive nature, moreover, it has diverse cultural

and contextual aspects (Ungar et al., 2013). However, resilience research has been heavily

critiqued for relying on western norms and missing a universal approach when

investigating the concept of cultural aspects (Ungar & Liebenberg, 2011). Throughout

different stages of resilience concept development, little consideration has been made to

cultural differences (Ungar, 2011).

Cultural norms impact the way people conceptualize resilience. Social values also

influence expected behaviour and accepted actions in response to traumatic events. The

presence of these factors results in different interpretations of the resilience concept

across different cultural groups. For example, while western thoughts on resilience

highlight the individual's strength and ability to be independent of their families; other

cultures might consider social interdependence, a collective sense of belonging, and

strong intergenerational relationships as characteristics that foster resilience (Al-Krenawi & Graham, 2000). Additionally, there is a debate on how the term translates across different languages and whether there are important aspects of the concept that are lost in translation (Ungar & Liebenberg, 2011). These differences across cultures were relatively abandoned when developing resilience definitions and the majority of the resilience measures (Panter-Brick & Leckman, 2013).

As discussed earlier, social milieu plays an important role in fostering resilience and supporting individuals' capacities to overcome adversity. However, it is a well-known fact that there are variations in social welfare operation models across the globe. What community agencies and faith-based organizations value and the way they deliver their services largely differ from one culture to another. Also, qualities and quantities of available resources in a given context affect individual resilience and their coping mechanism. Therefore, to design support systems that effectively facilitate positive adjustment, a more inclusive approach with respect to resilience is required. In addition, gender could be an important key player in respect to resilience depending on the context. For instance, in one study, gender played an important role in impacting resiliency and coping mechanism (Betancourt, Borisova, de la Soudière, & Williamson, 2011). On the other hand, it was not of such importance in another context (Dubow et al., 2012). In addition, because of the cultural differences, when the same resilience interventions were applied in different countries; different outcomes were delivered (Ungar, 2012). Thus, it is recommended to take a more holistic approach in exploring the concept of resilience

with paying specific attention to differences in culture and social contexts (Southwick, Bonanno, Masten, Panter-Brick, & Yehuda, 2014).

2.1.7 Resilience and its Relation to Health and Wellbeing

Resilience research introduced a new conceptual orientation in the study of health and illness. Resilience study tries to facilitate positive adaptation rather than focusing on the adverse effects of trauma. Resilience is embedded in the health model rather than the disease one. The World Health Organization (WHO) defines Health as "a state of complete physical, mental and social well-being and not merely the absence of disease or infirmity" (WHO, 1946). Mental health, on the other hand, is defined as "a state of well-being in which the individual realizes his or her own abilities, can cope with normal stresses of life, can work productively, and is able to make a contribution to his or her own community" (WHO, 2001). Resilience is closely related to mental health and wellbeing, however, one major difference between mental health and resilience is that resilience implies adapting to abnormal life stresses rather than normal ones.

Bonanno, Galea, Bucciarelli and Vlahov (2006) define resilience as showing either no or one symptom of posttraumatic stress disorder (PTSD). However, others argue that resilience is a heterogeneous and complex concept that extends beyond the mere absence of psychopathology (Almedom & Glandon, 2007). According to Trzesniak, Libório, and Koller (2011), what differentiates resilience is the ability of a system to "function as expected, within the boundaries of normality despite the stress being applied" (as cited in Ungar, 2011). It is important to note that in times of challenges and instability, what is expected as "healthy functioning" and "boundaries of normality" are

incompatible with times of stability. In this context, having symptoms of anxiety could be considered a "normal" response in the aftermath of hardships. Building on this understanding of resilience, resilience could be conceptualized as an independent construct that suggests positive adaptation in the aftermath of misfortune regardless of mental and physical illnesses (Reich, Zautra & Hall, 2010).

In the same sense that health is "not merely the absence of disease", resilience becomes not the mere absence of PTSD and depression (Almedom & Glandon, 2007). This leads us to conclude that resilience and anxiety, PTSD, and/or depression might co-exit. Likewise, the absence of the psychopathy is not a necessary factor in the existing of resilience. What really indicates resilience is the ability to "keep functioning" regardless of showing symptoms of psychopathy or not, thus, positive adaptation to mental illnesses suggests a high level of resiliency (Almedom & Glandon, 2007).

2.1.8 Resilience Measures

More than sixteen resilience measures were proposed to operationalize it. However, as the same with resilience definitions, there is no consensus among social scientists, psychologists and health practitioners on a single resilience scale. In the following paragraphs, I will explore the most cited resilience measures that have also been used with the forced migration population.

2.1.8.1 The Resilience Scale (Wagnild & Young, 1993)

The resilience scale (RS) is comprised of 25 items, each item having a 7-point Likert scale, with higher scores implying higher resiliency. The RS instrument was created in 1993 by Wagnild and Young. There are condensed 14-item and 8-item versions

of this scale as well. Within the context of the RS scale, resilience is conceptualized as the personal characteristics that enable individuals to cope with stressful events. Personal competence, acceptance of self and life, self-determination and self-reliance are all elements that underpin resilience according to the Wagnild and Young scale. RS scale was developed from a qualitative study with participants who positively adapted after a traumatic event. It was then tested and validated with a random sample of general public adults. However, it is widely used across different age ranges and ethnic groups including migrants and refugees, and it was translated into several languages. The full scale is available in *Appendix A, Table 2*.

2.1.8.2 Connor-Davidson Resilience Scale (Connor & Davidson, 2003)

The Connor-Davidson Resilience Scale (CD-RISC) is a self-rated instrument that includes 25 items to measure resilience. Each one of these items is rated on a 5-point scale indicating scores from (0-4) with higher scores reflecting higher resiliency. This scale was created by Connor and Davidson who were specialized in psychiatry and behavioural sciences, and it was first used in 2003. CD-RISC scale was developed as an attempt to quantify resilience to help clinical practitioners evaluate the psychiatric treatment efficiency such as medical intervention. The tool contents assess resilience based on psychometric properties, such as stress coping ability, self-esteem, goal-orientation (Rutter, 1985), and psychological hardiness (Kobasa, 1979). After the creation of the tool, it was evaluated for reliability and validity in the United States, the sample included a general population sample as well as clinical patients. Results indicated that the CD-RISC scale distinguished between those with lesser and greater resilience. In the

refugee context, the CD-RISC was used in numerous studies. The full scale is available in *Appendix A, Table 3*.

2.1.8.3 Child and Youth Resilience Measure (Liebenberg & Ungar, 2009)

The Child and Youth Resilience Measure (CYRM-28) is a self-reported questionnaire designed specifically to measure resilience in children and adolescent populations facing adversity. This instrument contains 28 items, each of which is rated on a 5- Likert scale with higher scores reflecting greater resilience. This tool is informed by social sciences theories.

This scale was developed on an international level with an attempt to capture shared factors of resilience across cultures. The CYRM was designed in collaboration with the targeted communities using a mixed-method approach. The sample included 89 youth and adults from 11 high, middle, and low-income countries and was further tested with 1451 adolescents. This scale includes 28 items that represented themes of "doing well" despite adversity. A 12-item reduced version is also available. The CYRM acknowledges the multi-facet aspects of resilience. Rather than treating resilience as an internal trait; CYRM was developed to have multiple subscales to measure resilience-protective factors on the micro, meso and macro levels. This accounts that the individual, peer, family, and community resources are evaluated throughout this tool. The CYRM scale was applied to measure refugee resilience in different refugee populations and was credited to be culturally sensitive (Ghannam & Thabet, 2014; Giordano et al, 2014; Kangaslampi, Garoff, & Peltonen, 2015). A full list of the 28-item CYRM is available in *Appendix A, Table 4*.

2.1.8.4 Additional Scales

In addition to the mentioned above scales there are additional ones that attempted to measure resilience either alone or along with other related concepts as well. For example, in the Acculturation and Resilience Scale AARS created by Khawaja, Ibrahim and Schweitzer (2017) there are three subscales: Acculturation, resilience, and spirituality. On the other hand, the Multidimensional Trauma Recovery and Resilience Scale (MTRR) assesses trauma impact, recovery and resiliency in trauma survivors. The conceptual orientation of the MTRR scale is based on the ecological framework of psychological trauma, and resilience is viewed as a multi-dimensional phenomenon.

Some scales acknowledge resilience as a process, for instance, the California healthy kids survey - The Resilience Scale of the Student Survey designed by Sun and Stewart (2007) refers to resilience as a process, discussing it through an ecological framework, this scale reflects protective factors on the individual, family and peer levels. Also, the Youth Resiliency: Assessing Developmental Strengths (YR:ADS) by Donnon and Hammond (2007); Donnon, Hammond, and Charles (2003) assesses the protective factors on the intrinsic and extrinsic levels that are believed to underline the resilience phenomenon. Resilience is conceptualized as a developmental process that is strengthened with the aid of protective factors that happens on the micro and macro levels. Several resilience scales use a proxy of protective factors to represent resilience, to give an example, the Resilience Scale for Adults (RSA) (Friborg, Barlaug, Martinussen, Rosenvinge, & Hjemdal, 2003, 2005). This scale uses the SOC and family healthy adjustment to express resilience pathways happening on the internal and external

levels. The Baruth Protective Factors Inventory (BPFI) proposed by Baruth and

Carroll (2002) acknowledges adaptive personality, supportive environment, and

encountering fewer stressors as protective factors that support a resilient response.

It is worth to note that the majority of these scales were developed in the United

States and Canada with only a few measurements developed elsewhere. The Adolescent

Resilience Scale (ARS) by Oshio, Kaneko, Nagamine and Nakaya (2003) was developed

in Japan aiming to measure psychological features associated with resilience in Japanese

youth. However, the trait chosen to represent resilience (emotional regulation, positive

future orientation and novelty-seeking behaviour) are presented without strong theoretical

evidence and there are other significant differences than other scales. The ARS scale is

only available in Japanese, with limited use outside Japan. Thus, findings are difficult to

generalize to other populations. The Brief Resilience Scale (BRS) Smith et al., (2008)

assesses the ability to recover from stressful events and to "bounce back" rather than

measuring protective factors fostering the resilience response. This instrument was

developed with a sample suffering from health-related stressors. Some scales were

developed to operationalize concepts closely associated with resilience. For example, the

Dispositional Resilience Scale (DRS) Bartone (1991, 1995, 2007) is based on

psychological hardiness theory. This instrument evaluates psychological hardiness

through personal resilience qualities and treats resilience as a fixed personality trait.

Bartone argues that specific personality characteristics such as commitment, control and

challenge assist individuals in generating resilient responses to stressful events. On the

other hand, the SOC scale created by Antonovsky (1987) is based on the salutogenesis

theory. Only people who make coherence interpretation of their traumatic experiences can overcome it. This ability is facilitated by both genetic disposition and surrounding resources.

2.1.8.5 Resilience Scales Critique

When comparing resilience instruments, one can conclude that there is no consensus in the elements of resilience scales. For example, RS by Wagnild and Young (1993) appraises independence, self-reliability, and the ability to solve problems without seeking external help, according to the CYMR by Liebenberg and Ungar (2009) demonstrating a large network of support that one reaches for in time of setbacks was deemed to indicate high resilience. This conflict impairs the inter-validity among different scales. As a result, when the same person takes different tests, varying scores on different measures will be achieved, as different scales test different elements. Also, self-reported instruments carry a greater possibility of error. On the other hand, some of the scales have emerged from psychiatric theories while others were developed to operationalize social sciences and ecological models.

Although there is a diverse set of resilience scales, one commonality among them is that none of them draw a line for pathology, whether in depression scales, for example, different scores indicate mild, moderate, or severe depression. As a result, health care professionals use depression scales to guide them in their diagnosis and therefore treatment options. On the contrary, not a single resilience instrument has linked a threshold resilience mark to indicate a need to intervene. This raises a serious question about the real practical implications of resilience scales.

2.2 Forced Displacement

2.2.1 General Overview

A greater number of people are on the move than ever (UNHCR, 2019). Experts classify this movement across international borders into two major categories. The first category is voluntarily migration. People who choose to voluntary leave their country of origin and resettle in another one are called immigrants (Koser, 2007). This migration is usually driven by the hope to enhance their living conditions, educational, employment, and economic stability (Berry, 2001). The second category is forced migration. In this case, groups of people are forced to flee their place of origin involuntarily due to life-threatening situations. The main triggers for the forced migration movement are unstable political conditions, state failure, armed conflicts, natural disasters and lately climate change (Fiddian-Qasmiyeh, Loescher, Long, & Sigona, 2014). According to (International Association of Studies of Forced Migration [IASFM]), "Forced Migration is a general term that refers to the movements of refugees and IDPs (those displaced by conflicts) as well as people displaced by natural or environmental disasters, chemical or nuclear disasters, famine, or development projects" (IASFM, 2010). This group includes refugees, IDPs as well as asylum seekers. According to the UNHCR 1951 Refugee Convention, a refugee is "someone who is unable or unwilling to return to their country of origin owing to a well-founded fear of being persecuted for reasons of race, religion, nationality, membership of a particular social group, or political opinion." (UNHCR, n.d)

UNHCR statistics demonstrate that the numbers of refugees are dramatically increasing in the last eight years with no sign of abating. In 2018, almost 71 million people around the globe were forcibly displaced (UNHCR, 2019). This number ranks the highest record ever to be documented in the history of UNHCR since the establishment of its office shortly after World War II. This has led to call the 21st century as the "century of displacement and dispossession" (Colson, 2003). Conflicts and humanitarian crises continue to form the number one reason people are forced to flee (UNHCR, 2017). A lot of ongoing crises erupt with no solution in sight. The displacement experience is often referred to as a turning point in refugees' lives and expectations for the future and meaning of following life events are generated based on that experience (Berntsen & Rubin, 2006). Somehow, the experience of displacement becomes a central component of their stories. With the focus on disturbance and trauma comes the criticism that displacement discourse implies a permanent state of vulnerability where people are moving from one traumatic experience into another with no room for competency or resilience (Fiddian-Qasmiyeh et al., 2014).

2.2.2 Impact of Forced Displacement on Wellbeing

Refugees are expected to have endured highly traumatizing experiences before, during and after their journey of displacement. To name a few, witnessing and experiencing the horrors of wars, losing their loved ones, fleeing from conflict zones, and being subject to different kinds of violence, lacking access to basic needs, and having a difficulty integrating into new societies (Bean, Derluyn, Eurelings-Bontekoe, Broekaert, & Spinhoven, 2007). These stressors threaten their wellbeing and act as a risk factor for

their mental health (Fazel et al., 2012). This risk is categorized as mild, moderate, and severe, and it can manifest in an acute or chronic form (Garmezy, 1983). When risk factors are associated with chronic stresses that happen pre and post-settlement, this constellation increases chances for vulnerabilities where refugees become at a greater risk of mental illnesses (Porter & Haslam, 2005; Tinghög et al., 2017).

Despite significant exposure to adversity, many refugees continue to function well, utilizing available resources to thrive. The field of refugee and forced migration studies emerged in the 1980s to study the lived experiences of dispossession and uprootedness (Fiddian-Qasmiyeh et al., 2014). At the same time, resilience research started to seriously evolve. Gracia-Coll and Magnuson (2000) suggested that refugee families should be studied from the perspective of resilience rather than that of the risk framework. Forced migration is an important arena for resilience research (Barber & Doty, 2013). It aims to "explain why, despite significant exposure to war, individuals and families achieve emotional adjustment and social functioning" (Eggerman & Panter-Brick, 2010). As aforementioned, the relationship between trauma and resilience is a complicated and multidimensional one. Trauma responses and resilience expression vary, and both individual and environmental factors affect these relationships (Barber, 2013).

2.2.3 Resilience as a Humanitarian Response

There has been an increased interest in the recent humanitarian and international development projects to adopt a resilience-centred approach. This model tends to focus on the potential of positive adaptation in times of crisis rather than anticipating maladaptation (Friedli, 2009). In this context, resilience is considered at the core of

United Nations (UN) policies; the 2030 United Nations recommends building resilience as a concrete step toward achieving the Sustainable Development Goals (United Nations Environment Programme [UNEP], n.d.). According to the WHO "building resilience is a key factor in protecting and promoting health and well-being" (WHO, 2017). The United Nations Development Programme (UNDP) also started a resilience program focused on resilience-building activities. This program aims to foster positive adaptation in response to adversities caused by conflicts, environmental crises, and climate change (UNDP, n.d.). Resilience is also considered to be a key principle in UN emergency response regarding forced migration. UNHCR defines resilience as "the ability of individuals, households, communities, national institutions and systems to prevent, absorb and recover from shocks while continuing to function and adapt in a way that supports long-term prospects for sustainable development, peace and security, and the attainment of human rights" (UNHCR, 2017b). UNHCR resilience plans target both forced migrated population to help them quickly recover from traumatic consequences associated with the fleeing experience (Columbia, Syria, Sudan, Chad) in addition to host communities affected by forced migration to help them build the available capacities and resources (Lebanon, Turkey, and Europe regional refugee and migrant response plan) (UNHCR, 2017b). In other words, strengthening resilience forms a ground principle in the UN agencies' work.

CHAPTER III: STUDY METHODOLOGY

3.1 Scoping Review Strategy

To systematically map the existing body of literature on how the concept of resilience is applied in refugee research; a scoping review methodology using Arksey and O'Malley framework was deemed the most appropriate to follow. This decision was made in collaboration between the primary researcher and the committee members who have extensive expertise in literature review protocols.

A scoping review method was the best-suited approach to be adopted in this research as it aligned with the purpose of the study. A scoping review method allowed for the mapping of the research evidence so as to outline the key concepts. Furthermore, this method is particularly useful to apply in areas where the concept under investigation is regarded as of a complex or a heterogeneous nature (Mays, Roberts & Popay, 2001). As discussed in Chapter II, resilience research is counted as a broad area. Additionally, preliminary research suggested that resilience is studied using a diverse range of study designs and methodologies across multi disciplines and fields of studies. Thus, applying a scoping review strategy enables to identify how the concept is used, by whom and in what context. Furthermore, it allows analytical interpretation of the results to identify where the gaps lie in the existing literature leading to inform further research (Levac, Colquhoun, & O'Brien, 2010). In addition, adopting a standardized approach while conducting a literature review is encouraged as it protects against bias and increases the quality of the work in selecting primary research publications (Levac et al., 2010).

The research included the five key stages outlined by Arksey and O'Malley's (2005) framework. The five stages are (1) identifying the research question, (2) identifying relevant studies, (3) study selection, (4) charting the data, (5) collating, summarizing, and reporting the results (Arksey & O'Malley, 2005). Enhancements proposed by Levac et al., (2010) to the methods were also applied. A detailed review protocol is explained and discussed in the following sections.

3.2 Step One: Identifying the Research Questions

Identifying the research questions forms the first phase of establishing an effective scoping review strategy. This step is fundamental as it sets the roadmap that will guide the following stages (Arksey & O'Malley, 2005). Thus, the research question should clearly articulate the focus of the scoping study, the targeted population, and concepts being investigated (Levac et al., 2010). At the same time, as scoping reviews are trying to capture a diverse breadth of the published literature, research questions should be broad in nature (Pham et al., 2014).

The aim of this study is to summarize the work that has been done about resilience in the displaced population. The study is trying to answer the following research questions:

1. How the concept of resilience is defined and operationalized in the forced migration population?

2. In the context of forced displacement, what is the relationship between resilience and mental health disorders, and what are the protective factors facilitating the resilience process?

There are three fundamental components for the scope of this study. First, the concept of resilience was defined as "In the context of exposure to significant adversity, resilience is both the capacity of individuals to navigate their way to the psychological, social, cultural, and physical resources that sustain their wellbeing, and their capacity individually and collectively to negotiate for these resources to be provided and experienced in culturally meaningful ways"" (Ungar, 2008). Second, the target population for this study is the forced displaced population which includes people who were forced to flee their place of origin. Lastly, the reasons for this forced movement included humanitarian crises, emergencies and natural disasters among others (for further details refer to table 2).

3.3 Step Two: Identifying Relevant Studies

3.3.1 Search Strategy and Search Terms

This stage aims to develop an effective research strategy leading to convert the research questions into researchable key concepts and keywords (Arksey & O'Malley, 2005). The research questions outlined two key concepts: 1) psychological resilience, and 2) forcibly displaced population. However, given the broad nature of the topic, running this research as a pilot resulted in a large amount of data with a significant number of irrelevant articles (a total number of 8460 articles). In light of the pilot search findings, the search strategy was refined and a third pool containing the potential reasons of the

human forced movement was added, this allowed a more focused approach in mapping the data and resulted in more related studies.

A final combination of related keywords and subject headings was developed with the committee team who are content and methodological experts. The following table (table 2) demonstrates the selected keywords that were used for each concept. Additional details for the search strategies used in each individual database, including modifications, can be found in Appendix A.

Table 2: Keywords that guided database search

Keywords Search Terms		
Resilience	Displaced Populations	Potential reasons for the forced movement
Resilience OR	refugee* OR	"humanitarian crisis" OR
resilien* OR	"forced displacement" OR	Wars OR
Adaptation OR	"forcibly displaced" OR	Conflicts OR
"sense of coherence" OR	"asylum seek*" OR	"Armed conflicts" OR
"emotional adjustment" OR	Stateless* OR	Disasters OR
"social adjustment" OR	returnee* OR	"complex disaster" OR
Survivorship OR	"forced movement" OR	"man made disaster" OR
"Coping behavior" OR	Flee OR	"manmade disaster" OR
Coping OR	Plight OR	"environmental disaster" OR
Adapt* OR	"displaced person" OR	"natural disaster" OR
flexib* OR	"displaced people" OR	"Climate Change" OR
Invulnerability OR	"displaced population" OR	"climate disaster" OR
"stress resistance" OR	forc* movement OR	Tsunami OR
"Protective Factors" OR	forc* migration OR	hurricane OR
"protective factor*" OR	forc* displac* OR	"cyclonic storms" OR

Adjustment OR	internal* displac* OR	"volcanic eruption" OR
adjust* OR		"mud slides" OR
survivor* OR		Earthquake OR
		"nuclear accidents" OR
		"Nuclear War" OR
		"nuclear disaster" OR
		"Industrial Accidents" OR
		Hunger OR
		Famine OR
		Starvation OR
		Fire OR
		Terrorism OR
		"terrorism attacks" OR
		Disease OR
		Drought OR
		Emergency OR
		Fear adj2 (race or religion or nationality or membership of a particular social group or political opinion)

The asterisk symbol (*) is used to retrieve variations that share the same root letters of the addressed word but have different endings. The asterisk refers to any number of unknown characters that could replace the asterisk's place.

The Syntax ADJn refers to adjacency followed by an (n) number of words that either the first search term is from the other search term in any order.

3.3.2 Electronic Data Base Search

Five online databases were searched for relevant articles to be included in the scoping review. The following databases were consulted for review; Medline, PsycINFO, CINAHEL, Embase, and Web of Science. Preliminary consultations with the literature indicated that the concept of resilience is of an interdisciplinary nature. Writings appear from a variety of disciplines including social sciences, psychology, and health sciences. To guarantee that the results cover the breadth of knowledge, databases were chosen to cover a wide range of fields.

Each database was selected due to its contribution to the overall comprehensiveness of the scoping review. PsycINFO focuses on literature in the fields of psychology, social sciences and human behaviour. Medline, the primary bibliographic database for the United States National Library of Medicine, covers a wide variety of healthcare research including mental health interventions that overlap with social support. Web of Science is a resource that enables comprehensive cross-disciplinary evidence gathering from different fields of humanities and refugee research. EMBASE allows in-depth exploration of global biomedical literature giving the international scope of refugee health research. The Cumulative Index of Nursing and Allied Health Literature (CINAHL) was included as it provides access to a wide variety of healthcare journals. The last rerunning of the research was conducted on June 10th, 2019. As noted earlier, the year 2000 was chosen as a starting date for this research. The research included data from January 1st, 2000 to June 10th, 2019 inclusive.

In addition to the articles gathered from the mentioned databases, reference lists of the final chosen articles were manually searched to capture any further relevant studies that were not previously identified.

3.4 Step Three: Study Selection & Eligibility Criteria

3.4.1 Inclusion and Exclusion Criteria

A post hoc set of inclusion and exclusion criteria was created to identify studies that could answer the research question and eliminate irrelevant ones (Arksey & O'Malley, 2005). Increased familiarity with the subject matter after reading published materials helped to further develop the criteria. This stage included repetitive steps of searching the literature, modifying the research strategy and further reviewing the literature to extract relevant articles. Periodic meetings among the research team were held to discuss decisions surrounding the inclusion and exclusion criteria. These meetings covered the beginning, midpoint and final stages to alleviate challenges and uncertainties faced by the primary researcher along the process. Each meeting resulted in further refining the eligibility criteria to better identify studies that can comprehensively answer the central research question. Database search included the English language only due to time and budget constraints and the lack of readily available translators. In addition, to set a time span for the research, the year 2000 was set as a starting point to investigate the construct of resilience within the 21st-century context. As discussed in chapter II, in the early days of resilience research, resilience was considered as a cluster of personal traits such as high self-esteem, hardiness and self-efficacy that facilitate positive adjustment.

This was reflected in the measures developed in the 1990s, the aforementioned RS scale serves as an example. However, later social ecology theories of resilience proposed by Luthar et al., (2000), Luthar (2006), Eggerman and Panter-Brick (2010) and Ungar (2011) credited resilience as a multi-dimensional construct. This model acknowledges protective factors not only on the individual levels but also on the environmental level as well. This was also reflected in the scales that started to appear in early 2000 and later on. For example, in the CD-RISC scale, there are two items that measure environmental factors' impact on resiliency, whereas in the CYRM scale there are 5 points that refer to resilience external protective factors. This shift from solo facet to the multi-dimensional conceptualization of resilience paved the way for a new understanding of the phenomenon and marked a new era in resilience research. This shift guided this research to mark the year 2000 as a starting point to collect data.

Inclusion Criteria:

Articles that were included met the following criteria:

i. Focused on forcibly displaced population.

ii. Concentrated on Resiliency (Resilience is a primary or secondary outcome of the study).

iii. Examined resilience in the context of "psychological resilience".

iv. Examined resilience in the context of humans including individuals, families and communities.

v. Explicitly defined resilience or had a resilience model or framework.

vi. Published in the year 2000 or later.

   vii.   Published in the English language.

  viii.   Published as primary research studies.

    ix.   Published as journal articles.

     x.   Studied resilience and explicitly stated that.

    xi.   Full text was available to access through the McMaster University library.

Exclusion Criteria:

Articles that were excluded met the following criteria:

     i.   Examined resilience in a context other than human beings.

    ii.   Focused solely on physical health, and/or environmental health.

   iii.   Focused solely on environmental resilience to climate change and/or resilience discourse in the context of climate change.

   iv.   Focused on systems' disaster resilience and/or health system resilience.

    v.   Focused solely on coping, adjustment and/or acculturation.

   vi.   Focused solely on mental health, vulnerability, wellbeing, stress and/or intervention to promote mental health.

   vii.   Focused on the resilience of caregiver (social workers, humanitarian workers).

  viii.   Examined resilience in voluntary migrated population.

    ix.   Published as books, book chapters, conference papers or conference abstracts.

    x.   Published as secondary research studies (literature reviews, book reviews).

   xi.   Published in a language other than English.

   xii.   Published prior to the year 2000.

xiii.   Study methods were not clearly indicated.

xiv.   Examined resilience in the context of world war II (it was deemed that the nature

of conflicts has changed since then).

3.4.2 Screening Protocol and Citation Management

Upon determining the final search terminology and bibliographic databases, the

last running of the search was conducted on June 10th, 2019 across the five selected

electronic databases. This search yielded **5524** hits which were then exported into

Endnote, a web-based citation manager. Following this step included manually deleting

duplicates after being spotted by Endnote. Further duplications were removed upon

identification. Removing duplicates resulted in **3222** citations which were then imported

to a web-based systematic review software (Rayaan QCRI) to facilitate title and abstract

screening process. Using a citation software promotes transparency, flexibility and

ultimately, the trustworthiness of the screening procedure (Pham et al., 2014). At this

stage, inclusion and exclusion criteria were applied to screen the titles. Titles that

indicated relevancy to the research questions were transferred to the next stage. In

addition, books, books' reviews and conferences' abstracts were removed at this point as

well. This resulted in **393** articles that were retained for abstract review.

The next stage in the screening procedure was reviewing 393 articles abstracts,

this was performed independently by two reviewers to increase validity (Levac et al.,

2010). Additionally, a third person was consulted to make the final decision regarding

articles on which disagreement occurred between the two reviewers. This ensured that

only relevant articles were retrained. Screening abstracts resulted in retaining **135** articles and excluding 258 articles. This multi-disciplinary team approach to systematically screening articles increased the validity of the process.

Following this step was a final, full text review to make final decisions. At this point, the primary researcher assessed the 135 full text articles. This resulted in retaining **18** articles. The reference lists were manually searched to capture additional relevant studies. A title screening of the reference lists led to 55 results. However, after the full text review of them only **2** were deemed to meet the inclusion criteria.

The process of the screening protocol is outlined in the next PRISMA Flow Diagram (figure 2). This diagram provides a chronological overview of the steps (identification of articles, screening of the articles found, determining eligibility, and selecting articles to be included). At each stage, the number of the published material is listed.
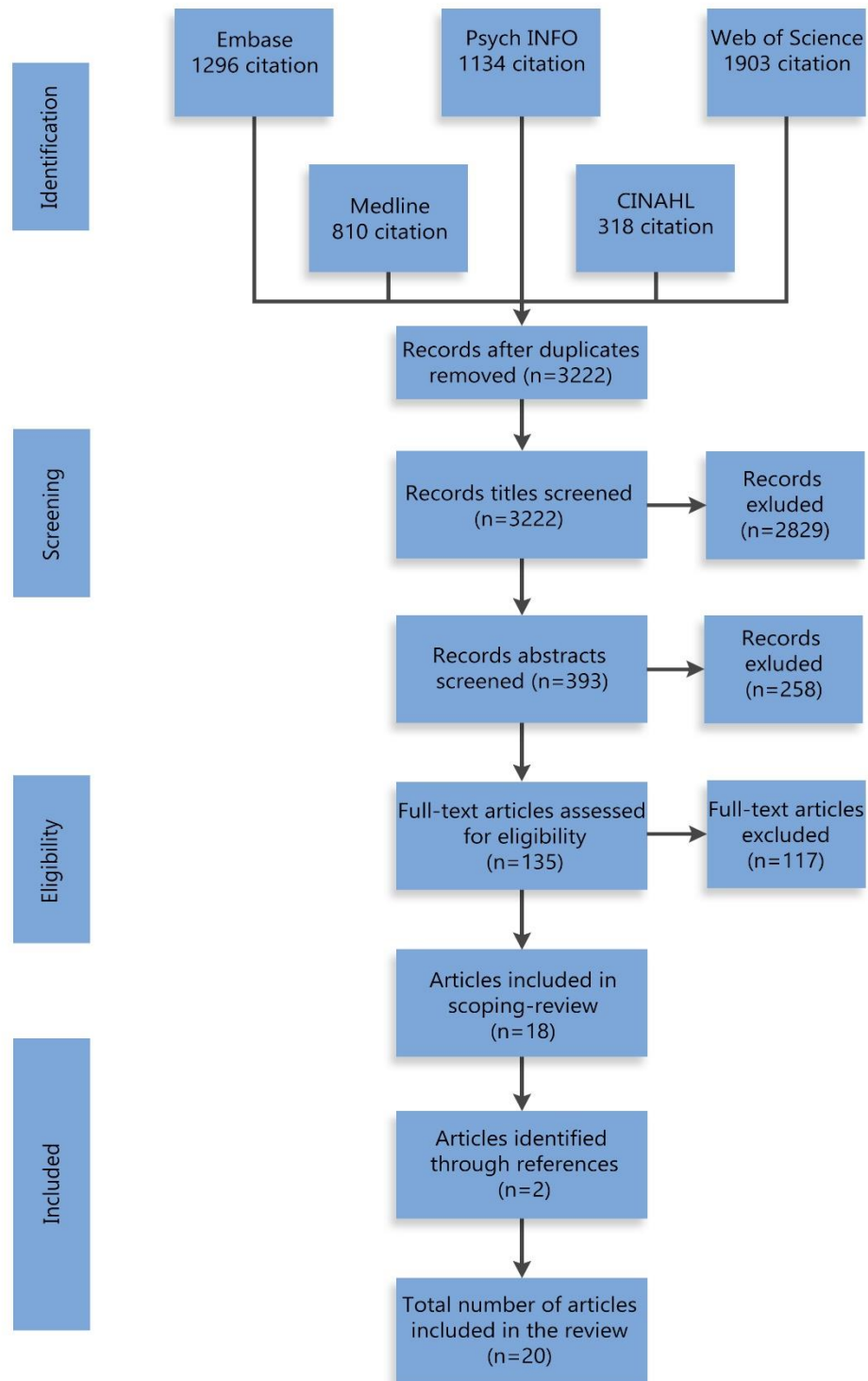
Figure 2. PRISMA Flow Diagram

3.5 Step Four: Charting the Data

3.5.1 Data Extraction

After selecting the final articles, the lead researcher read the 20 articles three times to establish familiarity with the texts. After that came the "data charting" stage. This step involved "charting" key information that has been extracted from the included articles. Charting is a technique that includes extracting and categorizing relevant data in line with "key issues and themes" to synthesize materials that answer the research questions (Ritchie & Spencer, 1994 as cited in Arksey & O'Malley, 2005). To achieve this step, a spreadsheet using Microsoft Office Excel was created as a data-charting form. Consultations among the research team were held during this stage to ensure that only the relevant data is extracted. The form was created to extract contextual variables that would align with the purpose of the study and answer the research questions. It is important to note that an iterative process was followed, as the charting spreadsheet was continually updated along the process to extract relevant information from each of the 20 selected studies (Arksey & O'Malley, 2005). A descriptive analytical method informed by Arksey and O'Malley (2005) was followed along this process to process the complex data that was gathered. A qualitative content analysis approach was also undertaken to make sense of the large amount of data collected (Hsieh & Shannon, 2005). The data was gathered systematically and transferred into the data-charting form. Themes were then identified, color coded and final material was synthesized (Levac et al., 2010).

Textual data was recorded from the selected articles including but not limited to:

- First author, year of publication, study title and study location.

- Aims of the study and/or research questions.

- Resilience definition cited (if any) and resilience scale used (if any).

- Study population demographics (nationality, age, number, gender).

- Study methodology and data collection methods.

The charting form tables can be found in *Appendix C.a, C.b, and C.c*.

3.6 Step Five: Collating, Summarizing and Reporting Results

This step represents the final stage of the scoping review framework, it follows

charting the information and importing it to the data-charting form. Levac et al., (2010)

recommended dividing this stage into three separate steps: analyzing the results, reporting

the results, and applying meaning to the results. This systematic approach of data analysis

and report improves the rigour and trustworthiness of the scoping review (Levac et al.,

2010).

3.6.1 Analyzing the Results

In this step, both numerical and thematic analysis were followed (Arksey &

O'Malley, 2005). The purpose of the numerical analysis was to outline the characters of

the included studies and to provide an overview of the breadth of the literature (Arksey &

O'Malley, 2005). In this scoping review, numerical data analysis gave an overview of the

nature and extent of the literature as it referred to study locations, methods, population,

and geographic distribution. To summarize the results, descriptive statistics were also

calculated (Pham et al., 2014). After numerical analysis, a thematic analysis was recruited

using qualitative data analytical techniques (Arksey & O'Malley, 2005; Levac et al.,

2010). It was deemed important to shed light on the way in which researchers had investigated the concept of resilience and linked it to other mental health issues. Using qualitative analysis allowed for clarity in establishing the main areas of interest in the field of resilience research. Resilience protective factors were also examined. The thematic analysis facilitated breaking a complex body of data into meaningful themes and identified gaps in resilience in the forced migration research.

3.6.2 Reporting the Results

This step included reporting the results that answer the research questions and making sure that the aims of the study are met. The themes identified earlier were presented and articulated to the targeted audience in a meaningful manner. Throughout this step, a consistent approach in reporting the findings was followed to eliminate any bias.

3.6.3 Applying Meaning to the Results

This step consisted of holistically approaching the findings to make sense of them in a broader context. This step consequently provided important implications for research, policy and practice. The discussion and recommendations appraised the ongoing debate in the field of refugee resilience and gave valuable insights to humanitarian organizations and practitioners in the field of forced migration research.

CHAPTER IV: RESULTS

4.1 Description of Literature

The initial database search- after deleting duplicates- resulted in 3222 hits. The set inclusion and exclusion criteria were developed post hoc and applied along the screening procedure. Titles screening retained 393 pieces of literature for abstract review. The abstract scan yielded 135 articles for full text review. The final number of relevant articles that deemed to meet the study objectives were 18 articles. An additional reference search identified 55 further studies. However, after reviewing them, only 2 met the eligibility criteria and were included in the scoping review. The flow diagram (Figure 2) provided in chapter III gives a comprehensive overview of the scoping review study selection process.

4.2 Nature of Literature

Many articles were excluded as they did not provide a resilience definition, an attempt to operationalize it, through using measures for example, nor a resilience framework or theoretical background. Other pieces of literature were excluded as they used a proxy of resilience such as the absence of anxiety, PTSD, and/or depression to express resilience. Moreover, a significant number of articles referred to resilience in the title and/or abstract but rarely addressed the concept later in the study, instead, they adopted a disease focused approach and concluded by recommending future research to explore resilience (Affleck, Thamotharampillai, Jeyakumar, & Whitley, 2018; Hanes, Sung, Mutch, & Cherian, 2017; Swaroop & DeLoach, 2015). Some additional articles

were excluded because they were ambiguous reporting whether the study participants

were migrants, refugees or from the host communities (Longobardi, Veronesi, Prino,

2017; McNamara, 2013). Although studying resilience in immigrants is valid and comes

to great use in understanding the concept of resilience; it fell beyond the scope of this

study. There was a limited number of articles that investigated the concept of resilience

in-depth in the forced migration population. However, several of the founded studies were

of high quality and they provided in-depth insights into the investigated matter.

Appendix C.a, C.b and C.c. provide an overview of the selected studies in this

scoping review. The appendix presents details on the first author and year of publication,

study aims, resilience definitions cited (if any), resilience measures used (if any),

demographics, and locations in which the studies were conducted.

All of the selected pieces of literature were primary research by virtue of the

inclusion and exclusion criteria. In addition, all the included studies were observational

studies. No interventional or experimental studies were reported during this scoping

review. In observational studies, the researcher tries to establish a relationship between

the cause or risk factor and effect by analyzing the collected data. This happens without

intervening or controlling the study contexts and circumstances. There were no studies

measuring resilience levels before and after a specific intervention. 7 studies (equals to

35%) investigated relationships between a specific resilience factor or a cluster of factors

on the individual, family, and/or societal levels and resilience. 7 studies (equals to 35%)

examined the association between resilience levels and mental health illnesses such as

depression, PTSD, stress and/or anxiety. 2 studies (equals to 10%) either developed a

resilience measure or validate an existing one. 2 studies (equals to 10%) looked into the meaning and expression of resilience, and/ or resilience processes for specific populations. 2 studies (equals to 10%) investigated if resilience is acting as a protective factor of mental health illnesses and/or wellbeing. Of the selected studies, 11 (equals to 55%) were quantitative, 7 (equals to 35%) were qualitative, and 2 (equals to 10%) were mixed methods.
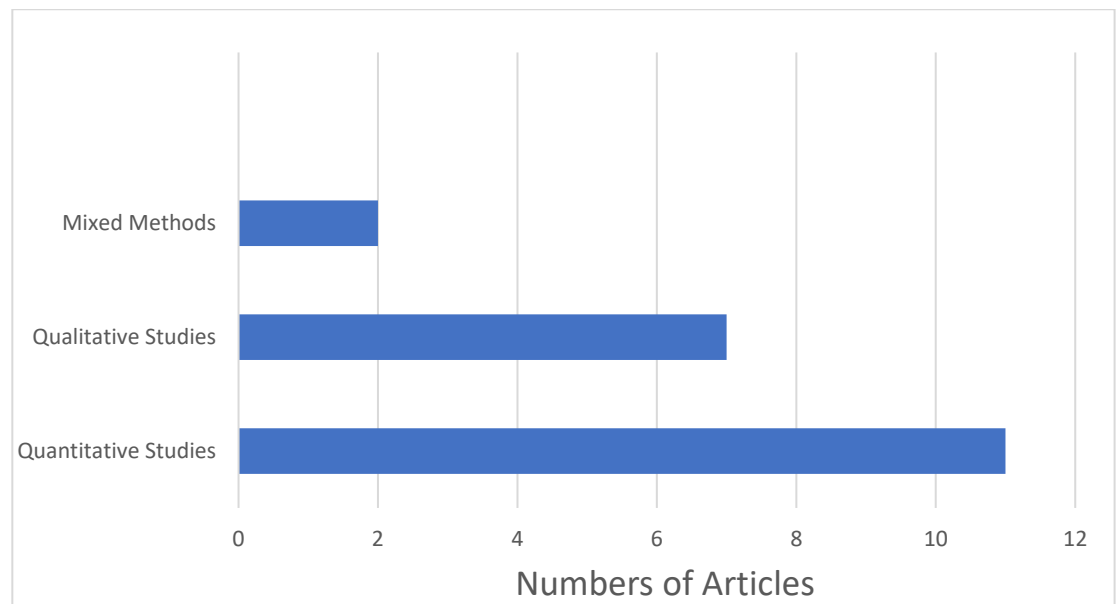
Figure 3: Distribution of Study Methods

4.3 Geographic Distribution

To understand how much research has been produced on the topic of resilience within the forced migration population, the geographical spread of the literature was investigated. The selected articles included studies that were conducted in six out of the seven world's continents. It included 16 countries in total. The largest percentage of the

studies were conducted in the Middle East (30%), followed by North America (15%), East Asia (15%), Africa (15%), Europe (10%), Australia (10%), and lastly Latin America (5%). Interestingly, all the studies (100%) were investigating resilience in populations who were forced to leave due to humanitarian crises triggered by violence and armed conflicts. None of the selected studies were conducted in the context of natural disasters (see *Appendix C.a, C.b and C.c*. for countries breakdown).

4.4 Targeted Population

In the first few years of resilience research, namely from the 1960s until the end of the 1980s, researchers explored the resilience phenomenon in children. In the following years, various age categories and genders were introduced. According to the first article of the United Nations Convention on the Right of the Child, "a child means every human being below the age of eighteen years unless under the law applicable to the child" (Office of the United Nations High Commissioner for Human Rights [OHCHR], n.d.). Thus, this scoping review followed the United Nations Convention on the Right of the Child definition in categorizing the target population as adults versus children. In regard to this scoping review, 70 % of the studies included adults as their participants, where 20% of the studies included children as their study participants and 10% of the studies gathered data from both adults and children (the first one included participants aged between 17 and 19-year-old and the second one included a sample of 13- 21-year-old individuals).

In regard to gender, out of the studies that included adults 57.2% of them included both men and women as their targeted population. 21.4% of the studies included only women and 7.1% of the studies included only men as their participants. 14.3% of them did not report if they recruited men, women, or both as their participants. Of the studies that included children or children and adults as their sample, all of them 100% included both males and females as their participants.

Only one study (equals to 5%) compared resilience among refugees who were forced to leave their country after experiencing trauma there to a group of immigrants who were not exposed to trauma. Another study (equals to 5%) compared resilience among IDPs who were forced to leave their place of origin to a group of traditionally mobile community. One study (equals to 5%) compared how different contexts might affect the targeted population's resilience, by comparing resilience among IDPs living in camps versus IDPs living in urban communities.

4.5 Definitions of Resilience

One of the main aims of this thesis was to understand how the concept of resilience is constructed in the literature of forced migration. As discussed in chapter II, there is no consensus in the broad literature on a single definition of resilience. Thus, it was expected to see a range of attempts to define the concept within the scope of this study. This scoping review mapped the cited key definitions of resilience (for a full breakdown refer to *Appendix C.a, C.b and C.c*)

One observation across the articles is that the presented definition and how the concept is addressed throughout the studies did not always align. For instance, the definition would suggest that resilience is a process and then researchers will measure qualities that serve as protective factors (Cengiz, Ergun, & Çakıcı, 2018).

4.5.1 Resilience as a Personality Trait

A number of selected studies conceptualized resilience as a constellation of personality elements that allow resilient people to bloom from within after encountering adversity. For instance, Arnetz, Rofa, Arnetz, Ventimiglia and Jamil (2013) defined resilience as "personality traits that help protect against the psychological disorders resulting from exposure to terrifying incidents, such as mass violence or deportation under life-threatening circumstances; it encompasses bouncing back and positive adaptation in the face of safety-challenging experiences" (Edward & Warelow, 2005; Hoge, Austin, & Pollack, 2007). Additionally, Siriwardhana, Abas, Siribaddana, Sumathipala and Stewart (2015) defined resilience as an "ability in children and adults to adapt to, adjust to or overcome chronic or acute adversity, providing protection against the development of psychopathology" (Bonanno, 2004; Connor & Davidson, 2003). For the study of Tozer, Khawaja and Schweitzer (2018) resilience was defined as "modifiable dispositional capacity for appraising adversity positively that confers resistance against the development of mental illness" (Arnetz et al., 2013; Edward & Warelow, 2005). All of these definitions refer to resilience as a quality of certain individuals that protect them against mental health illnesses. While Sleijpen, Mooren, Kleber and Boeije (2017) defined resilience as a "person's ability to adapt successfully to acute stress, trauma or

chronic forms of adversity" (Masten, 2014). Ziaian, de Anstiss, Antoniou, Baghurst and Sawyer (2012) referred to resilience as "the ability of a person to successfully adapt to or recover from stressful or traumatic experiences" (Crawford, Wright, & Masten, 2005). Corbin and Hall (2019) mentioned that resilience is an "ability to cope with unexpected events and pressures and achieve positive outcomes under adverse conditions" (Fraser, Richman, & Galinsky, 1999). All of the definitions in this category share that resilience includes characters of successful adaptation and positive coping ability.

4.5.2 Resilience as a Dynamic Response

In several selected articles, researchers explored the dynamic aspect of resilience and referred to it as a response that implies "bouncing back" to a previous situation. Chung, Hong and Newbold (2013) defined resilience as "a class of phenomena characterized by the ability to bounce back and cope effectively in spite of serious threats to adaptation or development" (Sossou, Craig, Ogren, & Schnak, 2008). Interestingly, Kuttikat, Vaillancourt and Massey (2018) referred to resilience as "the ability to thrive or bounce back after negative life experiences" (Mason & Pulvirenti, 2013). Both of these definitions employ the use of the term bounce back to express resilience. While Giordano, Cipolla, Ragnoli and Brajda Bruno (2019) defined resilience as "the capacity of a dynamic system (individual, family, school, community, society) to withstand or recover from significant challenges that threaten its stability, viability, or development" (Masten, 2011). This definition looks at resilience as a capacity rather than a quality, interestingly, it identifies resilience as a common theme that could be shared among not only individuals but also systems as well.

4.5.3 Resilience as a Multi-facet Construct

A majority of the studies examined in this thesis acknowledged the challenge of applying a solo-dimensional definition of resilience and rather preferred a definition that respects the multi-facet aspect of resilience. They expressed resilience by citing more than one definition to allow for some flexibility in this regard. For example, Aitcheson, Abu-Bader, Howell, Khalil and Elbedour (2017) used a set of definitions to express resilience in their study. According to them, resilience is "the ability to regain functionality after a stressful event", it is also "characterized by good outcomes despite serious threats to adaptation or development" (Gewirtz, Forgatch, & Wieling, 2008; Masten, 2001). In addition, resilience is a set of processes that are defined by "successful adaptation despite challenging or threatening circumstances", in other words, resilience is "a process, an outcome, a dynamic steady state in the face of adversity, [or] defiance of risk/vulnerability" (Almedom & Glandon, 2007; Blinn-Pike, 1999).

On the other hand, Mujeeb and Zubair (2012) used a set of two quotations to refer to resilience "resilience is conceived as an ability to maintain relatively stable healthy levels of psychological, and physical functioning" (Cownen, Wyman, & Work, 1996), as well as "the capacity for generative experiences and positive emotions" (Coutu, 2002). In the same context, Panter-Brick et al., (2018) defined resilience as "better than expected trajectories of healthy functioning over time" (Bonanno, Westphal, & Mancini, 2011), "the harnessing of resources to overcome adversity and sustain well-being" (Panter-Brick, 2014; Panter-Brick & Leckman, 2013; Southwick, Litz, Charney, & Friedman, 2011; Ungar, 2011), or "the capacity of a dynamic system to adapt successfully" (Masten,

2014). A common theme shared among the aforementioned studies is that all of them acknowledged that resilience could be an ability or a capacity that enables inidivuals who have it to adapt susseccfully in face of adversity.

4.5.4 Resilience as a Process

Although Lavie-Ajayi and Slonim-Nevo (2017) mentioned that resilience is ''. . . positive adaptation, or the ability to sustain or regain mental health, despite experiencing significant adversities'' (Sleijpen, June ter Heide, Mooren, Boeije, & Kleber, 2013). They concluded that the definition proposed by Ungar is more representative of resilience "In the context of exposure to significant adversity, resilience is both the capacity of individuals to navigate their way to the psychological, social, cultural, and physical resources that sustain their wellbeing, and their capacity individually and collectively to negotiate for these resources to be provided and experienced in culturally meaningful ways" (Ungar, 2008). They argue that they settled on this definition as it takes into consideration not only individuals but also the environmental characteristics as key players in the resilience response. Atallah (2017) and Tippens (2017) both cited this definition as well, making the definition proposed by Ungar (2008) the most cited definition within the scope of this study.

4.6 Operationalization of Resilience

There is no consensus on a standard operationalization of resilience among researchers in the broad literature, rather there are multiple attempts to address some aspects of the concept by using measures. One common way to operationalize resilience that appeared repeatedly through this scoping review was to use the presence of positive

adaptation and the absence of negative outcomes (such as mental health problems) to indicate high resiliency. Within the scope of this study, scales were widely used as an attempt to operationalize the concept of resilience in all quantitative studies. The most commonly cited resilience scales were the CYRM (Liebenberg & Ungar, 2009), the RS scale (Wagnild & Young, 1993), and the CD-RISC (Connor & Davidson, 2003). Each one of these measures was used in 23% of the studies that used a resilience measure. The SOC scale, the Ego Resiliency Scale (Block & Kremen, 1996), were each used once (equals to 7.7%) in the included studies in the scoping review. One study (equals to 7.7%) utilized a mix of two scales; the 14-item resilience subscale of the AARS designed by Khawaja, Moisuc, and Ramirez (2014) and the Resilience Questionnaire for Middle-Adolescents in Township Schools (R-MATS) (Mampane, 2012). One study (equals to 7.7%) used the absence of depression and anxiety as a proxy to indicate high resilience. For this matter, the Beck Depression Inventory-II and the Beck Anxiety Inventory were used to represent resilience (Beck, Steer, & Brown, 1996; Beck & Steer, 1990).

4.6.1 Validation and Translation of Measurements

4.6.2.1 The RS Scale

The RS scale was used in 3 articles out of the 13 quantitative and mixed methods studies included in this scoping review. Both the 8-item and the 14-item versions were recruited (Wagnild & Young, 1993). The 8-item RS was used in two studies Arnetz et al., (2013) and LeMaster et al., (2018) while the 14-item was used in only one (Siriwardhana et al., 2015). Arnetz et al., (2013) adopted an Arabic version of the scale for their study

with Iraqi refugees and Arab immigrants living in the United States. The Arabic version

of the scale was developed by translating and back translating the original instrument.

Also, LeMaster et al., (2018) used an Arabic version with Iraqi refugees living in the

United States. It was reported that the scale was translated and then back translated to

Arabic. A group of three bilingual investigators were involved in the translation and

checking of the accuracy of the scale. For Siriwardhana et al., (2015), the RS scale was

translated into Tamil language and then back translated. It was mentioned that the

translated version of the scale was then checked for cross-cultural validity, but no further

details were given.

4.6.2.2 The CD-RISC Scale

The CD-RISC scale designed by Connor and Davidson (2003) was used in 3

different studies within the scope of this research. All these studies recruited at least one

translated version of the measurement. However, they varied in their validation processes

of the translated editions. The first study CenGi et al., (2018) used the CD-RISC scale in

its Arabic version in their study with Syrian refugees living in Turkey. This version of the

CD-RISC was developed, translated, back translated and then tested for culture relevancy

in another study (Toma, Guetterman, Yaqub, Talaat, & Fetters, 2017). When Ziaian et al.,

(2012) used the CD-RISC scale in their study with refugee children living in Australia

from different backgrounds, they administrated it in its English version. However, they

translated and back translated the scale into 5 languages (Bosnian, Serbian, Arabic,

Persian, and Dinka). On the other hand, there was no mentioning about validating the

scale after translation. In the study of Suarez (2013) the Spanish version of the CD-RISC

scale was used with participants in Peru after being translated into Quechua; the local language. It was reported that a validation exercise was carried to ensure the cultural sensitivity of the instrument. This was done by conducting a focused group discussion with key informant persons who provided consultation on the accuracy of the translation.

4.6.2.3 The CYRM Scale

The CYRM scale proposed by Liebenberg and Ungar (2009) was used in 3 studies within the selected articles in this literature review. Both the 28-item and the 12-item versions were used. In their study, Panter-Brick et al., (2018) aimed to develop and validate the 28-item CYRM scale into an Arabic edition. In this mixed method research design that was conducted in Jordan with both Syrian and Jordanian populations, a culturally sensitive understating of the resilience concept was adopted. The validation process included: face validity, content validity, construct validity, convergent validity, and measurement reliability. During this process, cross-culture expert researchers were consulted along with members of the local and affected communities. Interestingly, this study deemed the 28-item CYRM to be of "poor fit" for this population while a reduced version of 12-item was concluded to have a better validation. However, the 12-item reduced version demonstrated a high correlation with the original version of the scale. As a later part of the same project, Clukay et al., (2019) used the validated 12-item CYRM scale in their longitude study with Syrian refugee children living in Jordan. While Giordano et al., (2019) used the 28-item CYRM scale to measure resilience levels in a sample of Syrian and Palestinian asylum seeker children in a transition period in Italy. To administrate the measure to Arabic speaking participants, an Arabic translation version of

the instrument was used. This translation was done in another study by a group of bilingual researchers to be used with a similar population (Maragel & Manachi, 2018). However, there was no mentioning of a validation process.

4.6.2.4 Other Scales

Several scales were used only once in the articles included in this scoping review. Of these scales are the SOC scale by Antonovsky (1987), the Ego Resiliency Scale designed by Block and Kremen (1996), the Adult Acculturation and Resiliency Scale (AARS) by Khawaja et al., (2014), and the Resilience Questionnaire for Middle-Adolescents in Township Schools (R-MATS) (Mampane, 2012). An adapted short version of the SOC scale was used in Almedom et al., (2007) research with IDPs and local in Ethiopia. The scale was translated into different local languages for the study, it was reported that the translated versions of the test were pre-tested and revised prior to their use with the study participants. However, no further information was given on the process of validation.

In their study with IDPs Pakistani Mujeeb and Zubair (2012) used the Ego Resiliency scale by Block and Kremen (1996) to operationalize resilience. Although it was mentioned that the Urdu version of the Ego Resiliency Scale was used, no further clarifications on the translation or the validation processes were given. It was also reported that some participants did not speak the Urdu language, so they recruited on-spot moderators to translate the scale into their different languages.

In their study with Palestinian adolescents living in Gaza, Aitcheson et al., (2017) used the Beck Depression Inventory-II by Beck et al., (1996) and the Beck Anxiety

Inventory by Beck and Steer (1990) to measure resilience. In this study, researchers conceptualized resilient adolescents as the ones who did not show depression and anxiety symptoms. This study was a unique one in terms of the measurements that were used to measure resilience as they used depression and anxiety instruments to operationalize resilience.

In a study on refugee children living in Australia, Tozer et al., (2018) administrated the AARS by Khawaja et al., (2014) in addition to two items from the R-MATS (Mampane, 2012). The two items from the R-MATS referred to toughness and commitment factors. This is the only study in this review to use a mix of two resilience scales to operationalize resilience. As argued by Tozer et al., (2018) the AARS was administered to measure the participants' ability to cope in the face of adversity while the R-MATS was used to measure their perseverance. Coping and perseverance despite unfavourable situations work together to establish a resilience response according to the authors. Regarding the languages used, it was reported that the questions of both scales were administrated in English and translators provided interpretation over the phone when necessary. It is worth to mention that this research was conducted with 93 refugee children from 23 different countries and who spoke one of 32 different languages.

4.7 Resilience - Mental Health Nexus

4.7.1 Resilience and PTSD

Within the scope of this research, 5 studies investigated the association between resilience and PTSD. All of these articles suggested that resilience and PTSD are

independent constructs as there was no relationship between resilience and PTSD symptoms (Arnetz et al., 2013; Cengiz et al., 2018; Giordano et al., 2019; LeMaster et al., 2018; Suarez, 2013). All the mentioned studies did not find differences in resilience levels between participants suffering from PTSD and participants who showed no symptoms of PTSD. They indicated that no correlation between PTSD and resilience levels was established. Within the scope of this study, the literature suggests that displaying symptoms of PTSD and having high resilience levels could co-exist together.

4.7.2 Resilience, Psychological Stress, and Anxiety

Three groups of researchers looked at the relationship between resilience and psychological stress in the forced migration population. There was a consensus among them that there is an inverse correlation between resilience and stress (Arnetz et al., 2013; Clukay et al., 2019; Mujeeb & Zubair, 2012). Two studies found that resilience was inversely correlated with psychological stress among refugees and immigrants from similar backgrounds in the United States and IDPs in Pakistan, respectively (Arnetz et al., 2013; Mujeeb & Zubair, 2012). They indicated that individuals who showed higher resilience experienced less stress. Low resilience was also found to predict stress. In addition, Clukay et al., (2019) found that higher levels of resilience were associated with lower psychological levels at baseline, but also, participants who demonstrated higher resilience levels were able to have a sharper reduction in stress levels overtime at the follow-up phase of the study. All three studies concluded that psychological stress and resilience had a negative association.

4.7.3 Resilience and Depression

Within the scope of this thesis, 4 studies investigated the association between resilience and depression. All of the 4 studies found that resilience and depression were inversely correlated. Ziaian et al., (2012) and Mujeeb and Zubair (2012) found a negative association between resilience levels and depression. The findings of both of these studies suggested that individuals who showed higher resilience experienced less depression. Also, significant differences in resilience levels were reported among participants who showed depression symptoms and those who did not, with depression free individuals scoring higher on resilience scales.

Siriwardhana et al., (2015) also found a strong negative relationship between resilience and major depression in their longitude study, where major depressive disorder was associated with lower resilience scores. In the same study Siriwardhana et al., (2015), reported that they did not find a consistent connection between resilience and CMD (depression, anxiety, and somatoform disorder) as a whole. In their one-year longitude study, LeMaster et al., (2018) found a negative correlation between depression and resilience at baseline. In other words, higher resilience at baseline was associated with less depressive symptoms. In their conceptualization of resilience, Aitcheson et al., (2017) defined resilience individuals as participants who showed minimal to no symptoms of depression and anxiety. It appears that there is a consensus in the literature that there is an inverse relationship between resilience and depression in the studies that measured both.

4.7.4 Resilience and Trauma Exposure

Three studies investigated the relationship between resilience and trauma exposure. However, mixed results were reported. Ziaian et al., (2012) did not find an association between the level of exposure to trauma and overall resilience levels. They indicated that there was no correlation between the number of traumatic events and resilience scores. Although exposure to trauma was higher for male participants in Clukay et al., (2019) research, there was no significant difference between male and female resilience levels. In Panter-Brick et al., (2018) study, for nonrefugee Jordanian children, resilience levels and trauma exposure were negatively correlated. Participants who had encountered traumatic events had lower resilience scores.

In the case of refugee children from Syria, it was found that they did not demonstrate such relationships, although they had a high trauma exposure, this exposure was not related to their resilience levels (Panter-Brick et al., 2018). In contrast, during the qualitative phase of the study, some of the Syrian refugee children expressed that encountering adversity is what made them gain strength and enhanced their resilience (Panter-Brick et al., 2018). Furthermore, in Cengiz et al., (2018) study with Syrian refugees living in Turkey, resilience was founded to have a positive correlation with post traumatic growth (PTG). These two studies suggested that there might be a relationship between adversity and PTG.

4.7.5 Resilience and Other Aspects of Wellbeing

Emotional and behavioural problems had a negative relationship with resilience (Ziaian et al., 2012). Children who had emotional and behavioural problems scored

significantly lower than other children on the resilience measure. In another study, participants who were seeking mental health services had a tendency to have lower overall levels of resilience, they also scored significantly lower on the CD-RISC subscale related to trust in one's instincts, tolerance of negative affect, and resolve in the face of stress (Ziaian et al., 2012).

Higher resilience was identified as a predictor of positive wellbeing in the study of Tozer et al., (2018) where it was positively related to good wellbeing. Building personal resilience in this context was suggested to aid in ameliorating positive mental health and reduce the risk of developing psychological illness and behavioural disorders.

Giordano et al., (2019) study indicated a correlation between resilience and strength and difficulties scale (SDQ) was found. The SDQ subscale was used to assess the children's general social impairment.

4.8 The Impact of Forced Displacement on Resilience

When Almedom et al., (2007) compared resilience levels between displaced and non-displaced populations from the same nationality living within the same cultural contexts, the differences in resilience scores between the two groups were statistically significant with non-displaced population scoring higher resilience. Interestingly, Almedom et al., (2007) found that when comparing communities that were displaced due to conflicts and other groups identified as voluntary mobile communities, the resilience levels were significantly different between the two groups. The voluntary mobile

population scored higher on the resilience scale comparing to the forced displaced ones even that the two groups shared similarities in terms of the socio-political context.

When comparing resilience levels between refugees and the general population Ziaian et al., (2012) found that the mean of the resilience in their study that included 170 refugees was lower than the mean that Connor and Davidson found in their general population (Connor & Davidson, 2003). Arnetz et al., (2013) compared resilience levels between 75 Iraqi refugees and 53 non-war exposed Middle Eastern immigrants living in the United States, no significant differences in the resilience scores were reported among these two groups. It is worth to mention that two groups shared cultural beliefs and were of similar historical and socio-culture context.

4.9 The Impact of Prolonged Displacement on Resilience

In their study Almedom et al., (2007) found that prolonged forced displacement was associated with further lowering the resilience scores. Yet, when Giordano et al., (2019) investigated the relationship between the length of stay in transit and resilience levels no association between the two variables was found. In their one-year prolonged study of 450 participants at baseline and 338 at follow-up, Siriwardhana et al., (2015) found mixed results about the correlation between resilience and prolonged displacement. Lower resilience levels were reported at the baseline, this was analyzed as a result of almost 20 years of displacement.

It was found that when IDPs were in the process of return to their place of origin at the follow-up due to the end of the war, resilience levels were found to be higher

(Siriwardhana et al., 2015). Sleijpen et al., (2017) reported that asylum seekers who were in dilemma about their future felt more vulnerable. Having to wait for years before their asylum seeking applications get processed was a step back to their resilience and caused them to suffer from "mental fatigue". This period of uncertainty impeded the resilience process and negatively impacted their psychological wellbeing.

Ziaian et al., (2012) study found that refugees who have been longer in Australia scored higher on the CR-RISC resilience scale. This was defined by living in Australia for 5 years or longer. Participants within their first 5 years of resettlement in Australia had significantly lower scores than participants who lived there for five years and longer. A longer period of uncertainty hindered the resilience process as it presented a stressful situation. The doubt about the future and being in a vulnerable and powerless situation was reported to have lowered the resilience of the youth. To deal with uncertain future and process traumatic events from the past formed a constellation of risk factors for resilience.

4.10 Factors Contributing to Resilience in the Forced Migration Population

The majority of the studies tried to identify protective factors that were associated with promoting resilience levels or they tried to test the impact of a specific factor or collective of factors on the resilience process. The protective factors mentioned in this scoping review could be mapped on the SEM (Bronfenbrenner & Morris, 1998). In this context, resilience is a dynamic process that is culturally constructed and ecologically embedded in factors spread across the individual, family, and social levels.

4.10.1 The Individual Level

The literature suggests that the set of resilience factors performing at the individual level such as gender, age, self-regulation, optimism, sense of control, and coping skills are essential in demonstrating high resiliency. In their study, Aitcheson et al., (2017) found that participants who showed greater self-regulation, a more optimistic world view, and better coping skills showed higher resiliency as well. This set of skills served as protective factors that predicted resilience. In addition, keeping a positive attitude, maintaining hope, and demonstrating strength were found a factor to facilitate resilience (Chung et al., 2013; Corbin & Hall, 2019; Lavie-Ajayi & Slonim-Nevo, 2017).

4.10.1.1 Resilience and Gender Differences

In regard to gender, there were mixed results whether women or men possess higher resilience. In Almedom et al., (2007) study, gender did not play a significant role in resilience levels between men and women. However, displacement had a more negative impact on women when compared with men, resulting in women scoring lower on the SOC scale. When investigating a potential relationship between gender and resilience Siriwardhana et al., (2015) were able to find no such association between the two factors in their prolonged study. However, at the baseline study, an association between male gender, unemployment and low resilience levels was established but was lost during the follow-up. Ziaian et al.'s, (2012) research with refugee children living in Australia from different backgrounds, they found that female participants had significantly higher levels of resilience. In conclusion, two studies suggested that women

had more resilience than men, and one study concluded that women were more prone to displacement and had lower resilience scores.

4.10.1.2 Resilience and Age Differences

Three studies looked if there is an association between age and resilience levels. However, no such relationship was established in two of the three articles. One study found that younger adolescents had higher resilience than older ones. Although Ziaian et al., (2012) and Siriwardhana et al., (2015) did not find a correlation between age and resilience levels, Siriwardhana et al., (2015) reported that when the displacement experience ended, adolescents reported higher resilience levels than adults.

Sleijpen et al., (2017) carried out a study with refugee adolescents. They reported that older refugees reported lower levels of resilience. Older participants struggled more as they found it harder to integrate into their country of resettlement, understand the new system and getting enrolled in school. These factors lowered their self-esteem and deprived them of feeling in control. Thus, Sleijpen et al., (2017) deemed older refugee adolescents to be of less resiliency. However, whether there is a statistically significant relationship between age and resilience levels is yet to be deemed as in Aitcheson et al., (2017) study older adolescents were of higher resiliency.

4.10.1.3 Resilience and Genetic

Only one study looked at resilience from a genetic perspective and tried to link specific genes with resilience (Clukay et al., 2019). Clukay et al., (2019) found there was no association between Monoamine Oxidase A (MAOA) specific proteins MAOA-L and

MAOA-H carriers and resilience levels. In their follow-up study, males with MAOA-L gene and high resilience scores had a sharper reduction in stress levels over males with MAOA-H gene or male with MAOA-L gene with lower resilience levels.

4.10.1.4 Strategies that Foster Resilience

4.10.1.4.1 Making Sense of Adversity

The way people interpret the traumatic events they go through determines to a great extent their resilience response. The group of people who conceptualize hardships as a central event that would shape their future lives will likely suffer from more clinical symptoms (Atallah, 2017). Individuals who are able to make sense of the adversity and interpret it as a transformative but not defining experience usually demonstrate greater resilience (Atallah, 2017). In order to make sense of adversity, displaced people usually employed internal narrative as a strategy to process their experiences (Lavie-Ajayi & Slonim-Nevo, 2017). This was a way used to give meaning to their past and predict a better future. Giving meaning to their unfortunate experiences helped them conceptualize the trauma in a meaningful way and enabled them to move forward in a positive manner (Lavie-Ajayi & Slonim-Nevo, 2017; Tippens, 2017). Processing traumatic experiences and making meaning of it was deemed essential to be able to survive, processing the traumatic experiences is what differentiates resilient refugees according to (Tippens, 2017).

In addition, external narrative was another strategy used by displaced persons to promote their resilience (Lavie-Ajayi & Slonim-Nevo, 2017). After being recently

relocated to a new county they tried to explain their plight to the new community in a relevant way to the recipients (Lavie-Ajayi & Slonim-Nevo, 2017).

4.10.1.4.2 Acting Autonomously

In their study with refugees from different backgrounds resettled in the Netherland Sleijpen et al., (2017) found that acting autonomously was a strategy used by the participants to foster their resilience. The refugee youth reported that having a sense of control over their lives made them feel resilient (Sleijpen et al., 2017). They had to show persistence and take account of their lives. Although being strong and keep preforming despite the stressful situation was the only option for them, doing so boosted their confidence and promoted their resilience.

4.10.2 The Microsystem Level

4.10.2.1 Family and Peers Support

In the narrative of participating in studies of Lavie-Ajayi and Slonim-Nevo (2017); Sleijpen et al., (2017) and Corbin and Hall (2019), it was highlighted that the positive support of family members wsas critical to enhancing their resilience. Also, their friends played an important role in supporting them along their displacement journey. This helped them to maintain a positive mindset and was a valuable element in fostering resilience. Sleijpen et al., (2017) mentioned that having peers from diverse backgrounds in the country of resettlement further boosted the refugees' confidence. In addition, their families gave them a sense of safety and trust. On the other hand, providing support and care for their families and parents empowered them and made them proud of themselves which ultimately ameliorated their resilience. Kuttikat et al., (2018) emphasized that the

support refugees received from other members of the same refugee camp was fundamental in their resilience process.

4.10.2.1.1 Loss of Family Members

In the context of conflicts and displacement, there is a higher chance of the occurrence of some traumatic events, such as the loss of family members. This might negatively impact the resilience of the affected individuals. In Siriwardhana et al.'s, (2015) study, lower levels of resilience were associated with widowed and divorced members of the participants in both the baseline and follow-up of the research. Additionally, in Sleijpen et al., (2017) study, the adolescents who were separated from their parents reported that this impeded their resilience process. Mujeeb and Zubair (2012) found that IDPs who suffered family loss prior to or during their displacement journey demonstrated less resilience than IDPs who did not go through this traumatic experience of loss.

4.10.2.2 School and Education

Although the relationship between resilience and education was not a primary aim of any of the selected studies; education as a resilience protective factor emerged from the data of numerous studies. For example, education and school presented itself as a fundamental resilience promoting factor in the narrative of the participants (Chung et al., 2013; Lavie-Ajayi & Slonim-Nevo, 2017; Sleijpen et al., 2017). According to the findings of these studies, education provided an opportunity for newcomers to build friendships and integrate into the new society. It also empowered them by giving them a sense of achievement. Moreover, schooling provided a distraction from the negative thoughts

about past traumatic experiences. It was reported that not being able to attend school, having to change schools constantly, or having to go to a lower academic level due to differences in the educational systems negatively affected the participants' resilience levels (Chung et al., 2013; Lavie-Ajayi & Slonim-Nevo, 2017; Sleijpen et al., 2017). Lower education levels were correlated with lower resilience as well (Siriwardhana et al., 2015).

4.10.2.3 Employment and Ability to Work

Work formed an important factor that promoted resilience feeling in asylum seekers, refugees and IDPs. Work fostered resilience on different levels (Chung et al., 2013; Lavie-Ajayi & Slonim-Nevo, 2017). It provided basic needs for refugees in their country of asylum and supported them financially. In addition, work provided a sense of self-worth and boosted displaced people's self-esteem. It created a support system and introduced them to positive relationships that promoted their resilience. Moreover, work provided an opportunity for refugees to engage in meaningful activities and thus employment alleviated the anxiety associated with thinking about traumatic events. The difficulty of not being able to find a job or having to do minimum wage employment decreased the refugee sense of belonging to the new community and was reported to negatively affect their resilience (Chung et al., 2013; Lavie-Ajayi & Slonim-Nevo, 2017).

4.10.2.4 The Availability of Basic Needs

Basic needs including shelter, water and sanitation, food, and essential health care services were suggested to be essential in facilitating resilience processes. In their research, Siriwardhana et al., (2015) and Corbin and Hall (2019) concluded that food

insecurity, lack of basic needs and higher poverty rates were associated with lower resilience scores.

4.10.3 The Macrosystem Level

4.10.3.1 Social Support

Social support is a factor that was deemed to have a positive impact on the resilience process in numerous studies. The ability to access culturally relevant resources is an example of social support. Siriwardhana et al., (2015) reported that resilience was found to have a correlation with social support, where lower resilience was associated with social isolation and lack of social support. According to the study's participants, the engagement in social activities strengthened their network and further developed it. This acted as a buffer against hardships and maintained their psychological wellbeing.

Sleijpen et al., (2017) discussed the narrative of their participants that learning the settlement country new language and getting introduced to the new culture and traditions promoted their sense of belonging. This participation in their new society was a strategy that fostered refugee resilience. Tippens (2017) and Corbin and Hall (2019) mentioned that community-based supporting structures created supporting networks that played a key role in facilitating refugee resilience. These community-based structures provided help and support to the most vulnerable groups of the same community.

4.10.3.2 Institutional Support

The government-supported education programs form an essential step in facilitating a better integration in the new society as they increase the chances of a better future for newcomers in terms of jobs and finances (Chung et al., 2013; Corbin & Hall,

2019). The literature mentioned the positive role the government played in facilitating resilience expression among internally displaced women (Corbin & Hall, 2019).

On the other hand, non-governmental organizations (NGO) support was deemed an important factor to promote refugee resilience. This assistance was spread across different sectors ranging from availability of basic needs such as shelter and food to providing referral services and necessary information to help newcomers navigate the new systems, the mental health services, and the language services. All of these services were reported as having a positive impact on the resiliency of refugees (Chung et al., 2013; Corbin & Hall, 2019).

4.10.3.3 Religion and Spirituality

It was reported throughout numerous studies that religion played a valuable role in promoting resilience for refugees and other displaced persons. The research conducted by Sleijpen et al., (2017); Tippens (2017) and Kuttikat et al., (2018) all similarly stressed the importance of spirituality and religion in promoting the participants' resilience and wellbeing. Religion was a source of support, guidance, and hope for the participants in these studies. It alleviated their stress, helped them deal with traumatic events, and gave meaning to their experiences and their displacement journeys. It is important to note that Lavie-Ajayi and Slonim-Nevo (2017) did not find religion nor spirituality to be an important factor in supporting the resilience of the refugees.

According to Chung et al., (2013) and Corbin and Hall (2019), religious groups in settlement communities played an important role in fostering resilience. The religious gatherings provided a sense of community, an opportunity to be introduced to a social

network, and a chance to participate in the new society in a culturally relevant way.

Religious organizations acted as a protective factor that facilitated resilience (Chung et

al., 2013). In addition, religious practices helped refugees and IDPs to reconnect with

their life rituals before their displacement. It also established a sense of routine and

restored some normality into their lives (Corbin & Hall, 2019).

4.10.3.4 Values and Traditions

The findings of the scoping review suggested that participants who demonstrated

higher ethnic identity showed higher resilience. It also indicated that strong ethnic

identity performed as a buffer factor that promoted resilience (Aitcheson et al., 2017).

Corbin and Hall (2019) reported that being able to express cultural traditions and

activities in the community was deemed as a resilience protective factor.

4.11 Resilience as an Intergeneration Process

It is plausible that resilience might be a process that transmits from one generation

to another (Aitcheson et al., 2017; Atallah, 2017). This process happens through oral

narrative and family traditions that are passed across family traditions (Aitcheson et al.,

2017). In the Palestinian community, reliance and interdependence between family

members and strong family cohesion reinforced resilience (Aitcheson et al., 2017).

Resilience was embedded in the narratives transmitted from parents and grandparents to

the new generations. Refugee journeys that went back almost 50 years ago were still

heavily existed in the present dialogue and they were conveyed throughout extended

family networks (Atallah, 2017). Resilience was a learning process that took many shapes

and forms. The method of transmitting resilience included verbal communication,

observation, being introduced to the land concept, and participation in cultural celebration and family rituals (Aitcheson et al., 2017; Atallah, 2017).

4.12 Resilience across Cultures

The conceptualization of self-identity varies globally across different communities. While in some cultures there is an embracing of individuality, other cultures value the collective community more than the individual. This difference in conceptualization might result in a difference in the way people from different cultural backgrounds understand resilience. In their study, Kuttikat et al., (2018) found that it was hard to distinguish between individual and community resilience in the Sri Lankan Tamil refugee community living in India. The boundaries between the two were disguised, as the bonds between the two are so strong.

In the study, "Palestinian Refugee Family Trees of Resilience" Atallah (2017) found that it was hard to separate the individual resilience from the family and community resilience. In this context, resilience included three constructs: resistance, return, and perseverance. Because living under the siege and occupation threatened access to safety and basic needs, expressing resilience took various forms and structures: ensuring other family members safety, creating a culture of care within the family and community, practicing patience and persistence, cultivating moral values of collectivism, strength, and determination in the face of adversity. Resilience thus becomes a collective process that bridged and bonded the individual with the family and community together (Atallah, 2017).

Suarez (2013) reported that in her Peruvian study, the validation consultation group of the CD-RISC scale revealed that some elements of the resilience concept were absent in the Andean culture in Peru, namely; culture identity and reciprocity. Interestingly, although Syrian and Jordanian people are similar in terms of culture, religious views, traditions, and language. Syrian refugee children and local Jordanian children expressed resilience differently (Panter-Brick et al., 2018). In interviews conducted using storytelling, it was found that for the Syrian refugees, resilience meant overcoming hardship and not feeling stressed about past traumatic experiences. Resilience was also considered to be the ability to live in the new host community and establish good relationships in the new society. Syrian refugees also referenced dreams for a better future, accomplish their goals, and the value of education. The Jordanian youth mentioned being able to improve and having role models in their local communities as an essential component of resilience (Panter-Brick et al., 2018). In addition, Sleijpen et al., (2017) anticipated that the understanding of the concept of resilience might differ across cultures and it might not even exist in some languages. However, they did not report their findings regarding this point.

Although Ziaian et al., (2012) found no trend between the overall resilience levels and participants' country of origin, ethnic differences were found in some of the subscales of the CD-RISC instrument. A significant association between the factor regarding the acceptance of change and feel of security in a relationship and the country of origin, refugees descending from former Yugoslavia scored the highest, followed by Middle Easterners and Africans, respectively. Also, in the subscale regarding religious and

spiritual beliefs, Middle Eastern, Africans, and former Yugoslavians scored the highest, respectively (Ziaian et al., 2012).

4.13 Resilience across Languages

In the context of multi-cultural research, it is essential to take terminology and linguistics into consideration as the meaning of words might vary across different languages. Panter-Brick et al., (2018) mentioned that during their study in Jordan, the term "resilience" was unproblematically translated to Arabic to "muruuna" meaning resilience with a sense of "flexibility". "Muruuna" was relevant to use in the context of Syrian refugees living in Jordan as it implied flexibility to changes and adaptability to the new host community (Panter-Brick et al., 2018). On the other hand, some reported that in the context of Palestinian research, resilience was translated to Arabic as "sumud" meaning resilience with a sense of "resistance" (Nguyen-Gillham, Giacaman, Naser, & Boyce, 2008). "Sumud" was culturally relevant in that context as it gave the word a political dimension that is appropriate for the Palestinian context (Panter-Brick et al., 2018). While Atallah (2017) mentioned that there is no translation for the word "resilience" in the Arabic language.

CHAPTER V: DISCUSSION

5.1 Nature of the Research

The literature review included both qualitative and quantitative studies that investigated resilience in the forced migration population. A previous systematic review of resilience and mental health showed that the studies in this field are dominated by quantitative and cross-sectional studies (Tol, Song, & Jordans, 2013). However, this scoping review showed an increasing interest in applying qualitative and mixed methods approaches to this field in recent years. This reflects an interest to understand the concept of resilience through synthesizing both qualitative and quantitative data. One major gap in the literature that was identified is the lack of longitudinal and interventional studies.

5.2 Operationalization of Resilience

According to the scoping review findings, resilience operates in a complex manner with interpersonal and intrapersonal factors affecting it. Resilience interplays with various factors and has relationships with different variations. In this scoping review, all the included quantitative studies used some type of scales to operationalize resilience. However, most of these scales measure personality-based traits such as hardness and competence. Although these personality characteristics might function as factors that promote resilience, what is concerning with this operationalization is the potential of silencing factors that operate on the macro levels. The use of a universal scale might not be able to capture the essence of the concept. Some authors recognized the limitation of scales to holistically capture the essence of resilience (Atallah, 2017; Panter-Brick et al.,

2018; Sleijpen et al., 2013). Thus, they try to bridge this gap by adopting a qualitative or mixed methods study design to explore the process of resilience

Most of the instruments were translated and back translated on a small scale and as a minor step in larger studies (Aitcheson et al., 2017; Tozer et al., 2018). Studies that carried large-scale research to test and validate the translated version of resilience measures were not the norm. Given the fact that all of these measurements were developed in western countries, some of their elements might not be applicable in another context. Furthermore, some concepts become obscure when translated into another language. Only 2 articles within the scope of this study validated an existing resilience instrument cross culturally and cross linguistically. Interestingly, both of them reported that not all of the measure elements were culturally and linguistically adequate, and several adjustments needed to be made (Almedom et al., 2007; Panter-Brick et al., 2018). On the contrary, studies that have translated the tools as part of a larger study never mentioned the challenge of missing elements due to differences across cultures and languages. Asking questions that are not culturally and linguistically appropriate might contaminate the data collected and negatively affect their interpretation. Developing comprehensive, culturally sensitive and yet reasonably short measures remain a challenge.

It is important to note that some studies used 5-Likert scale while others used 7-Likert scale ones. The varying use of shorter and longer Likert scales impedes the comparison of the results from different studies. In addition, three studies used the RS scale designed by Wagnild and Young (1993), however, Siriwardhana et al., (2015) used

a 14-item version of the scale while the other two used a reduced 8-item version of the scale (Arnetz et al, 2013; LeMaster et al., 2018). This hampers comparing resilience scores between the different studies.

The use of western resilience scales with a non-western population could cause a limitation for their implementation, as these scales might not be culturally and/or linguistically sensitive. Many of these measures have not been tested and validated with a non-English speaking population. Resilience scales themselves might not be able to capture the whole essence of the construct of resilience. Definitions of resilience are generally broad in nature and thus they are hard to operationalize. As mentioned before, the concept of resilience is a complex one with many cultural and contextual factors influencing the concept.

5.3 Resilience and its Relationship to Mental Health Illnesses

The association between resilience, risk and trauma is complicated. In their study, Sleijpen et al., (2017) recruited 16 psychological treatment seeking refugees, however, according to their findings, these individuals demonstrated resilience and effective coping strategies. Consequently, they argued that one can be both vulnerable and resilient at the same time. According to Sleijpen et al., (2017), resilience is not a trait that either you have it or not (APA, 2014). An individual's resilience may depend on the support system individuals are surrounded by overtime. Resilience could vary over time depending on the protective factors and the ecological context people are embedded in. Sleijpen et al., (2017) concluded that the participants' behaviour of seeking treatment might be seen as a

resilience mechanism as well. Although some participants in Sleijpen et al., (2017) study were suffering from PTSD symptoms they were functioning well at school. This complex dynamic between perceived functioning and mental health further emphasizes that resilience can co-exist along with PTSD. Even when people demonstrate high levels of resiliency, they can show symptoms of PTSD as a normal response to traumatic events (Cengiz et al., 2018).

CHAPTER VI: CONCLUSION & RECOMMENDATIONS

6.1 Recommendations

Based on the finding of this scoping review, the following is a list of recommendations to future directions. First and foremost, to advance the research in the field of resilience in the forced migration population, further clarifications are needed. Resilience scales need to be validated across languages. The validation process should include content validity, face validity, construct validity, and reliability. Cross cultural applicability of the resilience concept needs to be examined as well. The definition of resilience should not only be explored from the point of view of researchers but also from the targeted population perspective. As mentioned earlier, few studies have explored the meaning of resilience from the displaced populations' perspective. However, some nationalities have not had the chance to document their views on the subject matter yet, for example, South Soudanese, Afghan and Rohingya refugees. Additionally, longitudinal studies should be conducted to observe resilience dynamics over time. This will provide a more comprehensive understanding of the concept.

Second, the interactions between the disease model and the health model should be further investigated and requires clarification. Future research should further examine the relationship between resilience and mental health diseases and studies should document the correlation among resilience, depression, PTSD, and anxiety. Researchers should study the potential association between resilience and stress related hormones (such as cortisol). Additionally, studies that investigate the relationship between resilience and potential gene expression should be conducted. Rutter (2003) stressed the importance

of gene-environment interactions. This means that the genotype of an individual could influence responses to environmental accidents. This interplay between genetic and environmental factors would affect the expression of protective or risk factors leading to maximizing or minimizing their impact. Studies that investigate resilience from genetic lenses would provide more insights into the resilience process.

Third, as mentioned before, resilience could have different meanings for researchers from different disciplines, as it could be conceptualized as a trait or a set of qualities that help certain individuals to keep functioning regardless of the challenges they encounter. For others, resilience is an outcome of a well-functioning social system that supports its members to adapt and rebuild their lives when hardships take place. Thus, it is important to make sure there is a consensus regarding the conceptualization of resilience in multi-disciplinary projects in the global health context. When designing programs that foster resilience, it is worth to adopt a holistic cross-disciplinary understanding to capture the different themes and multi-dimensions of resilience.

Lastly, programs in the field of global health should adopt a strength-based approach that focuses on fostering resilience instead of narrowing attention toward risks and limitations. A strengths-based approach may shift the focus to build capacities based on available resources and assets. In addition, initiatives in fragile displacement context should not only focus on individuals but also include family members in their intervention plans. Strengthening communities' structures and delivering community-based programs will better promote individuals' resilience. In addition, humanitarian programs that aim to enhance resilience for their targeted populations should apply

rigorous evaluation methods to test the efficacy of their interventions. This will lead to more evidence informed decisions regarding interventions with vulnerable populations.

6.2 Strength

Research in the field of resilience in the forced migration population is conducted using numerous study designs and methodological orientations. Therefore, adopting a scoping review framework enabled to map the existing body of literature on how the concept of resilience is applied in refugee research. Following a systematic way in all steps of the scoping review reduced bias and increased the quality of the work. As discussed in chapter II, resilience is a complex and heterogeneous concept. Therefore, keywords were selected carefully to capture all aspects of the concept of resilience. Additionally, databases were selected to allow for an exploration of the concept across different fields as researchers from different backgrounds including but not limited to social sciences, anthropology, and health sciences investigated the concept.

6.3 Limitation

There are numerous limitations to this study. First, database search was restricted to only include articles published in the English language. This might have hindered looking at valuable studies published in languages other than English. The budget limitation impeded hiring interpreters to translate articles from other languages such as Spanish, Arabic, and/ or Urdu languages. Giving that many refugees and IDPs come from low-middle income countries where populations do not necessarily speak the English language. Thus, it is expected that there is a large body of literature addressing resilience

in the forced migration population that is published in languages other than English. Secondly, the search excluded publications before the year 2000. Although the concept of resilience had undergone a paradigm shift around the new millennium according to Rutter (2012), this might have omitted important articles published before that date. In addition, Arksey and O'Malley (2005) proposed an optional final step in conducting scoping reviews, the consultation exercise. However, this step was not conducted. Consultation with key stakeholders aims to provide further insights and references to the literature review. Consultation exercise involves practitioners in the filed as well as members of the target communities, due to time and budget constraints we choose not to follow this optional step.

6.4 Conclusion

This study conducted a scoping review of the current global literature on the concept of resilience in the forcibly displaced people. Selected studies covered a wide range of age groups, geographical regions, and methodologies. This master's thesis mapped the existing measurements, resilience definitions, associations between resilience and mental health illnesses, and protective factors facilitating resilience response. It also provided recommendations and insights for further studies.

It is interesting to note that the first piece of literature that referred to resilience as a human characteristic appeared in a humour English novel, and later it was imported to the field of psychology to describe people with an ability to defy the odds and survive adversity in the context of war and conflicts. It is also interesting to note that in the field

of materials' resilience there is a precise model to measure a given material resilience, where is the field of psychological resilience there is no consensus on a single instrument that could accurately measure individuals' resilience.

In conclusion, resilience is a useful concept that appraises competent adaptation and strength rather than focusing on risk and vulnerability (Panter-Brick & Leckman, 2013). As mentioned in chapter II, traditional research was embedded in the pathogenesis model. Resilience research provided a shift toward building capacity, this shift fosters hope and potential of individuals. However, it is important to note that the concept of resilience has an ambiguous nature with no agreement among researchers and practitioners on a definition nor a golden standard instrument to measure resilience. Also, to date, there is no medicalization of resilience and none of the scales draws a line for pathology. Therefore, the potential implications of resilience should be carefully studied. In addition, the word "resilience" should not be used in the context of forced migration without a comprehensive understanding of its true meaning.

REFERENCES

Affleck, W., Thamotharampillai, U., Jeyakumar, J., & Whitley, R. (2018). "If One Does Not Fulfil His Duties, He Must Not Be a Man": Masculinity, Mental Health and Resilience Amongst Sri Lankan Tamil Refugee Men in Canada. *Culture, Medicine, and Psychiatry*, *42*(4), 840–861. https://doi.org/10.1007/s11013-018-9592-9

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), 36–43. https://doi.org/10.1037/tra0000153

Al-Krenawi, A., & Graham, J. R. (2000). Culturally Sensitive Social Work Practice with Arab Clients in Mental Health Settings. *Health & Social Work*, *25*(1), 9–22. https://doi.org/10.1093/hsw/25.1.9

Almedom, A. M., & Glandon, D. (2007). Resilience is not the Absence of PTSD any More than Health is the Absence of Disease. *Journal of Loss and Trauma*, *12*(2), 127–143. https://doi.org/10.1080/15325020600945962

Almedom, A. M., Tesfamichael, B., Saeed Mohammed, Z., Mascie-Taylor, C. G. N., & Alemu, Z. (2007). Use Of 'Sense Of Coherence (SOC)' Scale To Measure Resilience In Eritrea: Interrogating Both the Data and the Scale. *Journal of Biosocial Science*, *39*(1), 91–107. https://doi.org/10.1017/S0021932005001112

American Psychological Association. The road to resilience. Washington, DC: American Psychological Association; 2014. Retrieved from http://www.apa.org/helpcenter/road-resilience.aspx

Anthony, E. J. (1974). Introduction: The syndrome of thepsychologically vulnerable child. In E. J. Anthony & C.Koupernik (Eds.), *The child in his family: Children at Psy-chiatric Risk* (Vol. 3, pp. 3–10). New York: Wiley.

Anthony, E. J. (1987). Risk, vulnerability, and resilience: An overview. In E. J. Anthony & B. J. Cohler (Eds.), *The invulnerable child* (pp. 3–48). New York: Guilford Press.

Antonovsky, A. (1984) A call for a new question – Salutogenesis – and a proposed answer –the sense of coherence. *Journal of Preventive Psychiatry* 2, 1–13.

Antonovsky, A. (1987). The Jossey-Bass social and behavioral science series and the Jossey-Bass health series. Unraveling the mystery of health: How people manage stress and stay well. Jossey-Bass.

Antonovsky, A. (1993) The structure and properties of the sense of coherence scale. *Social Science and Medicine* 36, 725–733.

Antonovsky, A. (1996) The salutogenic model as a theory to guide health promotion. *Health Promotion International* 11, 11–18.

Arksey, H., & O'Malley, L. (2005). Scoping studies: Towards a methodological framework. *International Journal of Social Research Methodology*, *8*(1), 19–32. https://doi.org/10.1080/1364557032000119616

Arnetz, J., Rofa, Y., Arnetz, B., Ventimiglia, M., & Jamil, H. (2013). Resilience as a Protective Factor Against the Development of Psychopathology Among Refugees: *The Journal of Nervous and Mental Disease*, *201*(3), 167–172. https://doi.org/10.1097/NMD.0b013e3182848afe

Atallah, D. G. (2017). A community-based qualitative study of intergenerational resilience with Palestinian refugee families facing structural violence and

historical trauma. *Transcultural Psychiatry*, *54*(3), 357–383. https://doi.org/10.1177/1363461517706287

Barber, B.K. (2013). Annual Research Review: The experience of youth with political conflict: Challenging notions of resilience. *Journal of Child Psychology and Psychiatry*, 54, 461– 473.

Barber, B.K., & Doty, B. (2013). How can a majority be resilient? Critiquing the utility of the construct of resilience through a focus on youth in contexts of political conflict. In C. Fernando, & M. Ferrari (Eds.), *The handbook on resilience in children of war*. NY: Springer. doi:10.1007/978-1-4614-6375-7_17

Bartone, P. T. (1991) Development and Validation of a Short Hardiness Measure. Paper presented at the American Psychological Society Annual Convention, Washington, DC.

Bartone, P. T. (1995) A Short Hardiness Scale. Paper presented at the American Psychological Society Annual Convention, New York.

Bartone, P. T. (2007). Test-Retest Reliability of the Dispositional Resilience Scale-15, a Brief Hardiness Scale. *Psychological Reports*. 101,943-944.

Baruth, K. E., & Caroll, J. J. (2002). A formal assessment of resilience: The Baruth Protective Factors Inventory. *The Journal of Individual Psychology, 58*(3), 235– 244.

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. https://doi.org/10.1097/01.nmd.0000243751.49499.93

Beck, A. T., & Steer, R. A. (1990). Manual for the Beck Anxiety Inventory. San Antonio, TX: Psychological Corporation.

Beck, A. T., Steer, R. A., & Brown, G. K. (1996). Manual for the Beck Depression Inventory-II. San Antonio, TX: Psychological Corporation.

Berntsen, D., & Rubin, D. C. (2006). The centrality of event scale: A measure of integrating a trauma into one's identity and its relation to post-traumatic stress disorder symptoms. *Behaviour Research and Therapy*, *44*(2), 219–231. https://doi.org/10.1016/j.brat.2005.01.009

Berry, J. W. (2001). A Psychology of Immigration. *Journal of Social Issues*, *57*(3), 615–631. https://doi.org/10.1111/0022-4537.00231

Betancourt, T. S., Borisova, I. I., de la Soudière, M., & Williamson, J. (2011). Sierra Leone's Child Soldiers: War Exposures and Mental Health Problems by Gender. *Journal of Adolescent Health*, *49*(1), 21–28. https://doi.org/10.1016/j.jadohealth.2010.09.021

Blinn-Pike, L. (1999). Why Abstinent Adolescents Report They Have Not Had Sex: Understanding Sexually Resilient Youth. *Family Relations*, *48*(3), 295. https://doi.org/10.2307/585640

Block, J., & Kremen, A. M. (1996). IQ and Ego-Resiliency: Conceptual and Empirical Connections and Separateness. *Journal of Personality and Social Psychology, 70*(2), 349–361. https://doi.org/10.1037/0022-3514.70.2.349

Bonanno G. (2004) Loss, trauma, and human resilience: have we underestimated the human capacity to thrive after extremely aversive events? *Am Psychol* 59:20–8.

Bonanno, G. A., Galea, S., Bucciarelli, A., & Vlahov, D. (2006). Psychological Resilience After Disaster: New York City in the Aftermath of the September 11th

Terrorist Attack. *Psychological Science*, *17*(3), 181–186. https://doi.org/10.1111/j.1467-9280.2006.01682.x

Bonanno GA, Westphal M, Mancini AD, (2011) Resilience to loss and potential trauma. *Annual Review of Clinical Psychology* 7:511–35. doi:10.1146/annurev-clinpsy-032210-104526

Bourbeau, P. (2018). On Resilience: Genealogy, Logics, and World Politics. *Cambridge: Cambridge University Press* 10.1017/9781108349017

Bronfenbrenner, V. (1979) The ecology of human development: experiments by nature and design, *Harvard University Press, Cambridge*

Bronfenbrenner, U., & Morris, P. A. (1998). The ecology of developmental processes. In W. Damon & R. M. Lerner (Eds.), *Handbook of child psychology: Theoretical models of human development* (p. 993–1028). John Wiley & Sons Inc.

Cengiz, İ., Ergun, D., & Çakıcı, E. (2018). Posttraumatic stress disorder, posttraumatic growth and psychological resilience in Syrian refugees: Hatay, Turkey. *Anatolian Journal of Psychiatry*, (0), 1. https://doi.org/10.5455/apd.4862

Chung, K., Hong, E., & Newbold, B. (2013). Resilience among Single Adult Female Refugees in Hamilton, Ontario. *29*(1), 10. *Refuge: Canada's Journal on Refugees,* 29(1), 65-74.

Clukay, C. J., Dajani, R., Hadfield, K., Quinlan, J., Panter-Brick, C., & Mulligan, C. J. (2019). Association of MAOA genetic variants and resilience with psychosocial stress: A longitudinal study of Syrian refugees. *PLOS ONE*, *14*(7), e0219385. https://doi.org/10.1371/journal.pone.0219385

Colson, E. (2003). Forced Migration and the Anthropological Response. *Journal of Refugee Studies*, *16*(1), 1–18. https://doi.org/10.1093/jrs/16.1.1

Connor, K. M., & Davidson, J. R. T. (2003). Development of a new resilience scale: The Connor-Davidson Resilience Scale (CD-RISC). *Depression and Anxiety*, *18*(2), 76–82. https://doi.org/10.1002/da.10113

Corbin, J. N., & Hall, J. C. (2019). Resettlement post conflict: Risk and protective factors and resilience among women in northern Uganda. *International Social Work*, *62*(2), 918–932. https://doi.org/10.1177/0020872818755863

Coutu, D. (2002, May 1). How Resilience Works. *Harvard Business Review*, (May 2002). Retrieved from https://hbr.org/2002/05/how-resilience-works

Cownen, E. L., Wyman, Pe. A., & Work, W. C. (1996). Resilience in Highly Stressed Urban Children. Concepts and Findings. *Bulletin of the New York Academy of Medicine*, 73 (1996), pp. 267-284

Crawford. E, Wright. E, & Masten, A. (2005) Resilience and spirituality in youth, in The *Handbook of Apiritual Development in Childhood and Adolescence*, E. C. Coehlkepartain, P. E. King, L. Wagener, and P. L. Benson, Eds., Sage, Thousand Oaks, Calif, USA, 2005.

Donnon, T., & Hammond, W. (2007). A Psychometric Assessment of the Self-Reported Youth Resiliency: Assessing Developmental Strengths Questionnaire. *Psychological Reports*, *100*(3), 963–978. https://doi.org/10.2466/pr0.100.3.963-978

Donnon, T., Hammond, W., & Charles, G. (2003). Youth Resiliency: Assessing Students' Capacity for Success at School. *Teaching and Learning*, *1*(2). https://doi.org/10.26522/tl.v1i2.109

Dubow, E. F., Huesmann, L. R., Boxer, P., Landau, S., Dvir, S., Shikaki, K., & Ginges, J. (2012). Exposure to Political Conflict and Violence and Posttraumatic Stress in

Middle East Youth: Protective Factors. *Journal of Clinical Child & Adolescent Psychology*, *41*(4), 402–416. https://doi.org/10.1080/15374416.2012.684274

Edward, K., & Warelow, P. (2005). Resilience: When Coping Is Emotionally Intelligent. *Journal of the American Psychiatric Nurses Association*, *11*(2), 101–102. https://doi.org/10.1177/1078390305277526

Eggerman, M., & Panter-Brick, C. (2010). Suffering, hope, and entrapment: Resilience and cultural values in Afghanistan. *Social Science & Medicine*, *71*(1), 71–83. https://doi.org/10.1016/j.socscimed.2010.03.023

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. https://doi.org/10.1016/S0140-6736(11)60051-2

Fiddian-Qasmiyeh, E., In Loescher, G., In Long, K., & In Sigona, N. (2014). *The Oxford handbook of refugee and forced migration studies.*

Fraser, M.W, Richman. J.W & Galinsky. M.L (1999) 'Risk, Resilience, and Protection: Towards a Conceptual Framework for Social Work Practice', *Social Work Research* 23(3): 131–43.

Friborg, O., Barlaug, D., Martinussen, M., Rosenvinge, J. H., & Hjemdal, O. (2005). Resilience in relation to personality and intelligence. *International Journal of Methods in Psychiatric Research*, *14*(1), 29–42. https://doi.org/10.1002/mpr.15

Friborg, O., Hjemdal, O., Rosenvinge, J. H., & Martinussen, M. (2003). A new rating scale for adult resilience: What are the central protective resources behind healthy adjustment? *International Journal of Methods in Psychiatric Research*, *12*(2), 65–76. https://doi.org/10.1002/mpr.143

Friedli, D. L. (2009). Mental health, resilience and inequalities. Denmark: World Health Organisation; http://www.euro.who.int/document/e92227.pdf

Garcia Coll, C., & Magnuson, K. (2000). Cultural differences as sources of developmental vulnerabilities and resources. In J.P. Shonkoff & S.J. Meisels (Eds), *Handbook of early childhood intervention* (2nd edn, pp. 94– 114). New York: Cambridge University Press.

Garmezy, N. (1974). The study of competence in children at risk for severe psychopathology. In E. J. Anthony and C. Koupernik (Eds.), *The Child and His Family. Yearbook of the International Association for Child Psychiatry and Allied Professions. Volume III.* New York: John Wiley and Sons.

Garmezy, N. (1983). Stressors of childhood. In N. Garmezy & M. Rutter (Eds.), *Stress, Coping and Child Development.* McGraw-Hill Book Company.

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. https://doi.org/10.1111/j.1752-0606.2008.00063.x

Giordano, F., Boerchi, D., Hurtubia, V., Maragel, M., Koteit, W., Yazbek, L., & Castelli, C. (2014). Risk and protection in mental health among Syrian children displaced in Lebanon. Paper presented at The Second World Congress on Resilience, Person to Society, Timișoara, Romania. https://doi.org/10.13140/2.1.2663.7607

Giordano, F., Cipolla, A., Ragnoli, F., & Brajda Bruno, F. (2019). Transit Migration and Trauma: The Detrimental Effect of Interpersonal Trauma on Syrian Children in Transit in Italy. *Psychological Injury and Law*, *12*(1), 76–87. https://doi.org/10.1007/s12207-019-09345-x

Hanes, G., Sung, L., Mutch, R., & Cherian, S. (2017). Adversity and resilience amongst resettling Western Australian paediatric refugees: Refugee resilience and adversity. *Journal of Paediatrics and Child Health*, *53*(9), 882–888. https://doi.org/10.1111/jpc.13559

Hoge, E. A., Austin, E. D., & Pollack, M. H. (2007). Resilience: Research evidence and conceptual considerations for posttraumatic stress disorder. *Depression and Anxiety*, *24*(2), 139–152. https://doi.org/10.1002/da.20175

Hsieh, H.-F., & Shannon, S. E. (2005). Three Approaches to Qualitative Content Analysis. *Qualitative Health Research*, *15*(9), 1277–1288. https://doi.org/10.1177/1049732305276687

Kangaslampi, Samuli & Garoff, Finn & Peltonen, Kirsi. (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. 10.1186/s12888-015-0520-z.

Khawaja, N. G., Ibrahim, O., & Schweitzer, R. D. (2017). Mental Wellbeing of Students from Refugee and Migrant Backgrounds: The Mediating Role of Resilience. *School Mental Health*, *9*(3), 284–293. https://doi.org/10.1007/s12310-017-9215-6

Khawaja, N. G., Moisuc, O., & Ramirez, E. (2014). Developing an Acculturation and Resilience Scale for Use with Culturally and Linguistically Diverse Populations: Developing an acculturation and resilience scale. *Australian Psychologist*, *49*(3), 171–180. https://doi.org/10.1111/ap.12052

Kobasa, S. C. (1979). Stressful life events, personality, and health: An inquiry into hardiness. *Journal of Personality and Social Psychology,37, 1-11.*

Koser K. (2007). *International Migration: A Very Short Introduction*. Oxford: Oxford Univ. Press

Kuttikat, M., Vaillancourt, A., & Massey, M. (2018). Battered but bold: Sri Lankan Tamil refugee war experiences, camp challenges and resilience. *International Journal of Migration, Health and Social Care*, *14*(3), 245–259. https://doi.org/10.1108/IJMHSC-04-2017-0013

Lavie-Ajayi, M., & Slonim-Nevo, V. (2017). A qualitative study of resilience among asylum seekers from Darfur in Israel. *Qualitative Social Work: Research and Practice*, *16*(6), 825–841. https://doi.org/10.1177/1473325016649256

LeMaster, J. W., Broadbridge, C. L., Lumley, M. A., Arnetz, J. E., Arfken, C., Fetters, M. D., Arnetz, B. B. (2018). Acculturation and post-migration psychological symptoms among Iraqi refugees: A path analysis. *American Journal of Orthopsychiatry*, *88*(1), 38–47. https://doi.org/10.1037/ort0000240

Levac, D., Colquhoun, H., & O'Brien, K. K. (2010). Scoping studies: Advancing the methodology. *Implementation Science*, *5*(1). https://doi.org/10.1186/1748-5908-5-69

Liebenberg, L., & Ungar, M. (2009). *Researching resilience*. Toronto, ON, Canada: University of Toronto Press.

Longobardi, Claudio & Veronesi, Tommaso G. & Prino, Laura. (2017). Abuses, resilience, behavioural problems and post-traumatic stress symptoms among unaccompanied migrant minors: An Italian cross-sectional exploratory study. *Psychiatria i Psychologia Kliniczna*. *17*(2), 87–92. https://doi.org/10.15557/PiPK.2017.0009

Love A. (1944) *A treatise on the mathematical theory of elasticity*. Dover Publications, New York. Fourth edition.

Luthar, S. S., Cicchetti, D., & Becker, B. (2000). The construct of resilience: A critical evaluation and guidelines for future work. *Child Development*, 71, 543–562.

Luthar, S. S. (2006). Resilience in development: A synthesis of research across five
    decades. In D. Cicchetti & D. J. Cohen (Eds.), *Developmental psychopathology:*
    Risk, disorder, and adaptation (p. 739–795). John Wiley & Sons Inc.

Mampane, R. (2012). Psychometric Properties of a Measure of Resilience Among
    Middle-Adolescents in a South African Setting. *Journal of Psychology in Africa*,
    22(3), 405–408. https://doi.org/10.1080/14330237.2012.10820545

Maragel, M., & Manachi, S. (2018). The resilience of Syrian refugee children in Lebanon.
    In M. Pace & S. Sen (Eds.), *Syrian refugee children in the Middle East and*
    Europe (pp. 32–45). London: Routledge.

Mason, G., & Pulvirenti, M. (2013). Former Refugees and Community Resilience:
    "Papering Over" Domestic Violence. *British Journal of Criminology*, *53*(3), 401–
    418. https://doi.org/10.1093/bjc/azs077

Masten, A. S. (1989). Resilience in development: Implications of the study of successful
    adaptation for developmental psychopathology. In D. Cicchetti (Ed.), *The*
    emergence of a discipline: Rochester Symposium on Developmental
    Psychopathology, Vol. 1 (p. 261–294). Lawrence Erlbaum Associates, Inc.

Masten, A.S., Best. K, & Garmezy. N, (1990) "Resilience and Development:
    Contributions from the Study of Children Who Overcome Adversity"
    Development and Psychopathology 2.04
    DOI: https://doi.org/10.1017/S0954579400005812

Masten, A. S., & Braswell, L. (1991). Developmental psychopathology: An integrative
    framework. In P. R. Martin (Ed.), *Pergamon general psychology series, Vol. 164.*
    Handbook of behavior therapy and psychological science: An integrative
    approach (p. 35–56). New York, NY: Pergamon Press.

Masten, A.S., & Coatsworth, J.D. (1998). The development of competence in favorable and unfavorable environments. *American Psychologist,* 53(2), 205-220.

Masten, A.S. (2001). Ordinary Magic. *American Psychologist,* 56(3), 227-238. https://doi.org/10.1037/0003-066X.56.3.227

Masten AS, Powell JL. (2003). A resilience framework for research, policy, and practice. In S Luthar (Ed.), *Resilience and vulnerability: adaptation in the context of childhood adversities*, 1–28, Cambridge University Press, New York (2003)

Masten, A. S. (2011). Resilience in children threatened by extreme adversity: Frameworks for research, practice, and translational synergy. *Development and Psychopathology*, *23*(2), 493–506. https://doi.org/10.1017/S0954579411000198

Masten, A. S. (2014). Global Perspectives on Resilience in Children and Youth. *Child Development*, *85*(1), 6–20. https://doi.org/10.1111/cdev.12205

Mays, N., Roberts, E., & Popay, J. (2001). Synthesising research evidence. In N. Fulop, P. Allen, A. Clarke, & N. Black (Eds.), Studying the Organisation and delivery of health services: *Research methods*. London: Routledge.

McNamara, P. M. (2013). Adolescent suicide in Australia: Rates, risk and resilience. *Clinical Child Psychology and Psychiatry*, *18*(3), 351–369. https://doi.org/10.1177/1359104512455812

Merriam-Webster's collegiate dictionary (10th ed.). (1993). Springfield, MA: Merriam-Webster.

Merriam-Webster's collegiate dictionary (n.d.) Resilience. Retrieved from: https://www.merriam-webster.com/dictionary/resilience

Mujeeb, A., & Zubair, A. (2012). Resilience, Stress, Anxiety and Depression among Internally Displaced Persons Affected by Armed Conflict. *Pakistan Journal of Social & Clinical Psychology* 9:20–6.

Nguyen-Gillham, V., Giacaman, R., Naser, G., & Boyce, W. (2008). Normalising the abnormal: Palestinian youth and the contradictions of resilience in protracted conflict. *Health and Social Care in the Community*, 16, 291–298. https://doi.org/10.1111/j.1365-2524.2008.00767.x

OHCHR, (n.d.) Convention on the Rights of the Child. Retrieved from: https://www.ohchr.org/en/professionalinterest/pages/crc.aspx

Oshio, A., Kaneko, H., Nagamine, S., & Nakaya, M. (2003). Construct Validity of the Adolescent Resilience Scale. *Psychological Reports*, 93: 1217–1222

Ouzzani M, Hammady. H, Fedorowicz. Z, & Elmagarmid A, (2016) Rayyan- a web and mobile app for systematic reviews. *Systematic Reviews* 5:210, DOI: 10.1186/s13643-016-0384-4

Panter-Brick, C. (2014). Health, Risk, and Resilience: Interdisciplinary Concepts and Applications. *Annual Review of Anthropology*. 43. 431-448.

Panter-Brick, C., Hadfield, K., Dajani, R., Eggerman, M., Ager, A., & Ungar, M. (2018). Resilience in Context: A Brief and Culturally Grounded Measure for Syrian Refugee and Jordanian Host-Community Adolescents. *Child Development*, *89*(5), 1803–1820. https://doi.org/10.1111/cdev.12868

Panter-Brick, C., & Leckman, J. F. (2013). Editorial Commentary: Resilience in child development - interconnected pathways to wellbeing. *Journal of Child Psychology and Psychiatry*, *54*(4), 333–336. https://doi.org/10.1111/jcpp.12057

Pham, M. T., Rajić, A., Greig, J. D., Sargeant, J. M., Papadopoulos, A., & McEwen, S. A. (2014). A scoping review of scoping reviews: Advancing the approach and enhancing the consistency. *Research Synthesis Methods*, *5*(4), 371–385. https://doi.org/10.1002/jrsm.1123

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. https://doi.org/10.1001/jama.294.5.602

Prince-Embury, S., & Saklofske, D. H. (2013). Resilience in children, adolescents, and adults. New York: Springer.

Reich, J. W., Zautra, A. J., & Hall, J. S. (Eds.). (2010). Handbook of adult resilience. The Guilford Press.

Ritchie, J., & Spencer, L. (1994). Qualitative data analysis for applied policy research. In A. Bryman & R. G. Burgess (Eds.), *Analysing qualitative data.* London: Routledge

Rutter, M. (1979). Protective factors in children's response to stress and disadvantage. In M.W. Kent and J.E. Rolf (Eds.), *Primary Prevention of Psychopathology. Volume III: Social Competence In Children.* University Press of New England.

Rutter M. (1985). Resilience in the face of adversity: protective factors and resistance to psychiatric disorders. *Br J Psych* 147:598–611.

Rutter, M. (1987). Parental mental disorder as a psychiatricrisk factor. In R. Hales & A. Frances (Eds.), *American Psy-chiatric Association annual review* (Vol., 6, pp. 647–663).Washington, DC: American Psychiatric Press, Inc.

Rutter, M. (2003). Genetic influences on risk and protection: Implications for understanding resilience. In S.S. Luther (Ed.), *Resilience and Vulnerability. Adaptation in the Context of Childhood Adversities.* Cambridge University Press.

Rutter, M. (2006). Implications of Resilience Concepts for Scientific Understanding. *Annals of the New York Academy of Sciences*, *1094*(1), 1–12. https://doi.org/10.1196/annals.1376.002

Rutter, M. (2012). Resilience as a dynamic concept. Development and psychopathology, 24, 335–344.

Siriwardhana, C., Abas, M., Siribaddana, S., Sumathipala, A., & Stewart, R. (2015). Dynamics of resilience in forced migration: A 1-year follow-up study of longitudinal associations with mental health in a conflict-affected, ethnic Muslim population. *BMJ Open*, *5*(2), e006000–e006000. https://doi.org/10.1136/bmjopen-2014-006000

Sleijpen, M., June ter Heide, F. J., Mooren, T., Boeije, H. R., & Kleber, R. J. (2013). Bouncing forward of young refugees: A perspective on resilience research directions. *European Journal of Psychotraumatology*, *4*(1), 20124. https://doi.org/10.3402/ejpt.v4i0.20124

Sleijpen, M., Mooren, T., Kleber, R. J., & Boeije, H. R. (2017). Lives on hold: A qualitative study of young refugees' resilience strategies. *Childhood*, *24*(3), 348–365. https://doi.org/10.1177/0907568217690031

Smith, B. W., Dalen, J., Wiggins, K., Tooley, E., Christopher, P., & Bernard, J. (2008). The brief resilience scale: Assessing the ability to bounce back. *International Journal of Behavioral Medicine*, *15*(3), 194–200. https://doi.org/10.1080/10705500802222972

Sossou MA, Craig CD, Ogren H, Schnak M, (2008) A qualitative study of resilience factors of Bosnian refugee women resettled in the southern United States. *Journal of Ethnic & Cultural Diversity in Social Work*. 17 (4): 365-385. 10.1080/15313200802467908.

Southwick S. M., Litz B. M., Charney D., Friedman M, (2011) Resilience and mental health: Challenges across the lifespan. Cambridge: Cambridge University Press

Southwick, S., Bonanno, G. A., Masten, A., Panter-Brick, C., Yehuda, R. (2014). Resilience definitions, theory, and challenges: Interdisciplinary perspectives. *European Journal of Psychotraumatology*, 5. doi: http://dx.doi/org/10.3402/ejpt.v5.25338

Suarez, E. B. (2013). Two decades later: The resilience and post-traumatic responses of Indigenous Quechua girls and adolescents in the aftermath of the Peruvian armed conflict. *Child Abuse & Neglect*, *37*(2–3), 200–210. https://doi.org/10.1016/j.chiabu.2012.09.011

Sun, J., & Stewart, D. (2007). Development of population-based resilience measures in the primary school setting. *Health Education*, *107*(6), 575–599. https://doi.org/10.1108/09654280710827957

Swaroop, S. R., & DeLoach, C. D. (2015). Voices of Trauma and Resilience: Cultural and Gender Distinctive Responses to War and Displacement in Pakistan. *Psychology and Developing Societies*, *27*(1), 1–30. https://doi.org/10.1177/0971333614564743

Tinghög, P., Malm, A., Arwidson, C., Sigvardsdotter, E., Lundin, A., & Saboonchi, F. (2017). Prevalence of mental ill health, traumas and postmigration stress among refugees from Syria resettled in Sweden after 2011: A population-based survey. *BMJ Open*, *7*(12), e018899. https://doi.org/10.1136/bmjopen-2017-018899

Tippens, J. A. (2017). Urban Congolese Refugees in Kenya: The Contingencies of
    Coping and Resilience in a Context Marked by Structural Vulnerability.
    Qualitative Health Research, *27*(7), 1090–1103.
    https://doi.org/10.1177/1049732316665348

Tol, W. A., Song, S., & Jordans, M. J. D. (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.
    https://doi.org/10.1111/jcpp.12053

Toma, G., Guetterman, T. C., Yaqub, T., Talaat, N., & Fetters, M. D. (2017). A
    systematic approach for accurate translation of instruments: Experience with
    translating the Connor–Davidson Resilience Scale into Arabic. *Methodological
    Innovations*, *10*(3), 205979911774140.
    https://doi.org/10.1177/2059799117741406

Tozer, M., Khawaja, N. G., & Schweitzer, R. (2018). Protective Factors Contributing to
    Wellbeing Among Refugee Youth in Australia. *Journal of Psychologists and
    Counsellors in Schools*, *28*(1), 66–83. https://doi.org/10.1017/jgc.2016.31

UNDP, (n.d.) Global Policy Centre on Resilient Ecosystems and desertification.
    Retrieved from: https://www.undp.org/content/undp/en/home/ourwork/global-
    policy-centres/sustainable_landmanagement.html

UNEP, (n.d.) The Global Resilience Project Retrieved from:
    https://www.unepfi.org/psi/global-resilience-project/

UNESCO, (2001) UNESCO Universal Declaration on Cultural Diversity. Retrieved from:
    http://portal.unesco.org/en/ev.php-
    URL_ID=13179&URL_DO=DO_TOPIC&URL_SECTION=201.html

Ungar, M. (2008). Resilience across cultures. *British Journal of Social Work*, 38, 218–235. http://dx.doi.org/10.1093/bjsw/bcl343

Ungar, M. (2011). The social ecology of resilience: Addressing contextual and cultural ambiguity of a nascent construct. *American Journal of Orthopsychiatry*, *81*(1), 1–17. https://doi.org/10.1111/j.1939-0025.2010.01067.x

Ungar, M., & Liebenberg, L. (2011). Assessing Resilience Across Cultures Using Mixed Methods: Construction of the Child and Youth Resilience Measure. *Journal of Mixed Methods Research*, *5*(2), 126–149. https://doi.org/10.1177/1558689811400607

Ungar, M. (2012). Researching and theorizing resilience across cultures and contexts. *Preventive Medicine,* 55, 387_389.

Ungar, M., Ghazinour, M., & Richter, J. (2013). Annual research review: What is resilience within the social ecology of human development? *Journal of Child Psychology and Psychiatry,* 54, 348–366. http://dx.doi.org/10.1111/jcpp.12025

UNHCR, (n.d.) The 1951 Refugee Convention. Retrieved from: https://www.unhcr.org/what-is-a-refugee.html

UNHCR, (2011) 21st Century Proving to Be 'Century of People on the Move', Innovative Approaches Needed to Address New Patterns of Forced Displacement, Third Committee Told. Retrieved from: https://www.un.org/press/en/2011/gashc4024.doc.htm

UNHCR, (2017a) War, violence, persecution push displacement to new unprecedented high. Retrieved from: https://www.unhcr.org/news/press/2017/6/5943ec594/war-violence-persecution-push-displacement-new-unprecedented-high.html

UNHCR, (2017b). Resilience and self-reliance from a protection and solutions
      perspective. Retrieved from:
      https://www.unhcr.org/excom/standcom/58ca4f827/resilience-self-reliance-
      protection-solutions-perspective.html

UNHCR, (2019). Global Trend Forced Displacement in 2018. Retrieved from:
      https://www.unhcr.org/statistics/unhcrstats/5d08d7ee7/unhcr-global-trends-
      2018.html

Wagnild G. M., Young H. M. Development and psychometric evaluation of the
      Resilience Scale. *Journal of Nursing Measurement* 1993; 1: 165–178

Werner, E. E. (1993). Risk, resilience, and recovery: Perspectives from the Kauai
      Longitudinal Study. *Development and Psychopathology*, *5*(4), 503–515.
      https://doi.org/10.1017/S095457940000612X

Werner, E. E. (1997). Vulnerable but invincible: High-risk children from birth to
      adulthood. *Acta Paediatrica, 86,* 103–105. doi:10.1111/j.1651-
      2227.1997.tb18356.x

Werner, E.E. (2000). Protective factors and individual resilience. In J.P. Shonkoff & S.J.
      Meisels (Eds.), *Handbook of Early Childhood Intervention Second Edition,* (pp.
      115-134). Cambridge University Press.

Westphal, M., & Bonanno, G. A. (2007). Posttraumatic growth and resilience to trauma:
      Different sides of the same coin or different coins? *Applied Psychology: An
      International Review*, 56, 417–427.

WHO, (1946) Preamble to the Constitution of WHO as adopted by the International
      Health Conference, New York. Retrieved from: https://www.who.int/about/who-
      we-are/constitution

WHO (2001a) Strengthening mental health promotion. Geneva, World Health Organization (Fact sheet, No. 220). Retrieved from: https://www.who.int/news-room/fact-sheets/detail/mental-health-strengthening-our-response

WHO, (2017) Strengthening resilience: a priority shared by Health 2020 and the Sustainable Development Goals. Retrieved from: http://www.euro.who.int/en/countries/monaco/publications/strengthening-resilience-a-priority-shared-by-health-2020-and-the-sustainable-development-goals-2017

Wodehouse P. G. (1922) The Adventures of Sally by Herbert Jenkins, UK

Yates TM, Egeland B, Sroufe LA. 2003. Rethinking resilience: a developmental perspective. S.S. Luthar (Ed.), *Resilience and vulnerability: Adaptation in the context of childhood adversities,* Cambridge University Press, New York, NY (2003), pp. 243-266

Ziaian, T., de Anstiss, H., Antoniou, G., Baghurst, P., & Sawyer, M. (2012). Resilience and Its Association with Depression, Emotional and Behavioural Problems, and Mental Health Service Utilisation among Refugee Adolescents Living in South Australia. *International Journal of Population Research*, *2012*, 1–9. https://doi.org/10.1155/2012/485956

APPENDIX A

TABLE 1: 25-item Resilience Scale (Wagnild & Young, 1993)

		Disagree Agree
1.	When I make plans, I follow through with them.	1 2 3 4 5 6 7
2.	I usually manage one way or another.	1 2 3 4 5 6 7
3.	I am able to depend on myself more than anyone else.	1 2 3 4 5 6 7
4.	Keeping interested in things is important to me.	1 2 3 4 5 6 7
5.	I can be on my own if I have to.	1 2 3 4 5 6 7
6.	I feel proud that I have accomplished things in life.	1 2 3 4 5 6 7
7.	I usually take things in stride.	1 2 3 4 5 6 7
8.	I am friends with myself.	1 2 3 4 5 6 7
9.	I feel that I can handle many things at a time.	1 2 3 4 5 6 7
10.	I am determined.	1 2 3 4 5 6 7
11.	I seldom wonder what the point of it all is.	1 2 3 4 5 6 7
12.	I take things one day at a time.	1 2 3 4 5 6 7
13.	I can get through difficult times because I've experienced difficulty before.	1 2 3 4 5 6 7
14.	I have self-discipline.	1 2 3 4 5 6 7
15.	I keep interested in things.	1 2 3 4 5 6 7
16.	I can usually find something to laugh about.	1 2 3 4 5 6 7
17.	My belief in myself gets me through hard times.	1 2 3 4 5 6 7
18.	In an emergency, I'm someone people can generally rely on.	1 2 3 4 5 6 7
19.	I can usually look at a situation in a number of ways.	1 2 3 4 5 6 7
20.	Sometimes I make myself do things whether I want to or not.	1 2 3 4 5 6 7
21.	My life has meaning.	1 2 3 4 5 6 7
22.	I do not dwell on things that I can't do anything about.	1 2 3 4 5 6 7
23.	When I'm in a difficult situation, I can usually find my way out of it.	1 2 3 4 5 6 7
24.	I have enough energy to do what I have to do.	1 2 3 4 5 6 7
25.	It's okay if there are people who don't like me.	1 2 3 4 5 6 7

TABLE 2: Content of the Connor-Davidson Resilience Scale (Connor & Davidson, 2003) P.78

Item no.	Description
1.	Able to adapt to change
2.	Close and secure relationships
3.	Sometimes fate or God can help
4.	Can deal with whatever comes
5.	Past success gives confidence for new challenge
6.	See the humorous side of things
7.	Coping with stress strengthens
8.	Tend to bounce back after illness or hardship
9.	Things happen for a reason
10.	Best effort no matter what
11.	You can achieve your goals
12.	When things look hopeless, I don't give up
13.	Know where to turn for help
14.	Under pressure, focus and think clearly
15.	Prefer to take the lead in problem solving
16.	Not easily discouraged by failure
17.	Think of self as strong person
18.	Make unpopular or difficult decisions
19.	Can handle unpleasant feelings
20.	Have to act on a hunch
21.	Strong sense of purpose
22.	In control of your life
23.	I like challenges
24.	You work to attain your goals
25.	Pride in your achievements

TABLE 3: Child and Youth Resilience Measure—CYRM-28 (Liebenberg & Ungar, 2011) P.146

		Not at all			A lot	
1.	Do you have people you look up to?	1	2	3	4	5
2.	Do you cooperate with people around you?	1	2	3	4	5
3.	Is getting an education important to you?	1	2	3	4	5
4.	Do you know how to behave in different social situations?	1	2	3	4	5
5.	Do you feel that your parent(s) watch you closely?	1	2	3	4	5
6.	Do you feel that your parent(s) know a lot about you?	1	2	3	4	5
7.	Do you eat enough most days?	1	2	3	4	5
8.	Do you strive to finish what you start?	1	2	3	4	5
9.	Are spiritual beliefs a source of strength for you?	1	2	3	4	5
10.	Are you proud of your ethnic background?	1	2	3	4	5
11.	Do people think you are fun to be with?	1	2	3	4	5
12.	Do you talk to your family about how you feel?	1	2	3	4	5
13.	Are you able to solve problems without using illegal drugs and/or alcohol?	1	2	3	4	5
14.	Do you feel supported by your friends?	1	2	3	4	5
15.	Do you know where to go in your community to get help?	1	2	3	4	5
16.	Do you feel you belong at your school?	1	2	3	4	5
17.	Do you think your family will always stand by you during difficult times?	1	2	3	4	5
18.	Do you think your friends will always stand by you during difficult times?	1	2	3	4	5
19.	Are you treated fairly in your community?	1	2	3	4	5
20.	Do you have opportunities to show others that you are becoming an adult?	1	2	3	4	5
21.	Are you aware of your own strengths?	1	2	3	4	5

22.	Do you participate in organized religious activities?	1	2	3	4	5
23.	Do you think it is important to serve your community?	1	2	3	4	5
24.	Do you feel safe when you are with your family?	1	2	3	4	5
25.	Do you have opportunities to develop job skills that will be useful later in life?	1	2	3	4	5
26.	Do you enjoy your family's traditions?	1	2	3	4	5
27.	Do you enjoy your community's traditions?	1	2	3	4	5
28.	Are you proud to be (Nationality: _____)?	1	2	3	4	5

APPENDIX B. Search Strategies for Electronic Databases

   a) **EMBASE Search**

Entry #	Search Term
1	psychological resilience/ or resilience.mp.
2	Adaptation.mp. or adaptation/
3	"sense of coherence".mp. or "sense of coherence"/
4	emotional adjustment.mp. or psychological adjustment/
5	survivorship.mp. or survivorship/
6	resilien*.mp.
7	coping.mp. or coping behavior/
8	adapt*.mp.
9	flexib*.mp.
10	invulnerability.mp.
11	"stress resistance".mp.
12	"protective factor*".mp.
13	adjust*.mp.
14	survivor*.mp.
15	1 or 2 or 3 or 4 or 5 or 6 or 7 or 8 or 9 or 10 or 11 or 12 or 13 or 14
16	refugee/ or refugee*.mp.
17	"forced displacement".mp.
18	"forcibly displaced".mp.
19	"asylum seek*".mp.
20	stateless*.mp.
21	returnee*.mp.
22	"forced movement".mp.
23	flee.mp.
24	plight.mp.
25	"displaced person*".mp.
26	"displaced people".mp.
27	"displaced population".mp.
28	forc* migration.mp.
29	forc* movement.mp.
30	forc* displaced.mp.
31	internal* displac*.mp.

32	16 or 17 or 18 or 19 or 20 or 21 or 22 or 23 or 24 or 25 or 26 or 27 or 28 or 29 or 30 or 31
33	humanitarian crisis.mp.
34	disaster/ or disaster.mp.
35	war/ or war.mp.
36	armed conflict.mp.
37	complex disaster.mp.
38	(man made disaster or manmade disaster).mp.
39	mass disaster.mp. or mass disaster/
40	conflict.mp. or conflict/
41	environmental disaster.mp.
42	natural disaster.mp. or natural disaster/
43	climate change/ or climate disaster.mp.
44	tsunami.mp. or tsunami/
45	cyclonic storm.mp. or hurricane/
46	volcanic eruption.mp. or volcano/
47	mud slides.mp.
48	earthquake.mp. or earthquake/
49	nuclear disaster.mp. or nuclear accident/
50	radioactive hazard release.mp.
51	famine.mp. or hunger/
52	starvation.mp. or starvation/
53	fire/ or fire.mp.
54	terrorism.mp. or terrorism/
55	terrorism attacks.mp.
56	disease.mp. or diseases/
57	drought.mp. or drought/
58	emergency/ or emergency.mp.
59	(fear adj2 (race or religion or nationality or membership of a particular social group or political opinion)).mp.
60	33 or 34 or 35 or 36 or 37 or 38 or 39 or 40 or 41 or 42 or 43 or 44 or 45 or 46 or 47 or 48 or 49 or 50 or 51 or 52 or 53 or 54 or 55 or 56 or 57 or 58 or 59
61	15 and 32 and 60

b) **PsycINFO Search**

Entry #	Search Term
1	exp "RESILIENCE (PSYCHOLOGICAL)
2	exp ADAPTATION/ or Adaptation.mp.
3	"sense of coherence".mp. or exp "Sense of Coherence"/
4	emotional adjustment.mp. or exp Emotional Adjustment/
5	social adjustment.mp. or exp Social Adjustment/
6	survivorship.mp.
7	resilien*.mp.
8	exp COPING BEHAVIOR/ or coping.mp.
9	exp Adaptation/ or adapt*.mp.
10	flexib*.mp.
11	invulnerability.mp.
12	"stress resistance".mp.
13	exp Protective Factors/ or "protective factor*".mp.
14	exp Adjustment/ or adjust*.mp.
15	survivor*.mp.
16	1 or 2 or 3 or 4 or 5 or 6 or 7 or 8 9 or 10 or 11 or 12 or 13 or 14 or 15
17	refugee*.mp.
18	"forced displacement".mp.
19	"forcibly displaced".mp.
20	"asylum seek*".mp.
21	stateless*.mp.
22	returnee*.mp.
23	"forced movement".mp.
24	flee.mp.
25	plight.mp.
26	"displaced person".mp.
27	"displaced people".mp.
28	"displaced population".mp.
29	forc* movement.mp.
30	forc* migration.mp.
31	forc* displac*.mp.
32	internal* displac*.mp.
33	17 or 18 or 19 or 20 or 21 or 22 or 23 or 24 or 25 or 26 or 27 or 28 or 29 or 30 or 31 or 32

34	humanitarian crisis.mp.
35	exp DISASTERS/ or disasters.mp.
36	war.mp. or exp WAR/
37	exp Conflict/ or armed conflict.mp.
38	complex disaster.mp.
39	(man made disaster or manmade disaster).mp.
40	environmental disaster.mp.
41	natural disaster.mp. or exp Natural Disasters/
42	exp Climate Change/ or climate disaster.mp.
43	tsunami.mp.
44	(hurricane or cyclonic storms).mp.
45	volcanic eruption.mp.
46	mud slides.mp.
47	earthquake.mp.
48	nuclear accidents.mp.
49	exp Industrial Accidents/ or nuclear disaster.mp. or exp Nuclear War/
50	exp Hunger/ or famine.mp. or exp Starvation/
51	fire.mp.
52	terrorism.mp. or exp TERRORISM/
53	terrorism attacks.mp.
54	disease.mp.
55	drought.mp.
56	(fear adj2 (race or religion or nationality or membership of a particular social group or political opinion)).mp.
57	34 or 35 or 36 or 37 or 38 or 39 or 40 or 41 or 42 or 43 or 44 or 45 or 46 or 47 or 48 or 49 or 50 or 51 or 52 or 53 or 54 or 55 or 56
58	16 and 33 and 57

c) Medline Search

Entry #	Search Term
1	RESILIENCE, PSYCHOLOGICAL/
2	ADAPTATION, PSYCHOLOGICAL/
3	"Sense of Coherence"/
4	Emotional Adjustment/ or Social Adjustment/
5	SURVIVORSHIP/
6	resilien*.mp.
7	coping.mp.
8	adapt*.mp.
9	flexib*.mp.
10	invulnerability.mp.
11	"stress resistance".mp.
12	"protective factor*".mp.
13	adjust*.mp.
14	survivor*.mp.
15	1 or 2 or 3 or 4 or 5 or 6 or 7 or 8 or 9 or 10 or 11 or 12 or 13 or 14
16	refugee*. mp.
17	"forced displacement".mp.
18	"forcibly displaced".mp.
19	"asylum seek*".mp.
20	stateless*.mp.
21	returnee*.mp.
22	"forced movement".mp.
23	flee.mp.
24	plight.mp.
25	"displaced person".mp.
26	"displaced people".mp.
27	"displaced population".mp.
28	forc* migration.mp.
29	forc* movement.mp.
30	forc* displaced.mp.
31	internal* displac*.mp.
32	16 or 17 or 18 or 19 or 20 or 21 or 22 or 23 or 24 or 25 or 26 or 27 or 28 or 29 or 30 or 31
33	humanitarian crisis.mp.

34	Disasters/ or disaster.mp.
35	war.mp.
36	armed conflict.mp. or Armed Conflicts/
37	complex disaster.mp.
38	(man made disaster or manmade disaster).mp.
39	environmental disaster.mp.
40	natural disaster.mp. or Natural Disasters/
41	climate disaster.mp. or Climate Change/
42	tsunami.mp. or Tsunamis/
43	hurricane.mp. or Cyclonic Storms/
44	volcanic eruption.mp. or Volcanic Eruptions/
45	mud slides.mp.
46	earthquake.mp. or Earthquakes/
47	nuclear accidents.mp. or Radioactive Hazard Release/
48	nuclear disaster.mp.
49	famine.mp. or Starvation/
50	fire.mp. or Fires/
51	Terrorism/ or terrorism attacks.mp.
52	Disease/ or disease.mp.
53	drought.mp. or Droughts/
54	(fear adj2 (race or religion or nationality or membership of a particular social group or political opinion)).mp.
55	33 or 34 or 35 or 36 or 37 or 38 or 39 or 40 or 41 or 42 or 43 or 44 or 45 or 46 or 47 or 48 or 49 or 50 or 51 or 52 or 53 or 54
56	15 and 32 and 55

d) Web of Science Search

Entry #	Search Term
#1	(resilience) OR (resilien*)
#2	(adaptation) OR (adapt*)
#3	("sense of coherence")
#4	(emotional adjustment) OR (social adjustment)
#5	(survivorship) OR (survivor*)
#6	(coping behavior) OR (coping)
#7	(flexib*)
#8	(invulnerability) OR ("stress resistance")
#9	("protective facotors") OR ("protective factor*")
#10	(adjustment) OR (adjust*)
#11	#1 OR #2 OR #3 OR #4 OR #5 OR #6 OR #7 OR #8 OR #9 OR #10
#12	(refugee*)
#13	("forced displacement") OR ("forcibly displaced")
#14	("asylum seek*") OR (returnee*) OR (stateless*)
#15	("forced movement") OR ("forc* migration") OR ("forc* displaced") OR ("forc* displac*")
#16	("displaced person") OR ("displaced people") OR ("displaced population")
#17	(flee)
#18	("internal* displac*")
#19	(plight)
#20	#12 OR #13 OR #14 OR #15 OR #16 OR #17 OR #18 OR #19
#21	#11 AND #20
#22	("humanitarian crisis") OR (war) OR (conflict*) OR ("armed conflict*")
#23	(disasters) OR (disaster*) OR ("complex disaster*")
#24	("man made disaster*") OR ("manmade disaster*") OR ("human made disaster*")
#25	("natural disaster*") OR ("environmental disaster*") OR ("climate disaster*") OR ("climate change")
#26	(tsunami) OR (hurricane*) OR ("cyclonic storm*")
#27	("volcanic eruption") OR ("mud slides") OR (earthquake*)
#28	("nuclear accident*") OR ("nuclear disaster*") OR ("nuclear war*")
#29	("industrial accident*")

#30   (famine) OR (starvation) OR (hunger)

#31   (fire) OR (fires) OR (drought) OR (droughts)

#32   (disease*)

#33   (terrorism) OR (terrorism attack*)

#34   (fear near/2 race) OR (fear near/2 religion) OR (fear near/2 nationality)
        OR (fear near/2 membership of a particular social group) OR (fear near/2 political
        opinion)

#35   #22 OR #23 OR #24 OR #25 OR #26 OR #27 OR #28 OR #29 OR #30 OR #31 OR
        #32 OR #33 OR #34

#36   #21 AND #35

e) **CINAHL Search**

Entry #	Search Term
S1	"resilience"
S2	"resilien*"
S3	""sense of coherence""
S4	(MM "Adaptation, Psychological+") OR "adaptation"
S5	"adapt*"
S6	(MH "Social Adjustment") OR "emotional adjustment"
S7	(MH "Survivorship") OR "survivorship"
S8	(MH "Coping") OR "coping"
S9	"flexib*"
S10	"invulnerability"
S11	"stress resistance"
S12	"protective factor*"
S13	"adjust*"
S14	"survivor*"
S15	S1 OR S2 OR S3 OR S4 OR S5 OR S6 OR S7 OR S8 OR S9 OR S10 OR S11 OR S12 OR S13 OR S14
S16	"refugee*" OR (MH "Refugees")
S17	"forced displacement"
S18	"forcibly displaced"
S19	"asylum seek*"
S20	"stateless*"
S21	"returnee*"
S22	"forced movement"
S23	"flee"
S24	"plight"
S25	"displaced person"
S26	"displaced people"
S27	"displaced population"
S28	"forc* migration"
S29	"forc* movement"
S30	"forc* displaced"
S31	"internal* displac*"

S32	S16 OR S17 OR S18 OR S19 OR S20 OR S21 OR S22 OR S23 OR S24 OR S25 OR S26 OR S27 OR S28 OR S29 OR S30 OR S31
S33	S15 AND S32
S34	"humanitarian crisis"
S35	(MH "Disasters") OR "disaster*"
S36	(MH "War") OR "war"
S37	"armed conflict"
S38	"complex disaster"
S39	"man made disaster"
S40	"manmade disaster"
S41	"human made disasters"
S42	(MH "Natural Disasters") OR "environmental disasters"
S43	(MH "Climate Change") OR "climate change"
S44	"climate disaster"
S45	"tsunami"
S46	"hurricanes"
S47	"volcanic eruptions"
S48	"mud slide"
S49	"earthquake"
S50	"nuclear accidents"
S51	"nuclear disaster"
S52	"famine"
S53	(MH "Starvation") OR "starvation"
S54	(MH "Fires") OR "fire"
S55	(MH "Terrorism") OR "terrorism"
S56	"terrorism attack"
S57	(MH "Disease") OR "disease"
S58	"drought"
S59	"fear N2 race"
S60	"fear N2 nationality"
S61	"fear N2 religion"
S62	"fear N2 membership of a particular social group"
S63	"fear N2 political opinion"

S64   S34 OR S35 OR S36 OR S37 OR S38 OR S39 OR S40 OR S41 OR S42 OR S43 OR
        S44 OR S45 OR S46 OR S47 OR S48 OR S49 OR S50 OR S51 OR S52 OR S53 OR
        S54 OR S55 OR S56 OR S57 OR S58 OR S59 OR S60 OR S61 OR S62 OR S63

S65   S33 AND S64

APPENDIX C. a. Condensed Data Charting Table for Quantitative Studies

Ref.	Title	Aim/ Research Questions	Location		Demographic				Resilience scale used (if any	Resilience definition (if any)
			Country	Context	National ity	Age	N	Gender		
(Aitcheson et al., 2017)	*Resilience in Palestinian Adolescents Living in Gaza*	This study hypothesized that the influence of ongoing stress on mental health and resilience would be moderated by several protective ecological variables, defined at the individual, family, and sociocultural levels. This study predicted that resilient functioning would present as an evolving transaction (Cicchetti & Rogosch, 1996) among societal, familial, and individual-level factors in Palestinian adolescents living in Gaza.	Palestine	Refugee camps school in Gaza, Palestine	Palestinia n refugees	(17-19) mean is 17.4	335	(140 men and 195 women)	Used a mixed of scales to measure depression/resilience-measuring resilience was through measuring sociocultural, family and individual resilience factors	Resilience has been described not only as the ability to regain functionality after a stressful event (Gewirtz, Forgatch, & Weiling, 2008), but also as a set of reactions, "characterized by good outcomes despite serious threats to adaptation or development" (Masten, 2001), or processes, defined by "successful adaptation despite challenging or threatening circumstances" (Blinn-Pike, 1999) "a process, an outcome, a dynamic steady state in the face of adversity, [or] defiance of risk/vulnerability" Almedom and Glandon (2007)

(Arnetz et al., 2013)	*Resilience as a Protective Factor Against the Development of Psychopathology Among Refugees*	To examine resilience as a potential protective factor against psychological distress and PTSD among Iraqi refugees exposed to traumatic events.	USA	Not reported	Iraqi refugees and Non-Iraqi Arab immigrants	Mean is 40.86 for refugees and 40.10 for immigrants	128	(52 men and 76 women)	8-item version of the resilience scale (Wagnild & Young, 1993)	Resilience is defined as personality traits that help protect against the psychological disorders resulting from exposure to terrifying incidents, such as mass violence or deportation under life-threatening circumstances; it encompasses bouncing back and positive adaptation in the face of safety-challenging experiences (Edward and Warelow, 2005; Hoge et al., 2007).
(Cengiz et al., 2018)	*Posttraumatic stress disorder, posttraumatic growth and psychological resilience in Syrian refugees: Hatay, Turkey*	To investigate the relationship between PTSD, PTG and resilience among Syrian refugees who live outside of the refugee camps	Turkey	Refugees living outside of refugee camps	Syrian Refugees	(18-above 40)	310	(146 women and 164 men)	Connor-Davidson Resilience Scale (CD-RISC)- Arabic Version	"Resilience is the personal qualities that enable one to thrive in the face of adversity" (Connor & Davidson, 2003)
(Clukay et al., 2019)	*Association of MAOA genetic variants and resilience with psychosocial stress: A longitudinal*	To test for association of MAOA variants with different measures of psychosocial stress and mental health in a population of Syrian refugee youth who have experienced high levels of war-related	Jordan	Refugees living in urban centres	Syrian Refugees living in Jordan	(12-18) Mean is 14.2 for males and 14.5 for females	Base line: 399 First follow w	Baseline: 221 males and 178 females. First follow	12-item Child and Youth Resilience Measure (CYRM)	Not reported

120

	study of Syrian refugees	trauma. To investigate the protective aspects of a contextually specific measure of resilience that measures individual and collective strengths, resources, and capabilities.					up: 263 Second follow up: 157	up: 136 males and 127 females Second Follow up: 78 males and 79 females		
(Giorda no et al., 2019)	*Transit migration and trauma: the detrimental effect of interpersonal trauma on Syrian children in transit in Italy*	(1) Explore the mental health and well-being of asylum seeking children who had been stuck in a transit condition in the middle of their migration journey from Syria to Northern Europe. (2) Evaluate the relationship between level of exposure to war experiences (Bdose of exposure^ effect) and mental health outcomes. (3) Explore whether various types of traumatic events relate differentially to PTSD and other mental health outcomes. (4) Explore the association between resilience and mental health outcomes in the sample.	Italy	Asylum seekers living in Reception Centres	Syrian and Palestinia n Asylum seekers living in transit in Italy	(6-14) Mean is 10	271	41% girls and 59% boys	28-item Child and Youth Resilience Measure (CYRM-28) (Liebenberg & Ungar, 2009)	Resilience is the capacity of a dynamic system (individual, family, school, community, society) to withstand or recover from significant challenges that threaten its stability, viability, or development (Masten, 2011).
(LeMast er et al., 2018)	*Acculturation and Post-migration Psychological Symptoms among Iraqi Refugees: A Path Analysis*	To test four hypotheses: 1. Greater exposure to pre-migratory trauma would be associated with greater PTSD and depressive symptoms and worse acculturation 1 year after re-settlement.	USA	Refugees living in the communit y	Iraqi refugees living in USA	Mean is 33.4 at baseline Mean is 34.3 at follow up	Base line: 298 Foll ow up: 291	Not reported	8-item Resilience Scale (Wagnild & Young, 1993)	protective responses after trauma exposure that reduce its impact, promote self-esteem and self-efficacy, and may prevent subsequent adverse psychological distress

		2. Higher resilience at baseline would be associated with lower PTSD and depressive symptoms and better acculturation at 1-year follow-up. 3. Higher PTSD and depressive symptoms and a greater number of chronic disorders at baseline would be associated with poorer re-settlement outcomes at 1-year follow-up, i.e. psychological symptoms and acculturation. 4. Exposure to post-migratory stressors would be the strongest mediator of change in mental health symptoms and acculturation during the first year post-arrival.							and disorders (Arnetz et al., 2013; Edward & Warelow, 2005; Hoge, Austin, & Pollack, 2007; Rutter, 1987).
(Mujeeb & Zubair, 2012)	*Resilience, Stress, Anxiety and Depression among Internally Displaced Persons Affected by Armed Conflict*	To explore the relationship between resilience, stress, anxiety and depression among internally displaced persons. To determine the role of demographics like gender, family loss and physical conditions of placement camps in relation to stress, anxiety and depression and resilience.	Pakistan	IDPs living in camps + IDPs living in host community	Pakistanis IDPs	20-75	125	(63 men and 62 women)	Ego Resiliency Scale: The Ego Resiliency Scale (Block & Kremen, 1996)/ Urdu version of Ego Resiliency Scale (Aslam, 2007)	Resilience is conceived as an ability to maintain relatively stable healthy levels of psychological, and physical functioning (Cowen, Wyman, & Work, 1996) as well as the capacity for generative experiences and positive emotions (Coutu, 2002).

(Siriwardhana et al., 2015)	*Dynamics of resilience in forced migration: a 1-year follow-up study of longitudinal associations with mental health in a conflict-affected, ethnic Muslim population*	To investigate the stability of levels of resilience and its associations with sociodemographic and mental health exposures in a conflict-affected internal-migrant population in Sri Lanka.	Sri Lanka	Not reported	Sri Lankan IDPS	(18-65) Mean at baseline is 37.1 Mean at follow up is 38.5	Base line: 450 Foll ow up: 338	Baseline: (166 Males and 284 Females) Follow up: (116 Males and 222 Females)	14- item resilience scale (RS-14)	An ability in children and adults to adapt to, adjust to or overcome chronic or acute adversity, providing protection against the development of psychopathology (Connor & Davison 2007; Bonanno 2004)
(Suarez, 2013)	*Two decades later: The resilience and post-traumatic responses of Indigenous Quechua girls and adolescents in the aftermath of the Peruvian armed conflict*	To examine the long-term outcomes of post-traumatic responses and resilience of a sample of adult Indigenous Quechua women, who were girls or adolescents during the Peruvian armed conflict (1980–1995)	Peru	IDPs and Local living in communit y	IDPs, returnees and non-displaced persons Indigenou s Quechua living in Peru	(25-45) mean is 35.29	75	75 females	25-item Connor-Davidson Resilience Scale (CDRISC; Connor & Davidson, 2003).	The CD-RISC defines resilience as 'a measure of stress-coping ability that varies with context, age, gender, time, and culture, as well as with different types of adversity'
(Tozer et al., 2018)	*Protective Factors Contributing to Wellbeing Among Refugee Youth in Australia*	To explore the importance of psychosocial variables as contributors to two main constructs of wellbeing — an absence of psychopathology and a presence of positive wellbeing—in a culturally diverse sample of refugee children and adolescents. There were two hypotheses. First, it was hypothesized that higher levels of school connectedness,	Australia	Not reported	Refugees residing in Australia from 24 different birth countries and 32 different language groups	(12-18) mean is 15.46	93	(50 females and 43 males)	8 items from the 14-item resilience subscale of the AARS (Khawaja et al., 2014) in combination with 2 items from the Resilience Questionnaire	Resilience is defined as a modifiable dispositional capacity for appraising adversity positively that confers resistance against the development of mental illness (Arnetz et al., 2013; Edward & Warelow, 2005).

		acculturation, and resilience would predict lower levels of depression and anxiety. Second, it was hypothesized that higher levels of school connectedness, acculturation, and resilience would be associated with higher levels of positive wellbeing.						for Middle-Adolescents in Township Schools (R-MATS; Mampane, 2012).	
(Ziaian et al., 2012)	*Resilience and Its Association with Depression, Emotional and Behavioural Problems, and Mental Health Service Utilisation among Refugee Adolescents Living in South Australia*	To explore the nature and predictors of psychological resilience in refugee adolescents and the association between this resilience and depression, emotional, and behavioural problems and mental health service utilisation.	Australia	Refugees living in the community	Refugees from different nationality living in Australia	(13-17)	170	Females and Males (exact numbers are not reported)	Connor-Davidson Resilience Scale (CD-RISC Connor & Davidson, 2003).	Resilience is broadly defined as the ability of a person to successfully adapt to or recover from stressful or traumatic experiences (E. Crawford, M. O. Wright, and A. Masten)

APPENDIX C. b. Condensed Data Charting Table for Qualitative Studies

Ref.	Title	Aim/ Research Questions	Location		Demographic				Resilience definition (if any)
			Country	Context	Nationality	Age	N	Gender	
(Atallah, 2017)	*A community-based qualitative study of intergenerational resilience with Palestinian refugee families facing structural violence and historical trauma*	What is the resilience process of Palestinian refugee families exposed to historical trauma and continuous structural violence associated with the Israeli occupation? How do Palestinian refugee families transmit resilience across generations?	Palestine	UN refugee camp in occupied West Bank	Palestinian Refugees	18-90	30	Not reported	When defining resilience, Ungar (2010) highlights two key collective family processes: (a) navigating to resources that are available and accessible and (b) negotiating for culturally and contextually relevant resources.
(Chung et al., 2013)	*Resilience among single adult female refugees in Hamilton, Ontario*	To examine how resilience is promoted, reinforced, or grown among low-income single refugee women in Hamilton	Canada	Refugees living in the community	Refugees from different nationality living in Canada	18-50	9	9 females	"a class of phenomena characterized by the ability to bounce back and cope effectively in spite of serious threats to adaptation or development (M. A. Sossou et al., 2008)

(Corbin & Hall, 2019)	*Resettlement post conflict: Risk and protective factors and resilience among women in northern Uganda*	To explore risk and protective factors as well as examples of resilience among women in northern Uganda resettling after armed conflict and internal displacement	Uganda	IDPs living in the community	IDPs in Uganda	18-78	47	47 females	Resilience is defined as the ability to cope with unexpected events and pressures and achieve positive outcomes under adverse conditions (Fraser et al., 1999)
(Kuttikat et al., 2018)	*Battered but bold: Sri Lankan Tamil refugee war experiences, camp challenges and resilience*	To explore resilience among Sri Lankan Tamils living in refugee camps in India	India	Refugee camps in India	Sri Lankan Tamil refugees in India	23-54	15	6 females and 9 males	"the ability to thrive or bounce back after negative life experiences" (Mason and Pulvirenti, 2013, p. 403).
(Lavie-Ajayi & Slonim-Nevo, 2017)	*A qualitative study of resilience among asylum seekers from Darfur in Israel*	To answer the questions: What are the subjective perspectives of Darfuri refugees in Israel regarding their personal traits, and what are the social and communal resources that contributed to their capacity to survive under hardship and to adapt to the new environment of the host country?	Israel	Asylum seekers living in a detention centre	Refugees from Darfur living in Israel	27-38	8	8 males	''. . . positive adaptation, or the ability to sustain or regain mental health, despite experiencing significant adversities'' (Sleijpen et al., 2013: 2). In the context of exposure to significant adversity, resilience is both the capacity of individuals to navigate their way to the psychological, social, cultural, and physical

									resources that sustain their well-being, and their capacity individually and collectively to negotiate for these resources to be provided and experienced in culturally meaningful ways.
(Sleijpen et al., 2017)	*Lives on hold: A qualitative study of young refugees' resilience strategies*	To identify factors and processes that according to young refugees promote their resilience.	Netherland	Not reported	Refugees and Asylum seekers living in Netherland from different backgrounds	13-21	16	(8 females and 8 males)	Resilience was regarded (in line with most of the recent definitions of resilience (Southwick et al., 2015) as a process of adapting well in the face of adversity.
(Tippens, 2017)	*Urban Congolese Refugees in Kenya: The Contingencies of Coping and Resilience in a Context Marked by Structural Vulnerability*	To posit that the interplay between (a) the ability to navigate and negotiate resources (strategies) and (b) the accessibility and availability of social, political, and environmental resources (contingencies) may either foster or diminish psychosocial health/resilience. To focus on the trajectory of resilience among a sample of urban Congolese refugees in Nairobi, Kenya, illustrating that indicators such as "getting by"	Kenya	Refugees living in camps	Refugees living in Kenya from different backgrounds	18-70 mean is 38	55	28 females and 27 males	Ungar's (2008) framing of resilience that focuses on the capacity of individuals and groups to navigate and negotiate health-promoting resources, this new focus "draws us away from an understanding of resilience as embedded inside individuals. Resilience is instead successful

		and "doing better than expected" may, in fact, be viewed as resilience along a larger continuum of well-being.							development that exploits environmental contexts as they change over time" (Ungar, 2011, p. 12).

APPENDIX C. c. Condensed Data Charting Table for Mixed Methods Studies

Ref.	Title	Aim/ Research Questions	Location		Demographic				Resilience scale used (if any)	Resilience definition (if any)
			Country	Context	Nationality	Age	N	Gender		
(Almedom et al., 2007)	*Use of 'sense of coherence (SOC)' scale to measure resilience in Eritrea: interrogating both the data and the scale*	How is the adapted short form of the SOC scale (SOC-13) understood by the study participants? What are the determinants of sense of coherences (resilience) in this sample? What are the implications of the study findings for humanitarian policy and public health in Eritrea, and other post-war settings in Africa?	Eritrea	IDPs living in camps and host communities	Eritrean IDPs, voluntary mobile population and non-displaced population	Adults	265	162 females and 103 males	Adapted "Sense of Coherence" Scale- short form (SOC-13)	Not Reported
(Panter-Brick et al., 2018)	*Resilience in Context: A Brief and Culturally Grounded Measure for Syrian Refugee and Jordanian Host-Community Adolescents*	To develop and validate a brief measure of resilience for inclusion in a longitudinal survey of mental health and psychosocial wellbeing of refugee and nonrefugee groups in northern Jordan.	Jordan	Refugees living in refugee camps + Refugees living in host community + Host community	Syrian Refugees + Jordanian	11-18) Mean is 14.22 (1.81)	603	41.60 % Females and 58.40 % Males	Child and Youth Resilience Measure (CYRM)	Better than expected trajectories of healthy functioning over time (Bonanno, Westphal, & Mancini, 2011), the harnessing of resources to overcome adversity and sustain well-being (Panter-Brick, 2014; Panter-Brick & Leckman, 2013; Southwick, Litz, Charney, & Friedman, 2011; Ungar, 2011), or the capacity of a dynamic system to adapt successfully (Masten, 2014).