

Resilience, mental health, and exposure to violence among individuals with former or current experiences of being a refugee in Sweden: quantitative and qualitative studies.

Erica Mattelin



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Popular Science Summary

More than 1% of the world's population is displaced from their homes, reaching an all-time high due to ongoing conflicts, climate change, and poverty. Among the displaced, nearly half are children. Many are subjected to violence and dangerous travel. Sadly, this might continue even after resettlement, where they may face racism and discrimination.

Mental illness is prevalent among displaced individuals. About two out in ten refugee children meet the criteria for post-traumatic stress disorder (PTSD), a disorder marked by constant feelings that the world is dangerous, due to their experiences. However, little is known about the factors that impact the well-being of displaced individuals, and children's voices are often overlooked.

This thesis aims to understand the increased risk of mental illness among refugees and explore children's own experiences. The first article examines resilience and risk factors, identifying negative events such as violence or parental mental illness as health risks, yet surprisingly found no studies on resilience. Subsequently, the second article investigates the impact of childhood refugee status on adult health, revealing no apparent correlation and suggesting other factors like age and sexual/gender identity may be contributory. The third article explores the effects of belonging to multiple minority groups, uncovering a link between sexual/gender minority identity and poorer health, independent of refugee status. In the fourth article, the prevalence of mental illness among recent refugee arrivals is explored, finding that their mental health may not be as dire as previously thought. Finally, the fifth article explores children's narratives of their experiences, revealing their resilience and agency amidst adversity.

In conclusion, this thesis emphasizes the diversity within refugee children and advocates for tailored interventions to support mental health. By understanding who is at increased risk for mental health issues and addressing societal factors, we can ensure that refugees maintain their mental well-being and access the care they need.

Child-friendly summary

Did you know that more than 1% of people all around the world have been forced to leave their homes because of problems like wars, climate changes, and not having enough money? Almost half of these people are kids. They may go through really scary things like violence, dangerous trips, and seeing bad stuff. Sometimes, even in often-seen safe countries like Sweden, they might be treated badly because of who they are. Lots of these people feel sad or scared because of what happened to them. For example, about two out of every ten children who had to leave their homes have really bad feelings, like they have too much stress. We don't know a lot about why this happens or how they feel after living in Sweden for a long time. Sometimes, we don't even ask the children themselves how they feel.

In my research, I wanted to understand why refugees might feel this way and learn from children themselves. In one study, we found that bad things happening, like violence or parents being sick, can make children feel worse. But we didn't find much about how people can feel better after bad things happen. Another study looked at how being a refugee as a child might affect someone's health when they grow up. Surprisingly, we found that being a refugee as a child might not always make someone's health worse later. Another study found that being a refugee and being treated unfairly because of who you love can make someone's health worse, but it didn't matter if you were born in Sweden or came here as a refugee, it doesn't make a big difference in how you feel emotionally. In another study, we wanted to know how many young people who just arrived in Sweden as refugees felt sad or scared. We found that it's not as bad as we thought, but still not great. Finally, we asked children to tell us about their trip to Sweden. We found that many of them just want normal lives, like going to school and feeling safe. But it's hard for them. Lastly, we learned that the children took part in the decision to leave. They didn't just sit and watch

Abstract

Studies indicate that individuals with current or former experiences of being a refugee are more likely to have experienced adverse events, like violence, and face mental health challenges in their host countries. After arrival in host countries, people with refugee experiences often confront various post-migration adversities like discrimination. However, research in this area has been hampered by limitations and a lack of child perspective. This thesis aims to examine both pre-, peri- and post-migration factors that impact the health, well-being, and experiences of children and adults who have migrated to Sweden as refugees.

Article I is a systematic review of Nordic studies on resilience, risk and protective factors for health in refugee children. We found that adversity was consistently identified as a risk factor for poorer health, but otherwise, findings were inconsistent. No study explicitly examined resilience. **Article II** examined the relationship between refugee experiences in childhood and health in adulthood in a nationally representative sample. The study found no clear link between childhood refugee experiences and worse health in adulthood. **Article III** investigated differences in health and health-related behaviours between sexual and gender minority refugees, migrants, and Swedish/Western-born individuals and their heterosexual peers. We found higher rates of mental and general ill-health and worse health-related behaviours in sexual- and gender-minority individuals regardless of whether they were refugees, migrants, or Swedish and Western-born. Surprisingly, our study revealed no indications of inferior health outcomes among refugee or migrant sexual and gender minorities in comparison to Swedish/Western-born individuals. **Article IV** investigated mental health and functioning of refugee children and young adults in Sweden. We found lower rates of mental ill-health than previously reported in other studies on refugee children and young adults. Unaccompanied refugee children had worse outcomes than those accompanied. **Article V** explored the experiences of refugee children and their agency in constructing their own lives during

migration. We found that child refugees express a longing for a good life and demonstrate active agency despite facing diverse challenges.

Overall, the prevalence rates for mental ill-health were lower than in many previously published studies even though the prevalence rates are higher than in many studies published on the general population of children in Sweden. Further, the results suggest that these effects are transient. The studies highlight the need to focus on the heterogeneity of the population, for example, by addressing factors that pose a risk to health and rights in refugee children and adults. Moreover, the research emphasizes the importance of adopting a perspective that simultaneously acknowledges both the strengths and vulnerabilities of refugee children. Additionally, this perspective should recognize individual differences, rights, and goals.

Sammanfattning

Tidigare forskning har visat att personer med nuvarande eller tidigare erfarenheter av flykt löper större risk att erfara negativa händelser och att drabbas av psykisk ohälsa. Efter flykten kan även motgångarna fortsätta i det nya landet exempelvis i form av diskriminering. Forskningen inom detta område har dock begränsats av metodologiska brister och en avsaknad av barnperspektiv. Denna avhandling syftar till att belysa både pre-, peri- och postmigratoriska faktorer som påverkar hälsa, välbefinnande och upplevelser hos barn och vuxna som har flytt till Sverige.

Artikel I är en systematisk översikt av studier om resiliens och risk- och skyddsfaktorer för fysisk och psykisk hälsa hos barn på flykt i de nordiska länderna. Vi fann att olika typer av negativa livshändelser genomgående identifierades som en riskfaktor för försämrad hälsa, medan resultaten för andra faktorer var inkonsekventa. Ingen studie undersökte uttryckligen resiliens. **I artikel II** undersöktes sambandet mellan att ha flytt i barndomen och senare hälsoutfall som vuxen i ett nationellt representativt urval. Studien fann ingen tydlig koppling mellan erfarenhet av flykt i barndomen och negativa hälsoutfall i vuxen ålder när man kontrollerade för störvariabler. **Artikel III** undersökte hälsa och hälsorelaterade beteenden hos flyktingar och migranter i jämförelse med de som är födda i Sverige eller annat land i väst som identifierar sig som homosexuella, bisexuella, transpersoner, personer med queera uttryck och identiteter. Vi fann högre nivåer av ohälsa och hälsorelaterade beteenden för sexuella och könsminoriteter oavsett om man var flykting, migrant eller född i Sverige eller annat land i väst. Vi fann dock inga bevis för sämre hälsa hos flyktingar- eller migranter jämfört med de födda i Sverige eller annat land i väst. **Artikel IV** undersökte förekomst av psykisk ohälsa och funktionsförmåga hos barn på flykt och unga vuxna på flykt i Sverige. Vi fann lägre förekomst av psykisk ohälsa än vad som tidigare rapporterats i andra studier av barn och unga vuxna på flykt. Ensamkommande barn hade sämre hälsa än barn som anlänt i familj. **Artikel V** utforskade barns upplevelse och deras förmåga att forma sina egna

liv under flykten. Vi fann att barn som befinner sig på flykt, trots att de står inför olika utmaningar, uttrycker en längtan efter ett gott liv och visar aktiv handlingskraft.

Sammantaget var prevalensen av psykisk ohälsa lägre än vad som observerats i många tidigare publicerade studier, även om den fortfarande var högre än många studier om barn födda i Sverige. Vidare tyder resultaten på att dessa effekter kanske inte är permanenta. Studierna belyser behovet av att uppmärksamma gruppens heterogenitet avseende psykisk ohälsa, exempelvis genom att hantera faktorer som utgör risker för ohälsa och rättigheter hos både barn och vuxna på flykt. Slutligen betonar forskningen vikten av ett nyanserat perspektiv som erkänner både sårbarhet och motståndskraft, och som också respekterar dessa barns rättigheter, kompetenser, mål och styrkor.

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First and foremost, thank you to all the children I have had the privilege of meeting, both before and during my work on this thesis. Your presence has inspired me and has reaffirmed my belief that one can truly make a difference for and alongside you.

My journey of working with children began when I was a child myself, shaped by the influence of my grandfather, Sven. He instilled in me the belief that kindness is paramount and taught me never to judge others based on appearances alone. For example, by saying "Hello" to literally everyone in the town where I grew up. Despite my childhood anxieties and occasional demands, he provided unwavering support, showing me that with his guidance, anything was achievable. Whether it was his willingness to bike through town to read "Stefan's Bicycle" as a bedtime story or his steadfast presence outside my classroom when, at the age of seven, I resisted attending school, he never hesitated. I am deeply grateful for his presence in my life.

My grandmother, Sonja, also played a very important role in shaping my aspirations. Despite her passion for education, she was unable to pursue further studies due to her background. Witnessing her unfulfilled dreams inspired me to relentlessly pursue opportunities in her honor. Her longing fueled me to make the most of what I have and to seize every opportunity that comes my way.

Additionally, my paternal grandmother, the kindest soul living on this earth, held a very special place in my heart. Whenever I felt alone, I could always seek refuge in her comforting presence, indulging in her home-baked treats and the most soothing back scratches there were. Her untiring love always offered consolation and comfort when I needed it the most.

Furthermore, my paternal grandparents welcomed Erika, a refugee from World War II-era Germany, into their lives with open arms despite their limited resources. That selflessness and generosity continue to inspire me daily.

Thank you also to my mom, dad, and Victor, even though you mostly tease me about being a bookworm. I know that you all believe I'm wasting my life on books and serious matters. It makes me feel like, to you, it doesn't matter how things go at work. You like me best when I'm not working. And in that, I find a lot of comfort. You remind me of who I (also) am.

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Thanks also to my co-authors Frida Fröberg, Natalie Söderlind, Johan Andersson, Hania Kutabi, and Jill W Åhs. Additionally, a heartfelt thank you to the research assistants and data collectors and the colleagues at Barnafriid who have contributed to the project.

During my time as a doctoral student, I have continued to work part-time at Save the Children Sweden. Thanks to all the amazing colleagues who have helped me feel the connection between research and the children we meet in everyday life. You are true heroes, and I am so proud to be part of this organization. An extra thank you to Ulf Rickardsson and Ola Mattson for making me feel that it's okay to dream big.

Being the first doctoral student at a recently established knowledge center can be very lonely, especially when a pandemic hits. I wouldn't have survived without my self-made little doctoral support group consisting of Rebecca Grudin, Jill Åhs, and Elisabeth Paul. Thank you for standing by me through both the highs and the lows. And a special thank you to Elisabeth for everything! You are a rock!

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When I applied for the doctoral program, I was pregnant, and my job interview had to be postponed because I gave birth to Siri. Towards the end, Hjalmar came along and delayed the dissertation. One might think that being a parent and a doctoral student is challenging. And indeed, it is, in practical terms. But I can't thank you enough for coming just now and as you are. It hasn't been possible to focus on work when I've been with you, Siri, because your personality fills up the whole room. It is only you when I'm with you. And you, Hjalmar, who came as a big cloud with many kilos of love after a tough year with Kristofer's illness. You have never been an obstacle – just an opportunity to look up from the computer and realize that life is happening now and that you both are the most important.

Finally, my living Sven Mattelin – Kristofer. As a wise woman said:” There's nothing we can't do if we work hard, never sleep, and shirk all other responsibilities in our lives”. Thank you for keeping me and the rest of our life afloat. I love you.

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Introduction

Since childhood, I've known that I wanted to work with society's most vulnerable children. Early on, I met a young boy while working in a school that impacted me deeply and formed the experience that, as a society, we are not doing enough. This realization has become the driving force behind my professional life: to do everything within my ability to improve society for children. In 2015, Barnafriid was formed, coinciding with landing my dream job at Save the Children. During this time, a colleague, now my best friend, handed me a copy of the Governmental decision to establish Barnafriid, saying, 'Within five years, you'll be a doctoral student at Barnafriid.' At that time, I saw this as an unattainable aspiration. However, in 2018, it became a reality as I was accepted into the doctoral program. This opportunity allowed me to combine my work in the nonprofit sector with research on children affected by adversity.

Despite my initial expectations of the doctoral program being more about statistics and scientific methodology than recruiting and collecting data, these years have seen me sitting at frozen bus stations in the deepest parts of Småland, spending hours at families' homes waiting to see if the children are coming home since no one has a phone. There were instances of traveling 40 miles only to turn back empty-handed. Then, we were hit by a pandemic that required us to rethink everything.

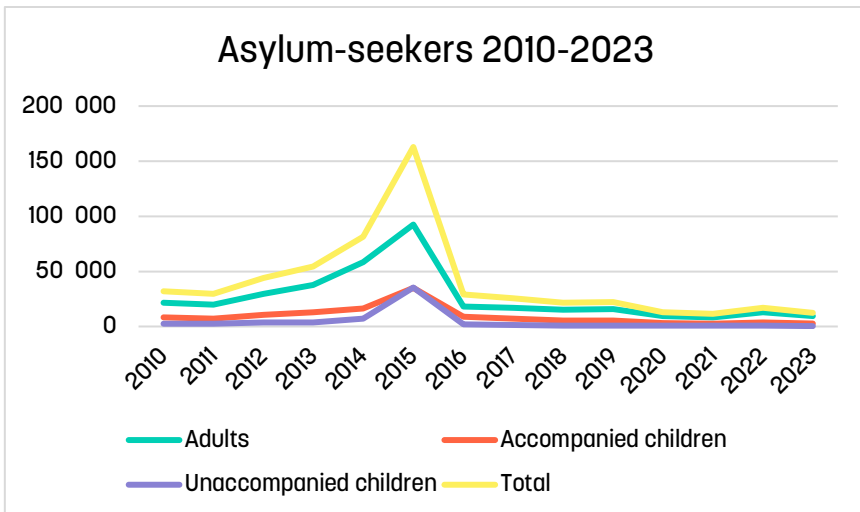
What I'm most proud of in this dissertation is that we did it. We managed to collect data from over 300 children and young people amidst a pandemic, compounded by restrictive legislation that meant that very few came to Sweden during this period. I am grateful and happy that I got to work with the colleagues I did, who made sure it eventually worked out. Learning how to connect with hard-to-reach populations, even though I thought I would primarily delve into statistics and scientific methodologies, stands out as my greatest achievement in this educational journey. Despite my initial expectations, I wouldn't have wanted it any other way.

Background

According to the United Nations High Commissioner for Refugees (UNHCR) a staggering 110 million people worldwide are forcibly displaced, with children making up 40% of this population (UNHCR, 2024). Over the past decade, approximately half a million million sought asylum in Sweden (Figure 1) (Migrationsverket [The Swedish Board of Migration], 2019, 2024). Amidst the surge of immigration in 2015, 70,384 children applied for asylum in Sweden; about half of them were unaccompanied (Migrationsverket [The Swedish Board of Migration], 2024). Since then, the number of asylum-seeking children in Sweden, except quota refugees, has gradually declined. In 2023, only 12,498 individuals sought asylum in Sweden (Migrationsverket [The Swedish Board of Migration], 2024). This decline reflects both political decisions (European Council, 2018) and the impact of the Covid-19 pandemic.

Figure 1

*Number of asylum seekers to Sweden in 2010-2023
(Migrationsverket [The Swedish Board of Migration], 2024)*



Reasons to flee

The causes behind leaving one's home to flee are multifaceted, reflecting the global landscape. Over the past years, focus has been placed on political conflicts, violence, economic turmoil, events that disturb public order, and climate change (International Organization for Migration, 2020; United Nations High Commissioner for Refugees, 2023). Moreover, reasons to flee have often been described from the views of adults (White, Ní Laoire, Tyrrell, & Carpena-Méndez, 2011), and less is known about children's perspectives and reasons. In one of the few studies on this topic, various reasons for fleeing were identified including the persecution of family or oneself, forced recruitment, war, a desire for education, and exposure to sexual violence (Hopkins & Hill, 2008).

Concepts and definitions

Refugee

The legal definition of the term *refugee* is defined under the Geneva Convention as someone who is:

owing to well-founded fear of being persecuted for reasons of race, religion, nationality, membership of a particular social group or political opinion, is outside the country of [their] nationality and is unable or, owing to such fear, is unwilling to avail [themselves] of the protection of that country; or who, not having a nationality and being outside the country of [their] former habitual residence, is unable or, owing to such fear, is unwilling to return to it (UN General Assembly, 1951).

Still, there is no internationally agreed-upon definition of the term refugee in the research literature (Bradby, Humphris, Newall, & Phillimore, 2015). In general, the term is used much more broadly than in the Geneva Convention. In this thesis, the term "refugee" incorporates individuals falling under different categories, including refugees as defined by the 1951 Refugee Convention, individuals granted asylum in Sweden, such as those in need of subsidiary protection, current asylum seekers, family reunification migrants, quota refugees, and undocumented migrants. The thesis also uses *refugee experience* to describe individuals who have

arrived in Sweden as refugees (according to the above definition) but who no longer fall under the definition since they, for example, have received Swedish citizenship.

Migrant

There is no joint definition of the term “migrant” according to international law. The International Organization on Migration (IOM) defines “migrant” as:

an umbrella term, not defined under international law, reflecting the common lay understanding of a person who moves away from his or her place of usual residence, whether within a country or across an international border, temporarily or permanently, and for a variety of reasons (International Organization for Migration, 2024).

In this thesis, migrant refers to a person who was born abroad, regardless of where the parents were born but who is not a refugee.

Unaccompanied minors

Unaccompanied minors are defined in Swedish law as children under the age of 18 who, upon arrival in the receiving country, are separated from both their parents or from another adult who may be considered to have taken the place of the parents, or who, after arrival, are without such a representative (Sveriges Riksdag [The Swedish Parliament], 1994). In earlier research, both the terms “unaccompanied” and “separated” children are used to describe children who seek asylum without their parents or guardians (Wernesjö, 2012). In this thesis, the term unaccompanied is used.

Exposure to violence among refugee children and youth

Adverse childhood experience is a term describing different events that can negatively affect children. Originally the term encompassed psychological abuse, physical abuse, sexual abuse, and household dysfunction that was divided into four categories: exposure to substance abuse, exposure to mental illness, violent treatment of mother or stepmother, and criminal behaviour (Felitti et al., 1998).

Since then, other researchers have expanded the term to include racism, witnessing violence, living in an unsafe neighborhood, bullying, and experience of living in foster care (Cronholm et al., 2015). Although there is no consensus on the definition of violence (Jud, Pfeiffer, & Jarczok, 2020), one of the most commonly used definitions by the World Health Organization (WHO) defines violence as: “the intentional use of physical force or power, threatened or actual, against oneself, another person, or against a group or community, which either results in or has a high likelihood of resulting in injury, death, psychological harm, maldevelopment, or deprivation” (Krug, Mercy, Dahlberg, & Zwi, 2002, p. 5).

Violence is still common among both children in general and refugee children in particular. One billion children experience violence every year (Hillis, Mercy, Amobi, & Kress, 2016), and a recent systematic review showed that 9-65 % of migrant children had been exposed to physical violence, and 5-20 % to sexual violence (Jud et al., 2020). Refugee children face a high risk of experiencing violence throughout every stage of the migration process, in their countries of origin, during transit to host countries, and in the country of resettlement (Isakov, Zegarac, Markovic, Trkulja, & Husremovic, 2022; Jud et al., 2020). Despite studies indicating that exposure to violence is common even after resettlement in the host country (Marshall, Schell, Elliott, Berthold, & Chun, 2005), the association between being a refugee or asylum seeker and later exposure to violence in the host country has not been extensively examined.

In addition to exposure to violence, refugee children also have an increased risk of experiencing other adverse experiences, such as detention, (Hodes, Jagdev, Chandra, & Cunniff, 2008; Müller, Büter, Rosner, & Unterhitzberger, 2019), lack of basic needs (Gusic, Cardena, Bengtsson, & Sondergaard, 2017; Müller et al., 2019; Save the Children, 2017) exposure to conflict (Derluyn, Mels, & Broekaert, 2009; Myles et al., 2018) and witnessing violence in the community (Çeri, Nasıroğlu, Ceri, & Çetin, 2018; Gormez et al., 2018; Montgomery, 2008; Montgomery & Foldspang, 2006).

Mental ill-health among refugee children and youth

Most studies on refugee children have focused on mental ill-health, specifically clinical psychiatric diagnoses (Blackmore et al., 2020b; Fazel, Reed, Panter-Brick, & Stein, 2012; Lustig et al., 2004). The most recent meta-analysis estimated a prevalence of 22.71 % for post-traumatic stress disorder (PTSD), 13.81 % for depression, and 15.77 % for anxiety disorders. Additionally, the prevalence rate for attention-deficit/hyperactivity disorder was 8.6 %, and 1.69 % for oppositional defiant disorder (Blackmore et al., 2020b). However, it is crucial to note that the prevalence rates between the studies included varied significantly. This could potentially be explained by factors such as the setting for displacement, the severity of war exposure, and study quality (Blackmore et al., 2020b; Kien et al., 2018).

Recent Swedish studies assessing the prevalence of psychiatric diagnoses in child refugees have primarily relied on questionnaire data. They have also been concentrated on symptoms of PTSD, all reporting high numbers (Gusic et al., 2017; Salari, Malekian, Linck, Kristiansson, & Sarkadi, 2017; Solberg et al., 2020). On the other hand, a relatively recent systematic review of mental illness in children in migration in European countries (Kien et al., 2018) found that self-assessment appears to yield higher prevalence rates of specific diagnoses than diagnostic interviews. The authors argue that self-assessment should be seen as a screening rather than an indication of how many young people need further support. Additionally, they emphasize the importance of obtaining reliable prevalence data for several different European countries, including Sweden (Kien et al., 2018).

Moreover, research on access to care for migrant and refugee children in Sweden has found that refugee children to a lesser extent receive a formal diagnosis and have reduced access to evidence-based treatment than children born in Sweden (Gubi, Sjöqvist, Dalman, Bäärnhielm, & Hollander, 2022; Gubi et al., 2021).

Mental ill-health among refugee adults

Similarly to refugee children and youth, refugee adults experience worse mental health outcomes. Various studies have consistently demonstrated that displaced individuals suffer from poorer mental health compared to both the host population and individuals from their home country who have not experienced migration. However, it is essential to note that the prevalence figures, similar to the figures for children, vary significantly (Bogic, Njoku, & Priebe, 2015; Fazel, Wheeler, & Danesh, 2005; Steel et al., 2009).

In a recent meta-analysis, prevalence rates were reported as follows: PTSD at 31.46 %, depression at 31.51 %, anxiety disorders at 11.09 %, and psychosis at 1.51 %. However, even in this comprehensive overview, significant methodological differences were observed among the included studies (Blackmore et al., 2020a).

While mental illness is reported as being more prevalent among refugees and migrants, there are health conditions that are less common in this population. For instance, in a Swedish study on suicide, it was found that refugees and migrants had a lower risk compared to individuals born in Sweden, with no significant difference relative to those who migrated voluntarily (Hollander et al., 2020).

Concerning substance abuse, high-quality studies are scarce (Horyniak, Melo, Farrell, Ojeda, & Strathdee, 2016). However, one large nationwide register study, found that refugees and migrants had a lower risk of substance abuse compared to individuals born in Sweden (Harris, Dykxhoorn, Hollander, Dalman, & Kirkbride, 2019b).

Social determinants and risk- and protective factors for health

The study of social determinants, including gender, food deprivation, safety and security, trauma, and education aims to highlight how the circumstances in people's life affect health outcomes (Alegría, NeMoyer, Falgàs Bagué, Wang, & Alvarez, 2018;

Lund et al., 2018). There is an ongoing discussion suggesting that immigration has not been given enough consideration as a social determinant of health (Castañeda et al., 2015). Additionally, migration may impact social determinants, adding complexity to factors like lifestyle habits and access to care (Castañeda et al., 2015).

Risk- and protective factors for mental health in children have been investigated by several original studies and synthesized in several systematic reviews (Fazel et al., 2012; Höhne, van der Meer, Kamp-Becker, & Christiansen, 2020; Reed, Fazel, Jones, Panter-Brick, & Stein, 2012). A systematic review (Fazel et al., 2012) of risk- and protective factors amongst refugee children who resettled in high-income countries identified several factors on the individual, family, community, and societal levels. Individual-level risk factors that have been found significant included exposure to premigration violence, female sex, and exposure to post-migration violence. At the family level, risk factors comprised being an unaccompanied migrant, parental psychiatric problems, single parent, poor financial support, and parental exposure to violence. Protective factors at this level were high parental support and family cohesion, same ethnic origin foster care parents, and self-reported positive school experience. At the community level, perceived discrimination and several residence changes in the host country were considered risk factors, and self-reported support from friends was a protective factor (Fazel et al., 2012).

Pre-, peri- and post-migratory factors

In research on individuals with refugee experiences, the division between pre-migration, peri-migration, and post-migration variables is frequently used. The concept of how displaced people may be exposed to different risk and protective factors throughout the migration process is described by Zimmerman and colleagues (Zimmerman, Kiss, & Hossain, 2011). Pre-migration factors include, for example, exposure to violence or other traumatic events, peri-migration factors can be exposure to dangers such as traveling

across the Mediterranean, and post-migration factors can be for example racism and discrimination in the new country.

Minority stress

The concept of minority stress refers to the unique stressor of belonging to a minority in society. The term was coined by Meyer in 1995 regarding sexual minority status (Meyer, 1995). The Minority Stress Model proposes that individuals belonging to a minority group experience stress related to their minority status encompassing exposure to stigma, discrimination, and microaggressions (Meyer, 2003). This model has been widely used to explain that stressors associated with belonging to a minority move through the same pathway for different minorities. This includes for example individuals of color, individuals with autism spectrum disorder, and those who belong to multiple minorities (Botha & Frost, 2018; Cyrus, 2017; Valentín-Cortés et al., 2020; Wei et al., 2010).

Minority stress is recognized as an underlying source of the heightened risk of mental (Cochran, Mays, & Sullivan, 2003) and physical health issues in minority groups (Flentje, Heck, Brennan, & Meyer, 2020). However, recent theories emphasize the importance of also considering both resilience and coping mechanisms. Examples of these include supportive social networks, legislation, and community empowerment (McConnell, Janulis, Phillips, Truong, & Birkett, 2018).

Despite its widespread use, the Minority Stress Model has been criticized for not being sufficiently tested (Michael Bailey, 2020), and for a lack of attention to biological factors (Heath et al., 2012).

Sexual- and gender-minority identity

Ongoing research indicates that individuals who identify as sexual- and gender minorities (SGM) face an increased risk of worse mental (Cochran et al., 2003) and physical health compared to cisgender and heterosexual peers (Flentje et al., 2020). However, much of this research originates from the United States and overlooks ethnic

minorities. The overrepresentation of North American studies presents challenges due to differences in healthcare systems and population demographics, both when compared to the European and Swedish and to countries experiencing ongoing wars and conflicts. Studies specifically addressing individuals identifying as both SGM and ethnic minorities are characterized by small sample sizes, a concentration on specific ethnic groups, and infrequent utilization of national population studies (Abu-Ras, Suárez, & Breiwish, 2021; Toomey, Huynh, Jones, Lee, & Revels-Macalinao, 2017). Furthermore, findings from these studies are inconsistent, with some indicating poorer health for those with dual minority identity and other studies indicating the opposite (Lett, Dowshen, & Baker, 2020). For refugees who identify as SGM, evidence is scarce, limited to quantitative studies with small samples and qualitative studies (White, Cooper, & Lawrence, 2019).

The intersectional framework theory suggests that the ‘intersection’ between multiple subordinated minority identities is associated with different forms of discrimination within existing social hierarchies (Bowleg, 2012). This framework suggests that studying multiple minority identities jointly is essential to understanding their impact on health inequalities. To achieve this, a comprehensive investigation, including all identity variables in the same model and testing for interactions, is necessary. The intersectional framework theory is often put forth to explain adverse health outcomes in individuals with two or more minority identities (Cyrus, 2017).

Resilience and post-traumatic growth

Resilience research initially emerged in the context of children affected by war (Masten, 2014) and has since been a topic for explaining how children, even when exposed to hardships, thrive. There is as yet no consensus regarding the definition of the phenomenon of resilience (Southwick, Bonanno, Masten, Panter-Brick, & Yehuda, 2014) and there is an ongoing debate about its usefulness. This is mainly because the term can refer to different things such as individual traits, environments, processes, and

mechanisms (Ungar, 2011). The concept has evolved and has changed from an earlier emphasis on a positive outcome in the individual, such as the absence of mental health issues to contemporary definitions (Masten, 2014). Current attempts at defining resilience include characterizing it as “the capacity of a system to adapt successfully to disturbances that threaten the viability, function, or development of the system” (Masten, 2014, p. 6).

There is an ongoing discussion that stresses the importance of considering the child’s physical and social ecology when trying to unfold resilience (Ungar, 2011). However, there is a noticeable gap in research regarding the potential downsides of resilience at the individual level, such as its impact on the stress system. Some studies and theories have begun to explore this aspect showing a prolonged negative impact on the stress-system (Brody et al., 2013).

A systematic challenge due to the lack of an agreed-upon definition of resilience is the heterogeneity and incomparableness of existing studies. For example, while several studies have assessed risk and protective strategies, gaining resilience, and interventions, the definition of “resilience” in these studies varied widely. This lack of consensus not only complicates the conceptualization of study results but also hinders the development of interventions.

Agency

There is an ongoing discussion about the conceptualization of agency. We here define agency as “an individual’s intrinsic capacity for intentional behaviour developed within the individual’s environment(s) and subject to environmental influences” (Thompson, Torres, Swanson, Blue, & Hernández, 2017, p. 2). However, a problem in research on refugees and migrants is the tendency to depict children as dependent on adults, lacking their own agency (White et al., 2011). They are often categorized simplistically as either victims or survivors (White et al., 2011). This limits our understanding of the nuanced roles and capacities children can hold. Scholars argue that this binary perspective limits

and restricts our understanding of migrant children and oversimplifies the complexity of the issue (Thompson et al., 2017; White et al., 2011). Similarly, adult migrants are sometimes characterized in governmental policy documents as passive, lacking an empowerment perspective (Dahl et al., 2020).

Current models of refugee distress

As of today, there is still a lack of theoretic explanations for the distress experienced by refugees. Initially, the primary model was a trauma model where distress was attributed to the association of war-related exposure and mental health. This model suggested that with an increasing number of adverse events, the likelihood of meeting diagnostic criteria also rises, a hypothesis partially supported by some studies (Mollica et al., 1998; Steel et al., 2009). However, the strength of the association varied greatly between studies, and confounders need to be addressed.

The discussion has since shifted towards examining the relative contributions of war-related exposure and "daily stressors". A longstanding conflict existed between models that emphasized psychosocial interventions and a medical model (trauma-based). This conflict was also present in the humanitarian field, where ongoing discussions debated whether to prioritize psychosocial interventions or trauma treatment (Inter-Agency Standing Committee, 2008).

In this context, attempts have been made to reconcile these perspectives within a single framework (Inter-Agency Standing Committee, 2008). This model highlights the importance of a layered system of complementary interventions. This involves basic security and services for all, enhancing community and family support for most, focused non-specialized services for some, and specialized services for a few (Inter-Agency Standing Committee, 2008).

It is important to acknowledge that while the mental-health and psychosocial support model has effectively tackled practical

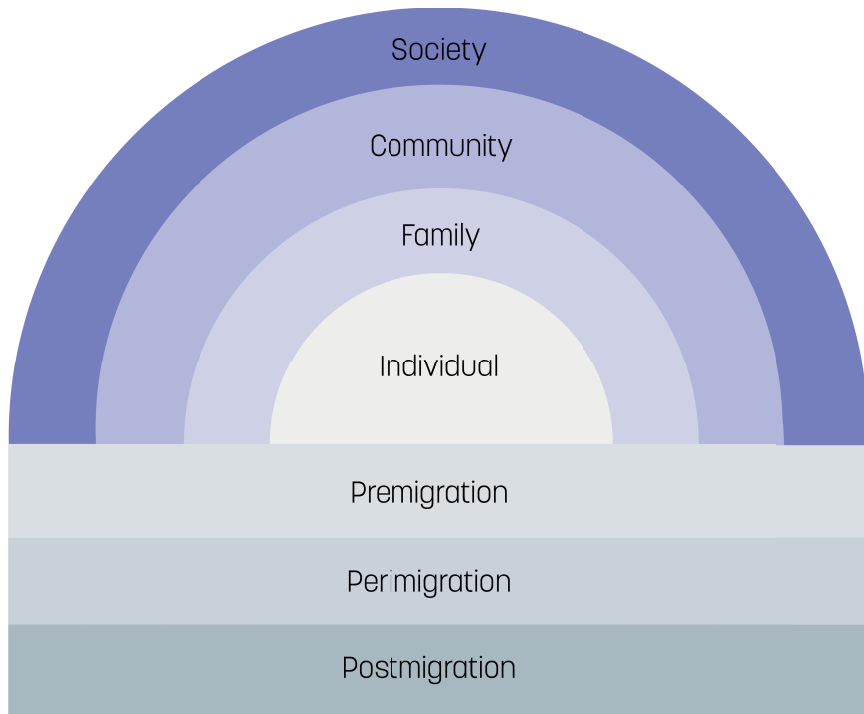
challenges, there are theoretical gaps that remain. At present, interventions frequently lack a clear theory of change, and multi-modal interventions may have clinical concepts such as PTSD as the primary outcome (Miller, Jordans, Tol, & Galappatti, 2021). Many of the current models stem from the ecological systems theory. These common denominators include emphasizing the importance of the environment for recovery, highlighting the importance of cultural and contextual aspects when understanding reactions to stress, and the importance of balancing the focus on psychosocial and psychiatric interventions (Silove, 2013).

The "ecological systems theory" theory was formulated by Uri Bronfenbrenner (Bronfenbrenner, 1977) and focuses on how individual, family-related, social, and societal factors impact mental health and well-being (Bronfenbrenner, 1977; Eriksson, Ghazinour, & Hammarström, 2018). This theory stipulates that to understand a child's development, all the ecosystems where a child grows and develops should be accounted for. Over time, the theory has evolved to emphasize proximal processes which are interactions between the individual and the environment, and the role of time, from significant moments to broader cultural influences (Bronfenbrenner & Morris, 2006).

For purposes of the research presented here, the ecological systems theory by Bronfenbrenner (Bronfenbrenner, 1977) was used and integrated with pre-, peri-, and post-migration factors within the same model (Figure 2). This approach was inspired by the work of Reed et al. (Reed et al., 2012) on risk- and protective factors in refugee children residing in low- and middle-income countries.

Figure 2

Conceptual integration of pre-, peri-, and post-migration factors within the ecological systems theory. Inspired by Reed et al (Reed et al., 2012).



Aims

The overarching aim of this thesis is to examine both pre-, peri- and post-migration factors that impact the health, well-being, and experiences of children and adults who have migrated to Sweden as refugees.

Paper I aimed to elucidate knowledge about resilience and risk and protective factors for mental and physical health among refugee children living in Nordic countries.

Paper II aimed to examine whether a refugee experience in childhood (<18 years of age) is associated with poor health and risk behaviours in adulthood (18-64 years).

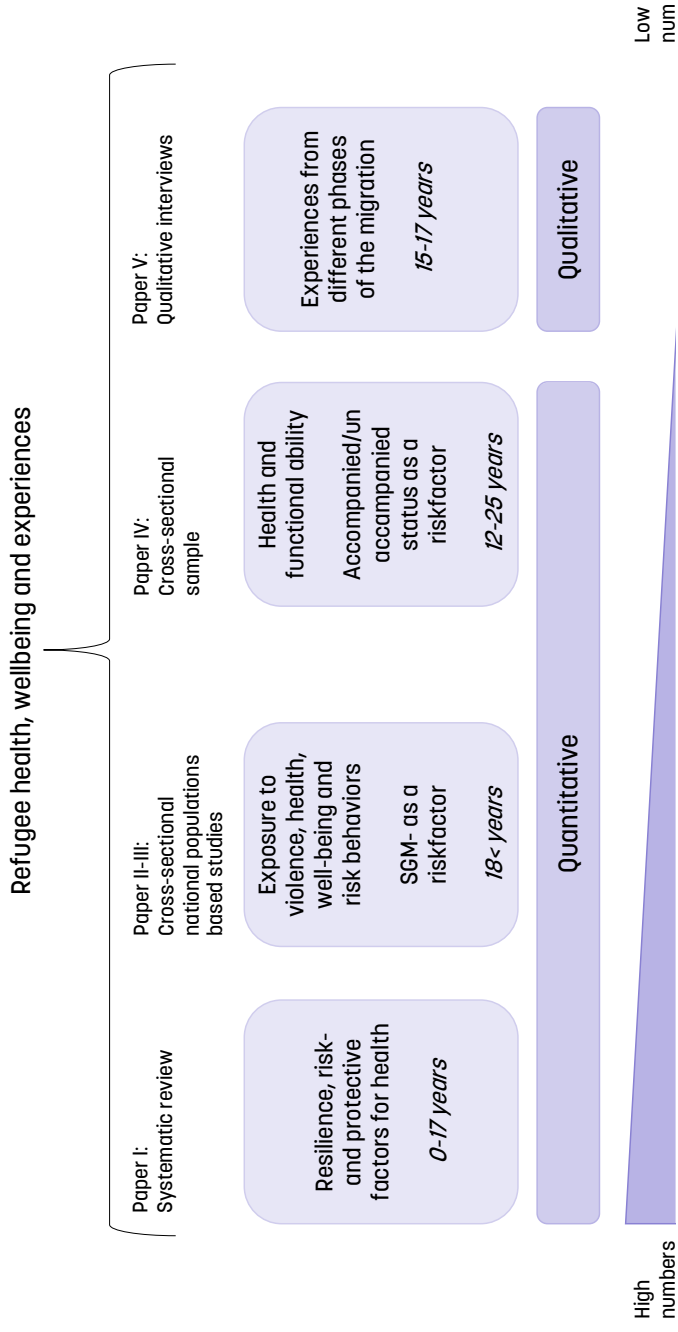
Paper III aimed to examine whether individuals with dual ethnic and sexual minority identities were more likely to have poorer mental and general health, worse health-related behaviours, and exposure to violence in comparison, to their heterosexual Swedish- and western-born cisgender peers.

Paper IV aimed to investigate diverse well-being, functional ability, and mental health indicators in a community sample of adolescent and young adult refugees and to examine differences in health by accompanied status and gender.

Paper V aimed to understand how children with a refugee background describe their experiences from different phases of the migration journey and construct their lives and agency? The study also examined whether factors such as time, gender, or asylum status have an impact on these experiences.

Figure 3

Overview of the included papers in the thesis.



Materials and methods

Table 1.

Data sources, measures, and design for the included studies

Paper	Data source	Measures	Design
I	Previously published studies on the subject	-	Systematic review
II	The Swedish National Public Health Survey 2018 and 2020. N=168,952 16–84-year-olds.	Self-assessment	Cross-sectional
III	The Swedish National Public Health Survey 2018 and 2020. N=168,952 16–84-year-olds.	Self-assessment	Cross-sectional
IV	The Long Journey to shelter-study	Clinician-distributed questionnaires and diagnostic interviews	Cross-sectional
V	In-depth interviews for The Long Journey to shelter-study	Semi-structured interviews	Qualitative study analyzed with thematic analysis

The following section describes the methods for each data source and study.

Paper I

Paper I is a systematic review following the PRISMA guidelines. The study population was child refugees residing in a Nordic country. Quantitative measures related to physical and mental health, health-related outcomes, risk and protective factors, and resilience were the focal points of interest in the study.

We extracted information on the following variables from the included papers: study origin, study design, data collection year(s), sample size, age, percent females, response rate, migrant status, country/countries of origin of the migrants, ethical approval, physical and mental health as well as other health-related outcomes, risk and protective factors, resilience, used instrument, type of informant and data on exposures to adversity, stressful life events, and/or violence. During September 2019 and December 2021, data searches were conducted across multiple databases including PubMed, Scopus, PsychINFO, Web of Science, CINAHL ERIC, Libris, and Cochrane.

Paper II & III

Survey data were obtained from the Swedish National Public Health Survey, administered by the Swedish Public Health Agency and Statistics Sweden (Folkhälsomyndigheten, 2020; Statistics Sweden, 2018). This is a postal/online survey sent out to a random sample of 16–84-year-old Swedish residents, according to the Register of the Total Population. For **paper II**, we excluded those who arrived after the age of 18, those who responded to the survey when they were under 18 years of age, and those who were over 65 at the time of completion of the questionnaire. For **paper III** we excluded participants that lacked data on ethnicity or sexual and gender identity.

Paper IV

Paper IV and **paper V** are based on the larger study *The Long Journey to shelter* (Mattelin, Khanolkar, Froberg, Jonsson, & Korhonen, 2021). For paper IV, we recruited adolescents, both unaccompanied and accompanied, and young adults via health care, social services, non-governmental organizations, and social media during 2019-2022. Inclusion criteria for adolescents were current or former asylum seekers; undocumented; or those who applied for family reunification, 12-17 years old, and had arrived in Sweden during the last six months. Inclusion criteria for young adults were current or former asylum seekers between 18 and 25 years currently living in Sweden. There was no restriction on time since arrival. Both groups needed to live in Sweden at the time of the interview.

Paper V

Paper V, enlisted adolescents aged 15 to 17, who had undergone the asylum application process in Sweden within the 18 months leading up to the interview date. Using a semi-structured interview adolescents were interviewed using the "Teller-focused interview" (Hydén, 2014). Questions during the interviews covered children's experiences in their home country and addressed various aspects of the migration journey, including their first 18 months in Sweden. Furthermore, participants were encouraged to discuss their future aspirations over the next 10 years. The total time per assessment was approximately one hour. All interviews were conducted in the child's mother tongue with the help of interpreters.

Instruments

Diagnostic interviews

In paper IV, clinical interviews were performed to assess psychiatric diagnoses.

The Mini-International Neuropsychiatric Interview for Children and Adolescents (MINI-KID/MINI) (Sheehan et al., 2010) is a structured diagnostic interview used to diagnose the most common psychiatric diagnoses in children and adolescents according to both the Diagnostic and Statistical Manual (DSM) system and the International Classification of Disease system (ICD). The Mini-International Neuropsychiatric Interview (MINI) (Sheehan et al., 1998) is the equivalent interview for adults. Both versions use short screening questions to determine whether the full battery of questions for each diagnosis needs to be completed. MINI-KID was used for the adolescent group and MINI for the young adult group in **paper IV**.

Questionnaires

For papers II and III, self-reported rating scales from the Public Health Survey were used to assess health, mental illness, and risk behaviour. **For paper IV**, clinician-administered rating scales were used to assess mental ill-health and functional ability.

Alcohol Use Disorders Identification Test-Concise (**AUDIT-C**) is a three-item questionnaire used to identify people with risky alcohol consumption (Bush, Kivlahan, McDonell, Fihn, & Bradley, 1998). Items are scored on a Likert scale ranging from 0 to 4. Total scores above 5 for women and 6 for men indicate risky consumption. We categorized AUDIT-C as at-risk alcohol use (>5 for women and >6 for men) and no at-risk alcohol use. AUDIT was used in **papers II and III**.

Child and Adolescent Trauma Screening (**CATS**) (Sachser et al., 2017) is a short questionnaire to assess exposure to violence, severe events and PTSD symptoms. It consists of 20 items that are scored on a 4-point Likert scale from 0 (never) to 3 (almost always). **In**

paper IV, PTSD symptoms in adolescents were measured using the CATS; while violence and exposure to severe events were measured with the Juvenile Victimization Questionnaire, described below.

The General Health Questionnaire (**GHQ-5**) (Goldberg et al., 1997) is a brief tool to assess psychological distress. It consists of 5 items which are scored on a 4-point Likert scale from 0 – 3. The first two answer options give the value 0, and the third and fourth options give the value 1. The sum variable can have values between 0 and 5 points. A dichotomous variable is created: if the <2, the value is set to 0, and if the sum is 2 or more, the value is set to 1. Participants with a value of 1 are defined as having reduced mental well-being (Folkhälsomyndigheten [Public Health Agency in Sweden], 2018). The GHQ-5 is used in **papers II and III**.

Global Assessment of Functioning (GAF)/ Children's Global Assessment Scale (**C-GAS**) are clinician-rated scales that assess overall functioning on a scale from 0-100 (Hall, 1995; Shaffer et al., 1983). Lower scores indicate lower functioning, GAF/C-GAS were used in **paper IV**.

The Juvenile Victimization Questionnaire (**JVQ**) (Finkelhor, Hamby, Ormrod, & Turner, 2005) is a questionnaire to assess the experience of violence and other difficult events in children and young people. It consists of 34 questions, representing five domains: conventional crime, child maltreatment, peer and sibling victimization, sexual victimization, and witnessing & indirect victimization. We used the JVQ in **study IV** and supplemented it with questions specifically tailored towards refugee experiences. In addition, we asked the number of times the child has experienced each event and when the event occurred such as before the migration, during migration, and after migration.

The **Kessler-6** (Kessler et al., 2003) is a short instrument to assess psychological distress. The 6 items are scored from 0-4, with a total of 24 points. Scores between 13-24 indicate psychological distress. The Kessler-6 was used in **papers II and III**.

The Posttraumatic stress disorder Checklist for DSM-5 (**PCL-5**) (Blevins, Weathers, Davis, Witte, & Domino, 2015) was used to assess PTSD symptoms in the young adult population of **paper IV**. The 20 items of the PCL-5 each represent one of the 20 symptoms of PTSD as described in the DSM-5. Each item is scored on a 5-point Likert scale, ranging from 0 (not at all) to 4 (extremely). Symptoms are considered to be present when scores are rated as 2 or higher. Symptom severity can be calculated using the total score.

Problem Gambling Severity Index (**PGSI**) (Ferris & Wynne, 2001) is a questionnaire used to assess gambling problems. While it consists of 9 items, the Swedish National Public Health Survey only uses four of these questions. The questions are rated on a 4-point Likert scale ranging from 0 to 3. Total scores above 0 indicate risky gambling habits (Statistics Sweden, 2018). The PGSI was used in **paper III**.

Warwick Edinburgh Mental Well-Being Scale (**WEMWBS**) is a questionnaire that assesses mental well-being over the past two weeks (Tennant et al., 2007). It consists of seven items that are scored between 1 -5. We used the single continuous summary score in the analysis. WEMWBS was used in **paper III**

WHO (five) Well-being Index (**WHO-5**) (Topp, Ostergaard, Sondergaard, & Bech, 2015) is a 5-item questionnaire used to assess well-being. Items are scored on a scale from 0 to 5. Total scores are multiplied by 4, resulting in a scale from 0 to 100, where 0 represents the worst possible while 100 represents the best possible outcome. WHO-5 was used in **paper IV**, and we used the continuous number in the analysis.

Other measurements

In **papers II and III** suicide thoughts were, measured as “Have you ever been in a situation where you seriously considered taking your own life?”. Suicide attempts were measured as “Have you ever attempted to take your own life?”. Both indicators were analysed as binary variables (No vs. Yes). In paper IV suicidal thought and

suicidal attempts were measured with MINI-KID 6.0 and MINI 7.0. Both indicators were analysed as binary variables (No vs. Yes).

General health was measured in **papers II** and **III** with the question “How would you rate your general health?”. Responses were dichotomized into good vs. poor.

Substance use was defined in **papers II** and **III** by two questions in the Public Health Survey (“Have you ever used cannabis, e.g., hashish or marijuana?”) and “Have you ever used an illicit drug other than cannabis (e.g., amphetamine, cocaine, heroin, ecstasy or LSD)?”). Responses were grouped into two categories: no substance use and any substance use.

Statistical analyses

Paper I

Following the methodology of a systematic review, statistical analyses were not performed.

Papers II

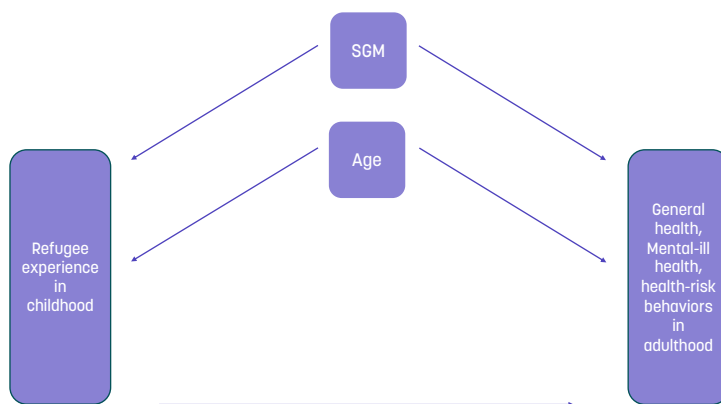
We analysed sociodemographic characteristics and mental/general health proportions across three categories of the refugee or migrant in childhood indicator (refugee experience in childhood/migrant experience in childhood/Swedish-born). We analysed differences in sociodemographic characteristics and mental/general health using Chi-Square. Multiple logistic regression was employed to assess associations with all outcomes, using those born in Sweden as the reference. Stratified models for life stages (young adulthood and later adulthood) underwent sequential adjustments for age, SGM identity, and all confounders (Figure 4). Age-stratified models were solely adjusted for SGM identity.

Analyses used population weights from Statistics Sweden to address survey design and non-response, conducted with SPSS (version 27). Calibrated weights, distinct from standard population weights, consider sociodemographic factors from the national register. The

calibration assumes the selected frame accurately represents the population.

Figure 4

The conceptual framework used to study differences in health between those with refugee experience in childhood, migrant experience in childhood, and Swedish-born (paper II).



Note. SGM=Sexual- and gender-minority identity

Paper III

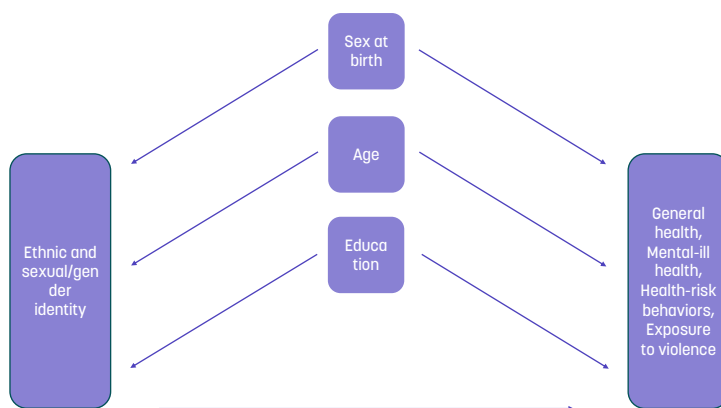
We analyzed sociodemographic characteristics, health indicators, health-related behaviours, and experiences of violence, threats, and discrimination based on dual ethnic and sexual/gender identities. Multiple logistic regression and linear regression were used to assess associations between ethnic and sexual minority identity and various outcomes, adjusting for gender at birth, age, and educational attainment (Figure 5).

We conducted sensitivity analyses using alternative exposure variables (for detailed information see paper III). Detailed distributions of health, behaviours, and exposure to violence,

threats, and discrimination were computed. Regression models for each outcome were rerun with the alternative exposure variables to examine differences between sexual identity subgroups and cisgender/transgender individuals, adjusting for confounders.

Figure 5

The conceptual framework used to study differences in health between individuals with minority identities and Swedish-born heterosexual peers (paper III).

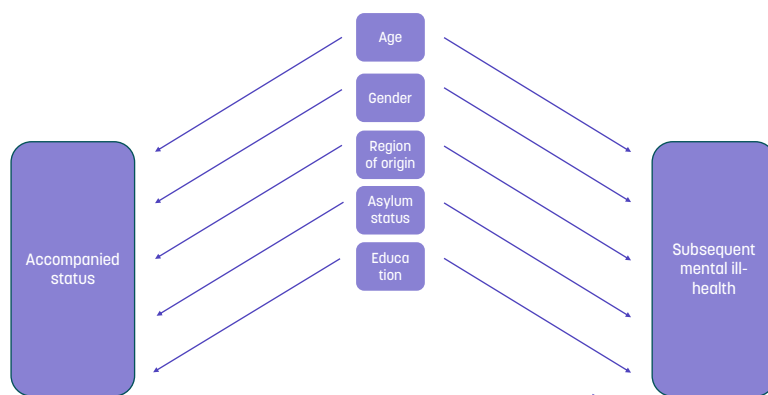


Paper IV

The analyses were conducted using Stata (V.17) and SPSS (v.28). The data were presented stratified by family accompaniment status. Initially, proportions for sociodemographic characteristics and psychiatric disorders, along with means and standard deviations for continuous variables (PTSD symptoms, well-being, and functioning), were calculated across the four groups unaccompanied/accompanied and adolescents/young adults. Associations between accompanied status and outcomes were assessed through logistic regression and linear regression, using accompanied as the reference category. Sequential adjustments for confounders were made in various models, ranging from unadjusted to those accounting for age, gender, area of origin, asylum status, and parental education (Figure 6).

Figure 6

The conceptual framework for studying disparities in health based on accompanied status.



Note. Education=Parental education

Paper V

Interviews were analyzed using NVivo qualitative research software (version 12). Data were examined through reflexive thematic analysis (Braun & Clarke, 2006; Clarke & Braun, 2018), following the six-step method. The analysis began by becoming acquainted with the data. No pre-defined codes were established; instead, codes, categories, and themes were created iteratively. According to Braun and Clarke (Braun & Clarke, 2006), reflexive thematic analysis is not bound to any specific theory. Therefore, the theory should complement the method of reflexive thematic analysis (Clarke & Braun, 2018). In this article, we adopted the perspective of agency. Additionally, we conducted further analyses of the codes based on time in Sweden, gender, and asylum status.

Results

The following sections summarize the purpose of each study and give a summary picture of the results. After that, each study is presented in detail individually.

Paper I

Aim: To elucidate knowledge about resilience and risk and protective factors for mental and physical health among refugee children living in Nordic countries.

Results: None of the included studies explicitly studied resilience. Several studies included risk- and protective factors but for most factors the results were inconclusive.

Paper II

Aim: To examine whether a refugee experience in childhood (<18 years of age) is associated with poor health and risk behaviours in adulthood (18-64 years).

Results: We found that childhood refugee experience was not associated with worse self-rated general or mental health, or more risk behaviours in adulthood, compared to non-refugee migrants or Swedish-born individuals when controlling for relevant confounders.

Paper III

Aim: To examine whether individuals with dual ethnic and sexual minority identities were more likely to have poorer mental and general health, worse health-related behaviours, and exposure to violence in comparison, to their heterosexual Swedish- and Swedish and Western-born cisgender peers, in a national population-based sample.

Results: Being a sexual- or gender minority, regardless of ethnic minority identity, was associated with worse general health and mental ill-health compared to heterosexual peers.

Paper IV

Aim: to investigate diverse well-being, functional ability, and mental health indicators in a community sample of adolescent and young adult refugees and to examine differences in health by accompanied status and gender.

Results: We found a lower prevalence of mental ill-health than previous studies on refugee children and young adults. Being unaccompanied was associated with poorer mental health compared to being accompanied.

Paper V

Aim: To understand how children with a refugee background describe their experiences from different phases of the migration journey and construct their lives and agency? The study also examined whether factors such as time, gender, or asylum status have an impact on these experiences.

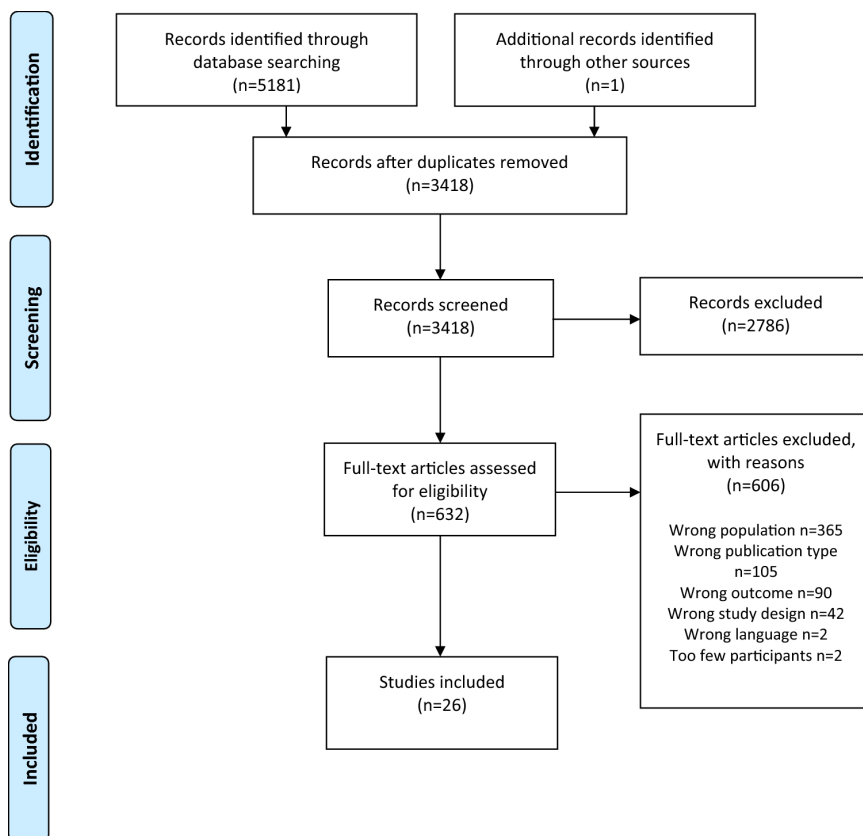
Results: The study resulted in two main themes: *Longing for a good life that cannot be taken for granted* and *Challenged agency and changing rights*.

Paper I

The inclusion process for the system review is presented in Figure 7. The review included 26 studies conducted between 1991 and 2021. Of these, 17 had a cross-sectional design. The study population exhibited heterogeneity, encompassing refugee children from diverse origins and various phases of migration. Health outcome data were predominantly collected from parents, and the utilization of standardized instruments was infrequent.

Figure 7

Prisma flow-chart diagram (Mattelin, Paidar, Söderlind, Fröberg, & Korhonen, 2022b)



Notably, none of the studies explicitly examined resilience, and only a few examined into the study of risk- and protective factors, often in a vague manner. Therefore, we clarified whether the studied associations fulfilled the basic criteria for the classification of risk- and protective factors. Among the most frequently studied factors were age, sex, and exposure to adversity, including loss and separation. The included studies generally reported positive associations between adversity, parental exposure to adversity, parental mental health problems, and the occurrence of mental health problems in children.

Other investigated risk- and protective factors, such as socioeconomic status, refugee status, time in the country of resettlement, and religion yielded inconclusive findings (Table 2).

Table 2

Included risk- and protective factors organized based on the conceptual framework. Factors in bold were identified as risk factors.

	Pre	Peri	Post
Individual	Age Sex Exposure to adversity Socioeconomic status	Exposure to adversity Duration of migration	Asylum-status
Family	Parental exposure to adversity		Parental mental ill-health
Community	Religion		
Society	Geographical origin		

Paper II

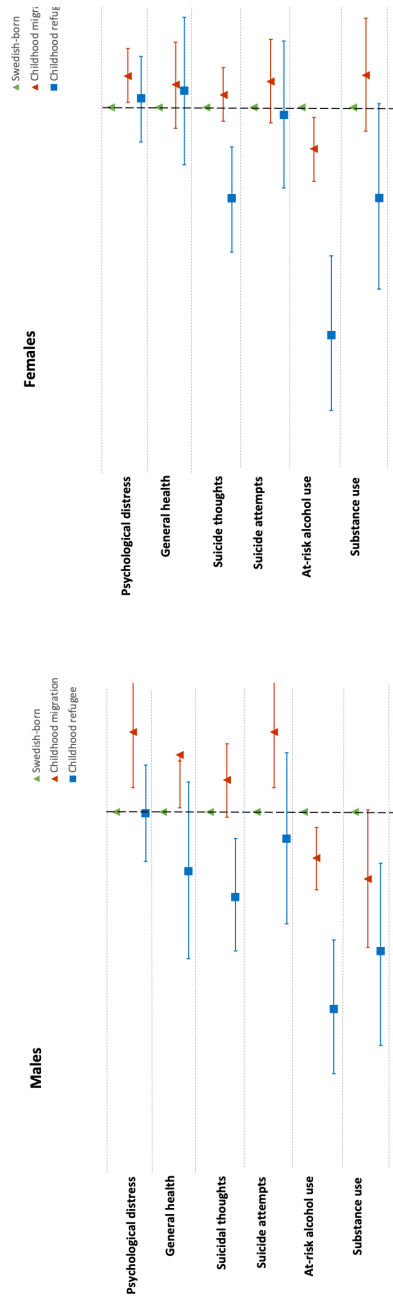
In paper II data from the National Health Survey was used. The final study sample included 89,416 individuals, 1,189 with a childhood refugee experience, 2,736 with childhood migrant experience, and 85,491 Swedish-born individuals.

Both male and female individuals with a childhood refugee experience exhibited higher proportions of current psychological distress as adults compared to non-migrant peers. They, however, demonstrated lower proportions of substance use.

After adjusting for confounders, childhood refugee experience was not associated with worse self-rated health or risk behaviours in adulthood when considering age and SGM identity (Figure 8). The results also indicated that both refugees and migrants had lower odds of at-risk alcohol use and substance use than their Swedish-born counterparts (Figure 8).

Figure 8

Odds ratios for health and risk behaviours based on childhood refugee experience and migrant childhood experience in 39,608 males and 49,808 females aged 18–64 (Mattelin, Khanolkar, Korhonen, Åhs, & Fröberg,



Paper III

In paper III data from the National Health Survey was used, excluding participants that did not provide data on ethnicity or gender identity. Within our sample, there were 143,694 Swedish- or Western-born heterosexual individuals, 4,688 Swedish- or Western-born SGM individuals, 4,300 migrant heterosexual individuals, 285 migrant SGM, 4,194 refugee heterosexual individuals, and 253 SGM individuals.

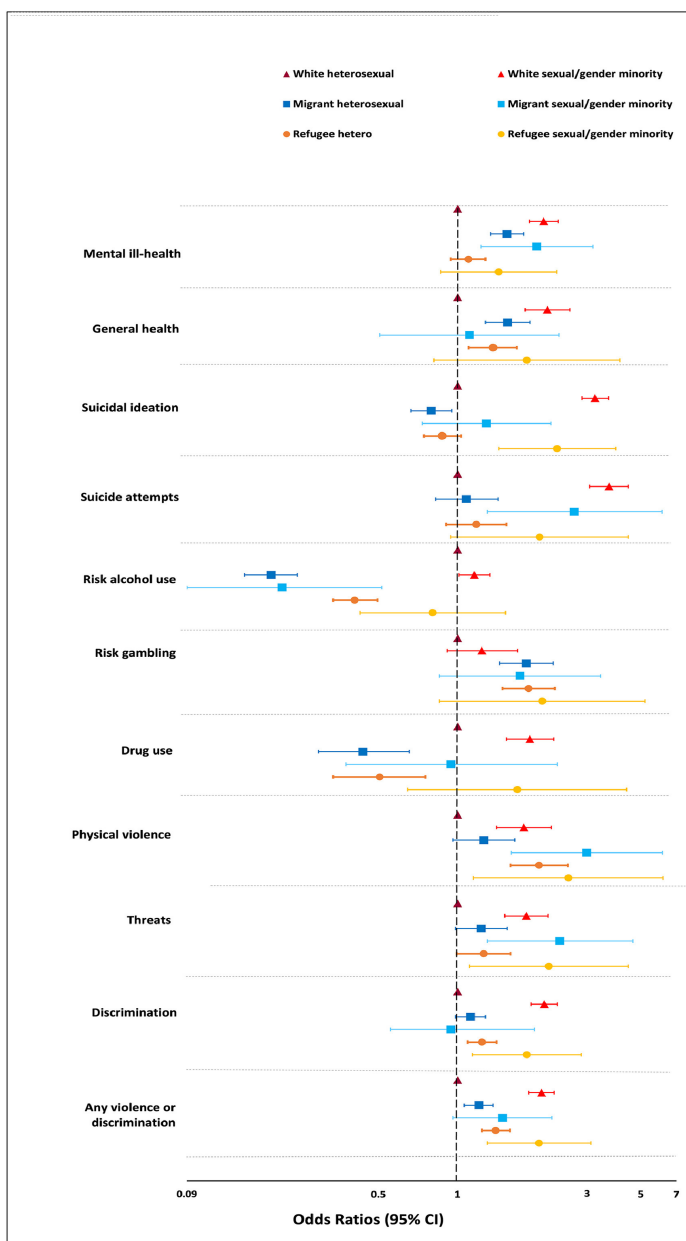
Across all sexual- and gender minority groups, higher proportions reported mental ill-health and engaged in adverse health-related behaviours compared to their heterosexual peers. For instance, 24.8% of Swedish- or Western-born sexual and gender-minority individuals, 23.3% of migrant sexual- and gender-minority individuals, and 21.0% of refugee sexual- and gender-minority individuals reported mental ill-health, in contrast to 10.6% of Swedish- or Western born heterosexual individuals.

Both Swedish- or Western-born sexual and gender-minority individuals and migrant sexual- and gender-minority individuals exhibited higher odds ratios for suicide attempts compared to Swedish- or Western-born heterosexuals, with the highest odds ratios observed among Swedish- or Western-born sexual and gender-minority individuals (OR 3.84, CI 3.23–4.55). Similar patterns were noted among refugee heterosexuals and refugee sexual- and gender-minority individuals (Figure 9).

However, refugees and migrants, were in general, less inclined to report the risk of alcohol use and drug use when compared to their Swedish or Western-born counterparts.

Figure 9

Odds ratios for health and health-related behaviours based on dual sexual/gender and ethnic (migrant and refugee) identities in 168 952 individuals aged 16-84 years who answered the Swedish National Public Health Survey in 2018-2020 (Mattelin, Fröberg, Korhonen, & Khanolkar, 2022a)

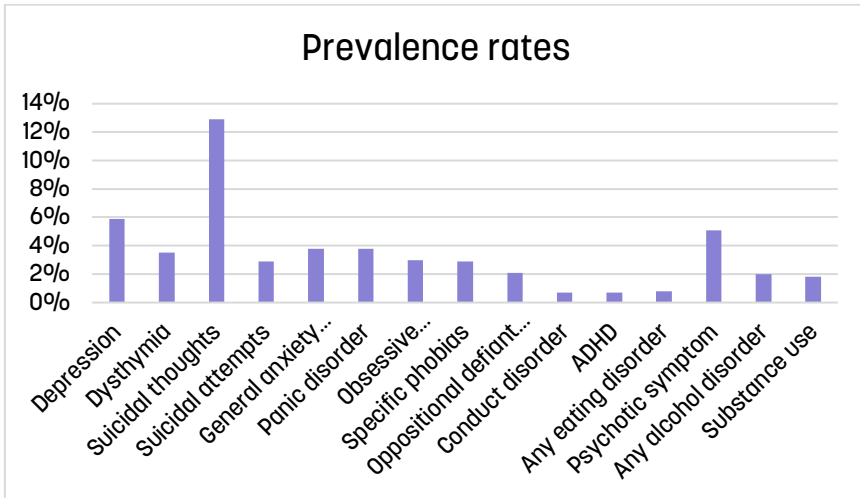


Paper IV

Paper IV is part of *the Long Journey to Shelter Study*. The sample included 291 refugee individuals, of whom 55.3 % were adolescents. The majority were accompanied (adolescents: 83.9 %, adults: 67.7 %). The mean age was 17.9 years, and 45% were female. The prevalence of mental disorders in *the Long Journey to Shelter*-sample is presented in Figure 10.

Figure 10

Prevalence rates for the most common mental disorders according to MINI respectively MINI-KID



In general, accompanied individuals exhibited better well-being and higher functional ability than unaccompanied individuals. The accompanied group also showed lower scores on PTSD. Regarding diagnoses, unaccompanied individuals had higher proportions for most outcomes, irrespective of being adolescents or young adults (e.g., 3.1 % of accompanied adolescents fulfilled the criteria for depression, compared to 10.5 % of unaccompanied).

In models adjusted for confounders, unaccompanied individuals had a higher risk for all investigated mental health diagnoses than

their accompanied counterparts. Being unaccompanied was, after adjusting for confounders, associated with lower mental well-being, lower functional ability, and higher rates of PTSD symptoms.

Paper V

Paper V is a qualitative study that is part of the ‘Long journey to Shelter study’. **Paper V** resulted in two main themes. The first theme “A longing for the good life that, however, cannot be taken for granted” had two subthemes: “Experiences of an ordinary childhood” and “Challenging factors”. The second theme “Challenged agency and changing rights” consisted of two subthemes: “The agency is being tested” and “Reaching the full age can change everything”. The themes are depicted in Figure 11. All subthemes were analysed by time in Sweden, gender, and asylum status to see if the results differed for sub-groups.

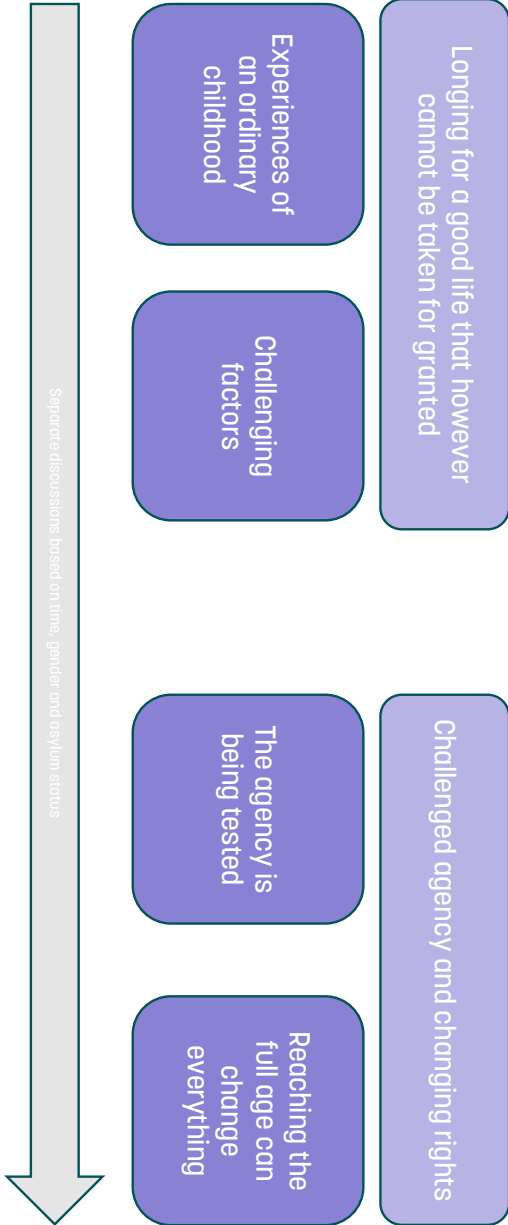
From the narratives, it is evident that children, despite the obstacles that they have faced, aspire for an ordinary childhood and a future in the same way as children not exposed to war and conflict. Furthermore, the findings indicate that children demonstrate proactive and flexible agency, adapting to different situations in contextually appropriate ways. Still, participation in decision-making and respect for a child’s rights cannot be taken for granted. Reaching the full age appears as a particularly problematic period both for children and for their families due to changes in rights and privileges.

Further, the results showed that there were qualitative changes in several themes based on time, asylum status, and gender. For example, in Sweden, children stop describing violence in terms of physical violence. Instead, they described racism, discrimination, polite exclusion, and bullying.

In summary, a shift from a predominantly negative and victim-based perception of child refugees is necessary and we need to adopt a perspective that simultaneously acknowledges both the strengths and vulnerabilities of refugee children.

Figure 11

Graphical illustration of the themes in paper V



Discussion

General discussion

Despite the large number of displaced children, over 40 million in the world, research on the health and well-being of this vulnerable population is both limited and prone to methodological shortcomings. Research in this thesis contributes to increasing knowledge about health in former and current refugee children in Sweden.

Resilience and risk- and protective factors for refugee children in the Nordic countries

The aim of **paper I** was to elucidate knowledge about resilience, and risk and protective factors for mental and physical health in refugee children living in Nordic countries. Resilience remains unstudied in refugee children in the Nordic countries. Further results on risk and protective factors were inconclusive. There was also a clear lack of definitions for several key concepts, which creates challenges for synthesizing existing research.

The systematic review showed an urgent need for more high-quality studies on risk- and protective factors. Exposure to adversities among both refugee children and their parents, and parental mental ill-health were the only variables clearly associated with subsequent mental ill-health. For all other variables like sex, age asylum-status, the results were inconclusive. Many studies lacked a clear conceptual framework for understanding the relationship between risk and protective factors and outcomes. This highlights the need for more rigorous methodological approaches in future research.

When researching vulnerable populations, such as children and refugees, ethical considerations are vital as emphasized by the Helsinki Declaration (World Medical Association, 2013). Our study underscores the importance of making sure that research with refugee children is responsive to their needs and priorities and that it cannot be conducted with non-vulnerable groups.

While the socio-ecological model is commonly used in research on refugee children (Reed et al., 2012), there is a gap in research on community and societal factors. While the individual-level factors have received considerable attention, broader aspects such as the community and societal levels need further exploration.

Conceptual challenges exist in the study of refugee children, including the ambiguity surrounding the definition of refugees and adversity. Few studies had clearly defined their population and hence we had to manually identify whether the children could be included as refugees or not. Also, descendants of refugees were often categorized as refugees. Further, there is a lack of a clear definition of adversity in the field. This ambiguity hampers our understanding of which types of adversities pose the greatest risk for mental ill-health in the population. Most of these studies use broad scales to measure adversity, treating diverse factors similarly. However, it could be that one or more specific types of adversity primarily explain the relationship between adversity and mental ill-health. Furthermore, the frequency of a child's exposure to adverse events is often overlooked in research. It would be important to develop screening questionnaires for the adversities that refugee children may experience, to develop these together with children, and to thoroughly test the psychometric properties to further understand the relationship with later health (Jud et al., 2020; Meehan, Baldwin, Lewis, MacLeod, & Danese, 2022).

In conclusion, we found a lack of research on resilience and inconclusive results on risk- and protective factors for refugee children in the Nordic countries. Moving forward, it is imperative for researchers to adopt standardized definitions and methodologies and also prioritize community and societal factors.

Associations between refugee experience in childhood and later adulthood

The objective of **paper II** was to investigate the potential correlation between a childhood refugee experience and adverse health outcomes and risky behaviours in adulthood. We did not find any correlation between having experienced being a refugee in

childhood and poorer health as an adult when we controlled for relevant confounding variables such as sexual- and gender-minority identity and age.

While our findings align with previous research indicating a lower risk of substance use among adult refugees in Sweden (Harris, Dykxhoorn, Hollander, Dalman, & Kirkbride, 2019a) they diverge from studies on healthcare use that have suggested for example higher risk of in-patient care for substance use (Manhica, Gauffin, Almqvist, Rostila, & Hjern, 2016). The contradiction with previous research suggests the need for further investigation into how different factors may influence health outcomes. It could also indicate that both self-assessment and research on healthcare use need to complement each other. The research on healthcare use consists of a highly selective population influenced, for example, by help-seeking behaviour and assessments by mental health professionals (Manhica, 2017).

Furthermore, our results contradict previous research on adversity as we found no association between refugee experience in childhood and outcomes in adulthood. This could indicate that the refugee experience itself may not be a risk factor but rather the specific exposures that are commonly associated with being a refugee.

It is also worth considering that the Swedish system, which at the time of the immigration of the participants in this paper was comparatively inclusive, may have contributed to better health outcomes. However, this would need to be studied specifically and preferably based on the idea that both community and societal factors affect health.

In summary, we found that refugee experience in childhood was not associated with worse health in adulthood. Future studies should include data for SGM identity to be able to control for this potential confounder. Further, in this paper, we used arrival at <18 as exposure. For future studies, it would also be interesting to study differences between age groups in refugee children.

Associations between refugees and migrants who self-identify as sexual and gender minority and health.

The aim of **paper III** was to examine whether individuals with dual ethnic and sexual minority identities were more likely to have poorer mental and general health, worse health-related behaviours, and exposure to violence in comparison, to their heterosexual Swedish- and western-born cisgender peers, in a national population-based sample. We found that sexual- and gender minority identity was associated with worse health and health-related behaviour for refugees, migrants, and Swedish- and Western-born. We hypothesized that individuals with multiple minority identities would have worse health than those only identifying as one minority identity, following a gradient effect. However, our analysis did not find evidence to support this hypothesis, as refugee sexual and gender minorities did not exhibit worse health outcomes compared to migrant or Swedish- or Western-born peers.

An explanation for this could be that people who arrived in Sweden as refugees are relatively better off in Sweden due to the country's more inclusive legislation including same-sex marriage and access to health care. Conversely, people who were born in Sweden might have the experience of knowing their legal rights but still have higher exposure to discrimination and violence. However, further replication and in-depth study are necessary to confirm this interpretation.

Interestingly, the results show that people who are of refugee or migrant background also had a higher risk of gambling problems. This finding has not been reported before.

In summary, identifying as a sexual minority is associated with worse health outcomes for refugees, migrants, and Swedish- and Western-born. However, we did not find evidence for a gradient effect. Since this is the first study of its kind further studies are needed. Additionally, the results suggest that public health policy in

Sweden should prioritize the specific needs of refugees belonging to sexual minority groups.

Mental health and functioning in adolescents and young adult refugees in Sweden.

Paper IV aimed to assess the frequency of mental health issues, diagnoses, symptoms of PTSD, and levels of functioning. Our findings revealed a higher prevalence of mental ill-health compared to studies of children born in Sweden, but lower numbers than studies on refugee children globally.

These results could potentially be explained by the use of a structured diagnostic interview, which has been shown to generate lower prevalence figures than questionnaires (Kien et al., 2018).

The results could also suggest that Sweden, as a host country, at the societal level has inherent protective factors, such as less frequent residency in reception centers, access to free schooling, and free healthcare. However, further investigation with different study designs and comparisons between countries is needed to confirm these hypotheses.

The results also identified being unaccompanied as a risk factor for mental health problems among refugee children. While previous research from the Nordic countries has shown varied results (Mattelin et al., 2022b), international studies have consistently indicated it as a risk factor (Fazel et al., 2012).

Lastly, in future analysis of this data, it would be interesting to investigate exposure to adversity in more detail. As stated in the above discussion of **paper I** there has been criticism about the way adversity has been measured, with all events being ascribed the same weight. A more detailed analysis may reveal that specific experiences of children and young people explain the difference between unaccompanied and accompanied minors.

How do children with refugee backgrounds describe their experiences from different phases of the migration journey and construct their lives and agency?

Paper V aimed to explore the narratives of children with a refugee background, focusing on their descriptions of various stages in the migration process and how they shape their lives and sense of agency. This paper provides new insights into the perspectives of children with diverse experiences, challenging common stereotypes and shedding light on their resilience and aspirations for the future.

One of the most prominent findings is how the children execute agency. The picture of refugee children as dependent on their parents and without agency in the decision to move is overturned. This aligns with prior research on this topic (Thompson et al., 2017).

Further, the results point to the importance of ordinariness. In most narratives, school and schooling have a prominent role. Even though the narratives shift from wanting to attend school in the country of origin to wanting to be educated in the future. These findings highlight the significance of early school enrollment and successful integration into the education system.

The children describe several things that hinder their ability to focus on getting their life and normality back. Some of these things are racism and discrimination. Racism and discrimination were identified as challenges, echoing broader societal issues faced by minority populations in Sweden (Barnombudsmannen, 2021). Another issue is the inability to reunite with their families and the threat of being separated. In this paper, the age of majority is problematic and ambivalent.

To address these challenges, there is a need for policy interventions that prioritize the well-being and integration of refugee children. Suggestions include raising the age threshold for family reunification to align with other support legislations and current research on youth development.

To conclude, in this paper, we found that children’s narratives are far from the commonly depicted picture of children as victims. This underscores the importance of further research on the heterogeneity of refugee experiences and the issues that children themselves deem important, such as access to education and successful integration into society.

Ethical considerations

Ethics approvals were received from the National Ethics Review Board. (**Paper II and III** Dnr 2020-02847. **Paper IV and V** Dnr 2018/292-31; 2018/504-32; 2020-00949; 2922-05591).

Ethical considerations are at the cornerstone of this project, especially concerning **papers IV and V**. Adolescents and young adults with refugee experience are potentially vulnerable groups due to the increased risk of being exposed to violence or other potentially traumatic events. One of the risks connected with exposure to violence is the risk of disturbing memories. However, uncontrollable disturbing memories have been rare in our studies. Instead, some participants expressed feeling listened to and appreciated the opportunity to talk without interruption. Our experiences are that children felt that it was worthwhile to participate in the studies and contribute to change in the long term.

For individuals over 18, the study has sparked reflections on the intricacies of navigating the healthcare system, exposing the challenges many faces without guaranteed access to care. Despite these complexities, we have not deemed it unethical to identify their needs, as the study has enabled referrals to non-profit organizations, demonstrating a commitment to ethical responsibility and positive outcomes.

Lack of appropriate instruments

The basis for being able to conduct high-quality research for refugee children is the possibility of using appropriate instruments. At present, however, the vast majority of instruments are designed for children in a Western context (Kohrt et al., 2011) and instruments used in global mental health are rarely validated (Akhtar, 2022).

This is problematic since validation is unlikely to be directly transferable to another context (Canino & Alegría, 2008; Jacobsen & Landau, 2003). Furthermore, symptoms may not necessarily cluster in the same way and children may experience symptoms in other ways (Canino & Alegría, 2008). Scholars have argued that the use of inappropriate measurements may even be harmful in humanitarian settings where it can lead to the recommendation of potentially harmful interventions (Wessells, 2009). Few of the instruments, if any, have been developed in collaboration with children and young people. This has previously proven to be important as it is far from certain that young people interpret questions in the same way as they are intended to (Wickström & Kvist Lindholm, 2020).

All these aspects are a shortcoming in the studies in this thesis, as the instruments are primarily designed for a Western population. This was also evident when some of the questions were asked. An example of this is that many of the children rated yes to initial questions about mania such as:

have there ever been times when you've been so happy that you've felt "wound up" or "high" or "hyperactive"? By "revved up," "high," or "hyperactive," I mean you really felt good; that you were full of energy; didn't need to sleep as much; that the thoughts were racing through your head or that you were full of ideas in MINI-KID (Sheehan et al., 2010).

In our interviews, there was a significant proportion of children who answered yes to this question regarding the day they came to Sweden while later declining all other symptoms of mania. This highlights the need for adaptation of instrument together with the study population.

This problem becomes even more complex when you consider that we are researching children from several other cultures in a Swedish context. Questions such as how long an instrument needs to be adapted arise, e.g. how many years does an individual need to live in a society for an instrument to be valid for them? And can we adapt all instruments, e.g. in population-based surveys?

Research on hard-to-reach populations

It has been argued that it is a right to be properly researched (Robson, 2011). Despite this, certain populations, notably children, face a research deficit compared to adults. Children in challenging life situations are especially underrepresented when contrasted with their counterparts in more favourable conditions (Boynton, Wood, & Greenhalgh, 2004). In addition, the research on refugee children has often had methodological flaws (Blackmore et al., 2020b). At the same time, the fact that there are populations that are methodologically more difficult to research is well established, and refugee children are one such population (Shaghaghi, Bhopal, & Sheikh, 2011). Further, the ethical considerations for researching children are stricter which sometimes causes delays in researching this often-ignored group, and children are usually considered vulnerable by ethics committees and regulations (Deps, Rezende, Andrade, & Collin, 2022) in contrast to how children themselves describe their potential role in research (Wright, 2015). It has also been argued that exclusion itself could be harmful to vulnerable populations. The argument is that the population then does not get knowledge of how an intervention works for them (Jackson, Kuhlman, Jackson, & Fox, 2019).

Data from the study *The Long Journey to Shelter* contributed to **papers IV and V**. At times, data collection felt time-consuming, complex, and almost impossible. Examples of this include multiple journeys to cities 300km away to meet study participants, or the lack of appropriate translators in the entire country. Despite multiple challenges and barriers, we recruited hundreds of children with invaluable lessons on how to conduct research in a child-friendly, more ethical, and efficient way than we knew in the beginning.

To ensure the collection of high-quality, reliable data on refugee children for future research projects, it is important that we openly share effective data collection methodologies. This often-overlooked aspect of research, hidden in unspoken knowledge, requires more discussion and collaboration among research groups. By doing so,

we can collectively advance our understanding and practices, sparing others the extensive time and financial investments associated with discovering these methods independently.

Our lessons learned during *The Long Journey to Shelter* must be translated into actionable insights. Without these strategies, we would have excluded relevant groups from our study. Examples of groups excluded are those who did not speak common languages, who were unable to travel, and participants where caregivers and/or other adults excluded them because they were too sensitive.

When reflecting on these experiences a few other valuable learnings emerge that could serve as guidance when conducting similar studies.

Firstly, a patient- and public-involvement approach would be integral, with a focus on actively engaging participants in study design and getting their input on aspects like recruitment. Secondly, the inclusion of individuals possessing relevant expertise, including language skills, experience working with the target group, and authority in collaborations, proved indispensable. Lastly, a crucial lesson was recognizing the complexities of the Swedish asylum system. This insight underscores the importance of meticulous planning tailored to the unique challenges presented by the system in question.

At the same time as we are now making these recommendations for similar studies, one can also wonder whether it only applies to similar studies or vulnerable populations. In each population, there are likely to be vulnerable participants, for example, due to economic situation or illness. Creating studies that are designed for accessibility from the onset may incur additional costs, but it is likely to yield significant benefits for the research conducted.

Challenges with labeling and classification

Another significant challenge was assigning refugee-, migrant-, or Swedish-born-status to individuals. This was explicitly clear when children and young adults in **papers IV and V** described about

how they never had their rights heard in their home countries, and traveled across continents, only to find themselves excluded from refugee or subsidiary protection status post-asylum process. The heterogeneity within the group of migrants adds to the complexity, encompassing individuals whose experiences closely mirror those of refugees but who, due to classification, are not officially recognized as such.

Reflection on the Research Approach

Conducting epidemiological research on refugee individuals has proven to be challenging and it has led me to reflect on the benefits and costs of this kind of research.

Some individuals argue that researchers within this field should focus on implementation research instead of epidemiological research (Morris, van Ommeren, & Servili, 2012). That discussion touches on one of the ethical dilemmas I have had in conducting this research. The Helsinki Declaration states that “this group should stand to benefit from the knowledge, practices or interventions that result from the research” (World Medical Association, 2013). Today, the time it takes from first gathering the data to translation to actionable public health policy is significantly long. For me, there is tension between the research deficit on the one hand and the imperative to benefit the population on the other hand. This, of course, does not diminish the value of epidemiological research, which is needed, among other things, to understand the needs of the population. However, this emphasizes the importance of involving the target group right from the planning stage to ensure the value and applicability of the research for them.

Strengths

The main strength of this thesis lies in the wide range of study methodologies including a systematic review to qualitative and quantitative methods. Furthermore, **Paper I**, a systematic review of resilience, risk- and protective factors for health, excels in clearly defining criteria for risk and protective factors. This is crucial as many studies in this field neglect these criteria, including

associations that may logically be outcomes rather than true risk- and protective factors.

The primary strength of **Paper II**, which explores associations between childhood refugee status and health in adulthood, and **Paper III**, investigating the association between multiple minority individuals and later health and exposure to violence, lies in the use of a large, highly powered, validated and nationally representative sample with recently collected data. Notably, these studies are the largest of their kind to examine the health of refugees and migrants in comparison to Swedish-born peers. The use of self-reported measures of mental and general health, and health-related behaviours are other strengths of these studies. Further, we included comparator groups for refugees/migrants and Swedish-born peers, often overlooked in such studies. The public health survey provided a unique opportunity for comparisons, contributing to the robustness of these investigations and complementing existing studies based on healthcare records.

Papers IV and V target hard-to-reach populations during the recent pandemic. Even so, the studies used a rigorous approach with semi-structured interviews. Most studies today have used questionnaires and the few studies that have used semi-structured interviews have a relatively small sample size. In a recent systematic review, the authors only identified two larger studies with this kind of methodology (Blackmore et al., 2020b). Further, we also included children from different nationalities which is unusual for this field of research.

Lastly, **paper IV** included a very wide range of data and investigated a broad spectrum of psychiatric diagnoses which is uncommon in refugee research where the focus almost always lies on internalizing problems and PTSD. It has been proposed that externalizing problems could be equally prevalent (Ventevogel, 2016). This is also important since most of the interventions for refugees in humanitarian settings focus on internalizing problems (Dawson et al., 2019) and PTSD (Jones, 2008).

Limitations

While researching hard-to-reach populations, this thesis encounters several limitations.

In **Papers II and III** we used self-assessment from the national public health survey. Self-assessments have many advantages but also built-in disadvantages. For example, the survey was only sent out in a limited number of languages, which is a shortcoming. However, it should be noted that most of the participants have lived in Sweden for a long time and thus the majority would have answered using the Swedish version of the survey. Furthermore, weights developed by Statistics Sweden were used to partly handle this underrepresentation. Another limitation is that even in large national samples with several hundred thousand participants, the number of individuals with multiple minority identities are still small. This highlights the need to collect adequately powered minority-specific data. Lastly, the lack of self-identified ethnicity is a limitation.

In **Paper IV**, a notable shortcoming lies in the sampling method, despite initial efforts to create a representative sample. This weakness was particularly evident due to challenges in recruitment, primarily involving asylum seekers.

Additionally, the intended longitudinal design faced obstacles, as follow-up became impractical due to participants' frequent changes in contact information. Future studies might benefit from exploring alternative communication channels to enhance follow-up reliability.

Another complexity arises from including asylum seekers, those granted asylum, and those in the appeal process in the sample, potentially influencing the interpretation of health outcomes. While this diverse inclusion offers insights, it also poses challenges in analyzing variations between these subgroups. Collaborating more

closely with other projects and implementing random selection methods could enhance the study's robustness.

Conclusions

This thesis aimed to highlight both pre-, peri- and post-migration factors that impact the health, well-being, and experiences of children and adults who have migrated to Sweden as refugees.

This was examined from several different angles in this thesis. **Paper I** examined risk and protective factors as well as resilience for both physical and mental health. In **Paper II**, we tried to understand how the experience of being a refugee in childhood affects subsequent health in adulthood. In **paper III**, we examined in more detail the aspect of belonging to a sexual minority and the intersection between sexual minority identity and migration status. **Paper IV** focused on the adolescents and young adults who have recently arrived in Sweden and the prevalence of mental illness in this group, as well as the difference between unaccompanied minors and those who have arrived with their families. Finally, we included children and young people's own experiences and narratives in **paper V**.

The use of semi-structured interviews revealed lower prevalence numbers for psychiatric diagnoses in children with a refugee experience than suggested in the literature. This emphasizes the importance of not solely studying children with a refugee experience with questionnaires or health care records as a proxy for psychiatric diagnoses but rather using gold-standard methods. Furthermore, it emphasizes the need for comparison groups from the country of origin and the host country since we still do not know why the prevalence numbers are lower than in previous studies.

This is especially evident in **paper II**, when the association between refugee experience in childhood and health in adulthood is no longer apparent after adjustment for confounders. Even though the narrative in both research and social debate is that refugees are a particularly burdened group. As shown in the article, the groups have higher proportions of mental illness than, for example, those born in Sweden, but the results indicate that refugee experience is perhaps not the cause of mental ill-health but other factors like SGM

identity and younger might explain worse mental health in some groups.

It also becomes clear, both when reviewing previous literature in **paper I** and interpreting results from **paper II and III**, that there are some issues with the theoretical background in the literature pertaining to children with a refugee experience. In the literature, refugee children are seen as an anomaly, excluded from child development in general. For example, it is rarely, if ever, described why the associations should be different for children with refugee experience than in the general population. There is a relatively good amount of research regarding sex differences in mental ill-health and we know that girls have a higher probability of developing internalizing symptoms, but this is not discussed in the studies examining the association between sex and mental ill-health in this field. Further, it is also unclear which confounders are considered important to control for. For example, very few studies control for SGM identity.

Lastly, it becomes clear that children's focus and experiences do not match the focus of literature, including our studies. Children focus much more on normal development, a good life with school and the future, and very little on potentially traumatic experiences and post-traumatic stress disorder.

Based on the results from the included studies, we can generate several ideas for future research. First and foremost, future research on children with refugee experience should involve the target group. This idea is not new and is growing within research in general. However, the importance has become strikingly clear from the work with this thesis. The reasons for including children are several, but among other things, the involvement of the target group would ensure that the focus ends up where the target group believes the needs exist. In addition, it ensures faster recruitment, and it is crucial to reaching this target group which is traditionally difficult to reach. Furthermore, *The Long Journey to Shelter study* was an attempt at a longitudinal study, a type of study that is needed. However, the study was not feasible due to the difficulties of

reaching the children after one year. This highlights the need for future longitudinal studies with even better recruitment strategies. A possible solution would be to involve the target group more clearly and earlier in the design. The Swedish Public Health Survey is a large, nationally representative survey. However, despite its size, we found it necessary to merge groups such as refugees, sexual- and gender minorities, as the subgroups were too small. To properly understand intersectionality, we would require even larger datasets encompassing variables such as self-identified ethnicity, refugee and migration background, and exposure to adversities. Finally, it becomes clear that more studies are needed about the diverse experiences of refugee children. The focus today is unilaterally on adversities and mental ill-health and there is a lack of literature about why and which children are doing well despite their experiences, especially from a community and societal standpoint.

For clinicians working with refugee children, it is crucial to avoid assumptions about vulnerability and prioritize understanding each individual's wants and needs. When addressing individuals who have been in displacement for an extended period, it is essential to focus on specific risk groups. The results of the studies presented here point towards vulnerability, especially for those who are younger, those who identify as sexual minorities, and unaccompanied children.

The most important message emerges from the narratives of these children. They provide insight into the children's strong desire for a normal life, emphasizing the importance of facilitating their integration into society. For instance, starting school promptly upon arrival is crucial, as highlighted in several interviews. Additionally, the narratives shed light on the complex issue of the 18th birthday, offering valuable perspectives on the challenges associated with coming of age. The ongoing debate on age assessments in clinical work gains new dimensions when considering the narratives of these individuals.

The findings in this thesis are at odds with the image that both the mainstream media and sometimes the political debate give us of

refugee children (Fryberg et al., 2012; Theodorou, 2024). What we have found is that the children want to get on with their lives, receive a good education, integrate as much as possible, and also give back to society. This also correlates with what we have found from the public health survey, which shows that this population is doing relatively well even several years after arrival as refugees.

Overall, this thesis highlights the complexity of how refugee experiences impact health. In the future, we need to understand this association further to be able to offer support at the right level and to the right individuals and groups. But we also should aim to make the research directly applicable to the population.

References

- Abu-Ras, W., Suárez, Z. E., & Breiwish, R. R. (2021). Beyond the axes of inequality: Religion, race, and everything in between. *American Journal of Orthopsychiatry*, *91*(2), 217-235. doi:10.1037/ort0000478
- Alegria, M., NeMoyer, A., Falgàs Bagué, I., Wang, Y., & Alvarez, K. (2018). Social Determinants of Mental Health: Where We Are and Where We Need to Go. *Current Psychiatry Reports*, *20*(11), 95-95. doi:10.1007/s11920-018-0969-9
- Barnombudsmannen. (2021). *Om barns och ungas utsatthet för rasism*. Retrieved from https://www.barnombudsmannen.se/globalassets/dokument/publikationer/om-barns-och-ungas-utsatthet-for-rasism_2021.pdf
- Blackmore, R., Boyle, J. A., Fazel, M., Ranasinha, S., Gray, K. M., Fitzgerald, G., . . . Gibson-Helm, M. (2020a). The prevalence of mental illness in refugees and asylum seekers: A systematic review and meta-analysis. *PLoS Med*, *17*(9), e1003337. doi:10.1371/journal.pmed.1003337
- Blackmore, R., Gray, K. M., Boyle, J. A., Fazel, M., Ranasinha, S., Fitzgerald, G., . . . Gibson-Helm, M. (2020b). Systematic Review and Meta-analysis: The Prevalence of Mental Illness in Child and Adolescent Refugees and Asylum Seekers. *Journal of the American Academy of Child & Adolescent Psychiatry*, *59*(6), 705-714. doi:10.1016/j.jaac.2019.11.011
- Blevins, C. A., Weathers, F. W., Davis, M. T., Witte, T. K., & Domino, J. L. (2015). The posttraumatic stress disorder checklist for DSM-5 (PCL-5): Development and initial psychometric evaluation. *Journal of traumatic stress*, *28*(6), 489-498.
- Bogic, M., Njoku, A., & Priebe, S. (2015). Long-term mental health of war-refugees: a systematic literature review. *BMC International Health and Human Rights*, *15*(1), 29. doi:10.1186/s12914-015-0064-9
- Botha, M., & Frost, D. M. (2018). Extending the Minority Stress Model to Understand Mental Health Problems Experienced by the Autistic Population. *Society and Mental Health*, *10*(1), 20-34. doi:10.1177/2156869318804297
- Bowleg, L. (2012). The Problem With the Phrase Women and Minorities: Intersectionality—an Important Theoretical Framework for Public Health. *American Journal of Public Health*, *102*(7), 1267-1273. doi:10.2105/AJPH.2012.300750

- Boynton, P., Wood, G., & Greenhalgh, T. (2004). Reaching beyond the white middle classes. *BMJ (Clinical research ed.)*, 328, 1433-1436. doi:10.1136/bmj.328.7453.1433
- Bradby, H., Humphris, R., Newall, D., & Phillimore, J. (2015). WHO Health Evidence Network Synthesis Reports. In *Public Health Aspects of Migrant Health: A Review of the Evidence on Health Status for Refugees and Asylum Seekers in the European Region*. Copenhagen: WHO Regional Office for Europe.
- Braun, V., & Clarke, V. (2006). Using thematic analysis in psychology. *Qualitative Research in Psychology*, 3(2), 77-101. doi:10.1191/1478088706qp063oa
- Brody, G. H., Yu, T., Chen, E., Miller, G. E., Kogan, S. M., & Beach, S. R. H. (2013). Is resilience only skin deep?: rural African Americans' socioeconomic status-related risk and competence in preadolescence and psychological adjustment and allostatic load at age 19. *Psychological science*, 24(7), 1285-1293. doi:10.1177/0956797612471954
- Bronfenbrenner, U. (1977). Toward an experimental ecology of human development. *American Psychologist*, 32(7), 513-531. doi:10.1037/0003-066X.32.7.513
- Bronfenbrenner, U., & Morris, P. A. (2006). The Bioecological Model of Human Development. In *Handbook of child psychology: Theoretical models of human development, Vol. 1, 6th ed.* (pp. 793-828). Hoboken, NJ, US: John Wiley & Sons, Inc.
- Bush, K., Kivlahan, D. R., McDonell, M. B., Fihn, S. D., & Bradley, K. A. (1998). The AUDIT alcohol consumption questions (AUDIT-C): an effective brief screening test for problem drinking. Ambulatory Care Quality Improvement Project (ACQUIP). Alcohol Use Disorders Identification Test. *Arch Intern Med*, 158(16), 1789-1795. doi:10.1001/archinte.158.16.1789
- Castañeda, H., Holmes, S. M., Madrigal, D. S., Young, M.-E. D., Beyeler, N., & Quesada, J. (2015). Immigration as a Social Determinant of Health. *Annual Review of Public Health*, 36(1), 375-392. doi:10.1146/annurev-publhealth-032013-182419
- Çeri, V., Nasıroğlu, S., Ceri, M., & Çetin, F. (2018). Psychiatric Morbidity Among a School Sample of Syrian Refugee Children in Turkey: A Cross-Sectional, Semistructured, Standardized Interview-Based Study. *J Am Acad Child Adolesc Psychiatry*, 57(9), 696-698.e692. doi:10.1016/j.jaac.2018.05.019
- Clarke, V., & Braun, V. (2018). Using thematic analysis in counselling and psychotherapy research: A critical reflection. *Counselling and Psychotherapy Research*, 18(2), 107-110. doi:<https://doi.org/10.1002/capr.12165>

- Cochran, S. D., Mays, V. M., & Sullivan, J. G. (2003). Prevalence of mental disorders, psychological distress, and mental health services use among lesbian, gay, and bisexual adults in the United States. *J Consult Clin Psychol*, *71*(1), 53-61. doi:10.1037//0022-006x.71.1.53
- Cronholm, P. F., Forke, C. M., Wade, R., Bair-Merritt, M. H., Davis, M., Harkins-Schwarz, M., . . . Fein, J. A. (2015). Adverse Childhood Experiences: Expanding the Concept of Adversity. *Am J Prev Med*, *49*(3), 354-361. doi:<https://doi.org/10.1016/j.amepre.2015.02.001>
- Cyrus, K. (2017). Multiple minorities as multiply marginalized: Applying the minority stress theory to LGBTQ people of color. *Journal of Gay & Lesbian Mental Health*, *21*(3), 194-202.
- Dahl, B. M., Buch Mejsner, S., Eklund Karlsson, L., Kostenius, C., Laverack, G., Andersen, H. M., . . . Lidmark, J. (2020). The Nordic perspective on migration and empowerment. *Health Promotion International*, *36*(1), 216-222. doi:10.1093/heapro/daaa021
- Dawson, K. S., Watts, S., Carswell, K., Shehadeh, M. H., Jordans, M. J. D., Bryant, R. A., . . . van Ommeren, M. (2019). Improving access to evidence-based interventions for young adolescents: Early Adolescent Skills for Emotions (EASE). *World Psychiatry*, *18*(1), 105-107. doi:10.1002/wps.20594
- Deps, P. D., Rezende, I., Andrade, M. A. C., & Collin, S. M. (2022). Ethical issues in research with refugees. *Ethics, Medicine and Public Health*, *24*, 100813. doi:<https://doi.org/10.1016/j.jemep.2022.100813>
- Derluyn, I., Mels, C., & Broekaert, E. (2009). Mental health problems in separated refugee adolescents. *J Adolesc Health*, *44*(3), 291-297. doi:10.1016/j.jadohealth.2008.07.016
- Eriksson, M., Ghazinour, M., & Hammarström, A. (2018). Different uses of Bronfenbrenner's ecological theory in public mental health research: what is their value for guiding public mental health policy and practice? *Social Theory & Health*, *16*(4), 414-433. doi:10.1057/s41285-018-0065-6
- European Council. (2018). European Council meeting (28 June 2018) – Conclusions. Retrieved from <https://www.consilium.europa.eu/en/meetings/european-council/2018/06/28-29/>
- 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. doi:10.1016/S0140-6736(11)60051-2

- Fazel, M., Wheeler, J., & Danesh, J. (2005). Prevalence of serious mental disorder in 7000 refugees resettled in western countries: a systematic review. *Lancet*, 365(9467), 1309-1314. doi:10.1016/s0140-6736(05)61027-6
- Felitti, V. J., Anda, R. F., Nordenberg, D., Williamson, D. F., Spitz, A. M., Edwards, V., . . . Marks, J. S. (1998). Relationship of childhood abuse and household dysfunction to many of the leading causes of death in adults. The Adverse Childhood Experiences (ACE) Study. *Am J Prev Med*, 14(4), 245-258. doi:10.1016/s0749-3797(98)00017-8
- Ferris, J. A., & Wynne, H. J. (2001). *The Canadian problem gambling index*: Canadian Centre on substance abuse Ottawa, ON.
- Finkelhor, D., Hamby, S. L., Ormrod, R., & Turner, H. (2005). The Juvenile Victimization Questionnaire: reliability, validity, and national norms. *Child Abuse Negl*, 29(4), 383-412. doi:10.1016/j.chiabu.2004.11.001
- Flentje, A., Heck, N. C., Brennan, J. M., & Meyer, I. H. (2020). The relationship between minority stress and biological outcomes: A systematic review. *Journal of Behavioral Medicine*, 43(5), 673-694. doi:10.1007/s10865-019-00120-6
- Folkhälsomyndigheten. (2020). *Syfte och bakgrund till frågorna i nationella folkhälsoenkäten*. Retrieved from <https://www.folkhalsomyndigheten.se/pubreader/pdfview/117450?browserprint=1>
- Folkhälsomyndigheten [Public Health Agency in Sweden]. (2018). *Syfte och bakgrund till frågorna i nationella folkhälsoenkäten*. Retrieved from
- Fryberg, S. A., Stephens, N. M., Covarrubias, R., Markus, H. R., Carter, E. D., Laiduc, G. A., & Salido, A. J. (2012). How the Media Frames the Immigration Debate: The Critical Role of Location and Politics. *Analyses of Social Issues and Public Policy*, 12(1), 96-112. doi:<https://doi.org/10.1111/j.1530-2415.2011.01259.x>
- Goldberg, D. P., Gater, R., Sartorius, N., Ustun, T. B., Piccinelli, M., Gureje, O., & Rutter, C. (1997). The validity of two versions of the GHQ in the WHO study of mental illness in general health care. *Psychological Medicine*, 27(1), 191-197. doi:10.1017/S0033291796004242
- Gormez, V., Kılıç, H. N., Oregul, A. C., Demir, M. N., Demirlıkan, Ş., Demirbaş, S., . . . Semerci, B. (2018). Psychopathology and Associated Risk Factors Among Forcibly Displaced Syrian Children and Adolescents. *J Immigr Minor Health*, 20(3), 529-535. doi:10.1007/s10903-017-0680-7

- Gubi, E., Sjöqvist, H., Dalman, C., Bäärnhielm, S., & Hollander, A. C. (2022). Are all children treated equally? Psychiatric care and treatment receipt among migrant, descendant and majority Swedish children: a register-based study. *Epidemiol Psychiatr Sci*, *31*, e20. doi:10.1017/s2045796022000142
- Gubi, E., Sjöqvist, H., Viksten-Assel, K., Bäärnhielm, S., Dalman, C., & Hollander, A. C. (2021). Mental health service use among migrant and Swedish-born children and youth: a register-based cohort study of 472,129 individuals in Stockholm. *Social Psychiatry and Psychiatric Epidemiology*. doi:10.1007/s00127-021-02145-2
- Gusic, S., Cardena, E., Bengtsson, H., & Sondergaard, H. P. (2017). Dissociative Experiences and Trauma Exposure Among Newly Arrived and Settled Young War Refugees. *Journal of Aggression Maltreatment & Trauma*, *26*(10), 1132-1149. doi:10.1080/10926771.2017.1365792
- Hall, R. C. (1995). Global assessment of functioning. A modified scale. *Psychosomatics*, *36*(3), 267-275. doi:10.1016/s0033-3182(95)71666-8
- Harris, S., Dykxhoorn, J., Hollander, A.-C., Dalman, C., & Kirkbride, J. B. (2019a). Substance use disorders in refugee and migrant groups in Sweden: A nationwide cohort study of 1.2 million people. *PLoS Medicine*, *16*(11), e1002944. doi:10.1371/journal.pmed.1002944
- Harris, S., Dykxhoorn, J., Hollander, A. C., Dalman, C., & Kirkbride, J. B. (2019b). Substance use disorders in refugee and migrant groups in Sweden: A nationwide cohort study of 1.2 million people. *PLoS Medicine*, *16*(11). doi:10.1371/journal.pmed.1002944
- Heath, A. C., Lynskey, M. T., Madden, P. A. F., Martin, N. G., Nelson, E. C., Verweij, K. J. H., & Zietsch, B. P. (2012). Do shared etiological factors contribute to the relationship between sexual orientation and depression? *Psychological Medicine*, *42*(3), 521-532. doi:10.1017/S0033291711001577
- Hillis, S., Mercy, J., Amobi, A., & Kress, H. (2016). Global Prevalence of Past-year Violence Against Children: A Systematic Review and Minimum Estimates. *Pediatrics*, *137*(3), e20154079. doi:10.1542/peds.2015-4079
- Hodes, M., Jagdev, D., Chandra, N., & Cunniff, A. (2008). Risk and resilience for psychological distress amongst unaccompanied asylum seeking adolescents. *J Child Psychol Psychiatry*, *49*(7), 723-732. doi:10.1111/j.1469-7610.2008.01912.x
- Hollander, A.-C., Pitman, A., Sjöqvist, H., Lewis, G., Magnusson, C., Kirkbride, J. B., & Dalman, C. (2020). Suicide risk among refugees compared with non-refugee migrants and the Swedish-

- born majority population. *The British Journal of Psychiatry*, 217(6), 686-692. doi:10.1192/bjp.2019.220
- Hopkins, P., & Hill, M. (2008). Pre-flight experiences and migration stories: The accounts of unaccompanied asylum-seeking children. *Children's Geographies*, 6, 257-268. doi:10.1080/14733280802183981
- Horyniak, D., Melo, J. S., Farrell, R. M., Ojeda, V. D., & Strathdee, S. A. (2016). Epidemiology of Substance Use among Forced Migrants: A Global Systematic Review. *PLoS One*, 11(7), e0159134. doi:10.1371/journal.pone.0159134
- Hydén, M. (2014). The teller-focused interview: Interviewing as a relational practice. *Qualitative Social Work*, 13(6), 795-812. doi:10.1177/1473325013506247
- Höhne, E., van der Meer, A. S., Kamp-Becker, I., & Christiansen, H. (2020). A systematic review of risk and protective factors of mental health in unaccompanied minor refugees. *European Child & Adolescent Psychiatry*. doi:10.1007/s00787-020-01678-2
- Inter-Agency Standing Committee. (2008). IASC Guidelines on Mental Health and Psychosocial Support in Emergency Setting: Checklist for field use. In *IASC Guidelines on Mental Health and Psychosocial Support in Emergency Setting: Checklist for field use* (pp. 39-39).
- International Organization for Migration. (2020). World Migration Report. Retrieved from https://publications.iom.int/system/files/pdf/wmr_2020.pdf
- International Organization for Migration. (2024). WHO is a migrant? . Retrieved from <https://www.iom.int/who-migrant-0>
- Isakov, A., Zegarac, N., Markovic, V., Trkulja, A., & Husremovic, D. (2022). *Wherever we go someone does us harm. Violence against refugee and migrant children arriving in Europe through the Balkans*. Retrieved from
- Jackson, L., Kuhlman, C., Jackson, F., & Fox, P. K. (2019). Including Vulnerable Populations in the Assessment of Data From Vulnerable Populations. *Front Big Data*, 2, 19. doi:10.3389/fdata.2019.00019
- Jones, L. (2008). Responding to the needs of children in crisis. *Int Rev Psychiatry*, 20(3), 291-303. doi:10.1080/09540260801996081
- Jud, A., Pfeiffer, E., & Jarczok, M. (2020). Epidemiology of violence against children in migration: A systematic literature review. *Child Abuse & Neglect*, 108, 104634. doi:<https://doi.org/10.1016/j.chiabu.2020.104634>
- Kessler, R. C., Barker, P. R., Colpe, L. J., Epstein, J. F., Gfroerer, J. C., Hiripi, E., . . . Zaslavsky, A. M. (2003). Screening for Serious

- Mental Illness in the General Population. *Archives of General Psychiatry*, 60(2), 184-189. doi:10.1001/archpsyc.60.2.184
- Kien, C., Sommer, I., Faustmann, A., Gibson, L., Schneider, M., Krczal, E., . . . Gartlehner, G. (2018). Prevalence of mental disorders in young refugees and asylum seekers in European Countries: a systematic review. *European Child and Adolescent Psychiatry*. doi:10.1007/s00787-018-1215-z
- Krug, E. G., Mercy, J. A., Dahlberg, L. L., & Zwi, A. B. (2002). The world report on violence and health. *The Lancet*, 360(9339), 1083-1088. doi:[https://doi.org/10.1016/S0140-6736\(02\)11133-0](https://doi.org/10.1016/S0140-6736(02)11133-0)
- Lett, E., Dowshen, N. L., & Baker, K. E. (2020). Intersectionality and Health Inequities for Gender Minority Blacks in the U.S. *Am J Prev Med*, 59(5), 639-647. doi:10.1016/j.amepre.2020.04.013
- Lund, C., Brooke-Sumner, C., Baingana, F., Baron, E. C., Breuer, E., Chandra, P., . . . Saxena, S. (2018). Social determinants of mental disorders and the Sustainable Development Goals: a systematic review of reviews. *Lancet Psychiatry*, 5(4), 357-369. doi:10.1016/s2215-0366(18)30060-9
- Lustig, S. L., Kia-Keating, M., Knight, W. G., Geltman, P., Ellis, H., Kinzie, J. D., . . . Saxe, G. N. (2004). Review of child and adolescent refugee mental health. *J Am Acad Child Adolesc Psychiatry*, 43(1), 24-36. doi:10.1097/00004583-200401000-00012
- Manhica, H. (2017). *Mental health, substance misuse and labour market participation in teenage refugees in Sweden : a longitudinal perspective*. Stockholm: Centre for Health Equity Studies (CHESS), Stockholm University.
- Manhica, H., Gauffin, K., Almqvist, Y. B., Rostila, M., & Hjern, A. (2016). Hospital admission and criminality associated with substance misuse in young refugees - A swedish national cohort study. *PLoS One*, 11(11). doi:10.1371/journal.pone.0166066
- Marshall, G. N., Schell, T. L., Elliott, M. N., Berthold, S. M., & Chun, C. A. (2005). Mental health of Cambodian refugees 2 decades after resettlement in the United States. *Jama*, 294(5), 571-579. doi:10.1001/jama.294.5.571
- Masten, A. S. (2014). Global perspectives on resilience in children and youth. *Child Dev*, 85(1), 6-20. doi:10.1111/cdev.12205
- Mattelin, E., Fröberg, F., Korhonen, L., & Khanolkar, A. R. (2022a). Health and health-related behaviours in refugees and migrants who self-identify as sexual or gender minority: A National population-based study in Sweden. *Eclinicalmedicine*, 52. doi:10.1016/j.eclinm.2022.101641

- Mattelin, E., Khanolkar, A. R., Froberg, F., Jonsson, L., & Korhonen, L. (2021). 'Long journey to shelter': a study protocol: a prospective longitudinal analysis of mental health and its determinants, exposure to violence and subjective experiences of the migration process among adolescent and young adult migrants in Sweden. *BMJ Open*, *11*(9). doi:10.1136/bmjopen-2020-043822
- Mattelin, E., Khanolkar, A. R., Korhonen, L., Åhs, J. W., & Fröberg, F. (2023). Is refugee experience in childhood a risk for poorer health in adulthood?—A Swedish national survey study. *PLOS Global Public Health*, *3*(11), e0002433. doi:10.1371/journal.pgph.0002433
- Mattelin, E., Paidar, K., Söderlind, N., Fröberg, F., & Korhonen, L. (2022b). A systematic review of studies on resilience and risk and protective factors for health among refugee children in Nordic countries. *Eur Child Adolesc Psychiatry*. doi:10.1007/s00787-022-01975-y
- McConnell, E. A., Janulis, P., Phillips, G., 2nd, Truong, R., & Birkett, M. (2018). Multiple Minority Stress and LGBT Community Resilience among Sexual Minority Men. *Psychol Sex Orientat Gend Divers*, *5*(1), 1-12. doi:10.1037/sgd0000265
- Meehan, A. J., Baldwin, J. R., Lewis, S. J., MacLeod, J. G., & Danese, A. (2022). Poor Individual Risk Classification From Adverse Childhood Experiences Screening. *Am J Prev Med*, *62*(3), 427-432. doi:<https://doi.org/10.1016/j.amepre.2021.08.008>
- Meyer, I. H. (1995). Minority stress and mental health in gay men [American Sociological Assn doi:10.2307/2137286]. Retrieved
- Meyer, I. H. (2003). Prejudice, social stress, and mental health in lesbian, gay, and bisexual populations: conceptual issues and research evidence. *Psychological bulletin*, *129*(5), 674-697. doi:10.1037/0033-2909.129.5.674
- Michael Bailey, J. (2020). The minority stress model deserves reconsideration, not just extension. *Archives of Sexual Behavior*, *49*(7), 2265-2268.
- Migrationsverket [The Swedish Board of Migration]. (2019). Asylsökande till Sverige 2000–2018 Retrieved from <https://www.migrationsverket.se/Om-Migrationsverket/Statistik/Asyl.html>
- Migrationsverket [The Swedish Board of Migration]. (2024). Asyl. Retrieved from <https://www.migrationsverket.se/Om-Migrationsverket/Statistik/Asyl.html>
- Montgomery, E. (2008). Long-term effects of organized violence on young Middle Eastern refugees' mental health. *Soc Sci Med*, *67*(10), 1596-1603. doi:10.1016/j.socscimed.2008.07.020

- Montgomery, E., & Foldspang, A. (2006). Validity of PTSD in a sample of refugee children: can a separate diagnostic entity be justified? *Int J Methods Psychiatr Res*, 15(2), 64-74. doi:10.1002/mpr.186
- Morris, J., van Ommeren, M., & Servili, C. (2012). Review: exposure to premigration violence, gender and settlement location are associated with psychological problems among forcibly displaced children. *Evid Based Ment Health*, 15(3), 62. doi:10.1136/ebmental-2012-100682
- Myles, P., Swenshon, S., Haase, K., Szeles, T., Jung, C., Jacobi, F., & Rath, B. (2018). A comparative analysis of psychological trauma experienced by children and young adults in two scenarios: evacuation after a natural disaster vs forced migration to escape armed conflict. *Public Health*, 158, 163-175. doi:10.1016/j.puhe.2018.03.012
- Müller, L. R. F., Büter, K. P., Rosner, R., & Unterhitzberger, J. (2019). Mental health and associated stress factors in accompanied and unaccompanied refugee minors resettled in Germany: a cross-sectional study. *Child and Adolescent Psychiatry and Mental Health*, 13(1), 8. doi:10.1186/s13034-019-0268-1
- Reed, R. V., Fazel, M., Jones, L., Panter-Brick, C., & Stein, A. (2012). Mental health of displaced and refugee children resettled in low-income and middle-income countries: risk and protective factors. *The Lancet*, 379(9812), 250-265.
- Robson, E. (2011). The Right to be Properly Researched. How to Do Rights-Based, Scientific Research with Children: A Set of Ten Manuals for Field Researchers. *Children & Society*, 25(4), 341-342. doi:<https://doi.org/10.1111/j.1099-0860.2011.00359.x>
- Sachser, C., Berliner, L., Holt, T., Jensen, T., Jungbluth, N., Risch, E., . . . Goldbeck, L. (2017). International development and psychometric properties of the Child and Adolescent Trauma Screen (CATS). *Journal of Affective Disorders*, 210. doi:10.1016/j.jad.2016.12.040
- Salari, R., Malekian, C., Linck, L., Kristiansson, R., & Sarkadi, A. (2017). Screening for PTSD symptoms in unaccompanied refugee minors: a test of the CRIES-8 questionnaire in routine care. *Scandinavian Journal of Public Health*, 45(6), 605-611. doi:10.1177/1403494817715516
- Save the Children. (2017). *A tide of self-harm and depression: the EU-Turkey deal's devastating impact on child refugees and migrants*. Retrieved from <https://resourcecentre.savethechildren.net/library/tide-self-harm-and-depression-eu-turkey-deals-devastating-impact-child-refugees-and-migrants>

- Shaffer, D., Gould, M. S., Brasic, J., Ambrosini, P., Fisher, P., Bird, H., & Aluwahlia, S. (1983). A Children's Global Assessment Scale (CGAS). *Archives of General Psychiatry*, 40(11), 1228-1231. doi:10.1001/archpsyc.1983.01790100074010
- Shaghaghi, A., Bhopal, R. S., & Sheikh, A. (2011). Approaches to Recruiting 'Hard-To-Reach' Populations into Re-search: A Review of the Literature. *Health Promot Perspect*, 1(2), 86-94. doi:10.5681/hpp.2011.009
- Sheehan, D. V., Lecrubier, Y., Sheehan, K. H., Amorim, P., Janavs, J., Weiller, E., . . . Dunbar, G. C. (1998). The Mini-International Neuropsychiatric Interview (M.I.N.I.): the development and validation of a structured diagnostic psychiatric interview for DSM-IV and ICD-10. *J Clin Psychiatry*, 59 Suppl 20, 22-33;quiz 34-57.
- Sheehan, D. V., Sheehan, K. H., Shytle, R. D., Janavs, J., Bannon, Y., Rogers, J. E., . . . Wilkinson, B. (2010). Reliability and validity of the Mini International Neuropsychiatric Interview for Children and Adolescents (MINI-KID). *J Clin Psychiatry*, 71(3), 313-326. doi:10.4088/JCP.09m05305whi
- Solberg, O., Nissen, A., Vaez, M., Cauley, P., Eriksson, A. K., & Saboonchi, F. (2020). Children at risk: A nation-wide, cross-sectional study examining post-traumatic stress symptoms in refugee minors from Syria, Iraq and Afghanistan resettled in Sweden between 2014 and 2018. *Conflict and Health*, 14(1). doi:10.1186/s13031-020-00311-y
- Southwick, S. M., Bonanno, G. A., Masten, A. S., Panter-Brick, C., & Yehuda, R. (2014). Resilience definitions, theory, and challenges: interdisciplinary perspectives. *European Journal of Psychotraumatology*, 5, 10.3402/ejpt.v3405.25338. doi:10.3402/ejpt.v5.25338
- Statistics Sweden. (2018). *Teknisk Rapport. En beskrivning av genomförande och metoder. "Hälsa på lika villkor. Nationellt urval*. Retrieved from
- Steel, Z., Chey, T., Silove, D., Marnane, C., Bryant, R. A., & van Ommeren, M. (2009). Association of torture and other potentially traumatic events with mental health outcomes among populations exposed to mass conflict and displacement: a systematic review and meta-analysis. *Jama*, 302(5), 537-549. doi:10.1001/jama.2009.1132
- Sveriges Riksdag [The Swedish Parliament]. (1994). *Act on the Reception of Asylum-Seekers and Others*.

- Tennant, R., Hiller, L., Fishwick, R., Platt, S., Joseph, S., Weich, S., . . . Stewart-Brown, S. (2007). The Warwick-Edinburgh Mental Well-being Scale (WEMWBS): development and UK validation. *Health Qual Life Outcomes*, 5, 63. doi:10.1186/1477-7525-5-63
- Theodorou, E. (2024). Constructing the child as refugee: Visual representations of refugee children in digital news media. *Childhood*. doi:10.1177/09075682241227806
- Thompson, A., Torres, R., Swanson, K., Blue, S., & Hernández, O. (2017). Re-conceptualising agency in migrant children from Central America and Mexico. *Journal of Ethnic and Migration Studies*, 45, 1-18. doi:10.1080/1369183X.2017.1404258
- Toomey, R. B., Huynh, V. W., Jones, S. K., Lee, S., & Revels-Macalinao, M. (2017). Sexual minority youth of color: A content analysis and critical review of the literature. *J Gay Lesbian Ment Health*, 21(1), 3-31. doi:10.1080/19359705.2016.1217499
- Topp, C. W., Ostergaard, S. D., Sondergaard, S., & Bech, P. (2015). The WHO-5 Well-Being Index: a systematic review of the literature. *Psychother Psychosom*, 84(3), 167-176. doi:10.1159/000376585
- UN General Assembly. (1951). Convention relating to the status of refugees. *United Nations, Treaty Series*, 189(1), 137.
- 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. doi:<https://doi.org/10.1111/j.1939-0025.2010.01067.x>
- UNHCR. (2024). Refugee data finder Retrieved from <https://www.unhcr.org/refugee-statistics/>
- United Nations High Commissioner for Refugees. (2023). Figures at a Glance Retrieved from <https://www.unhcr.org/figures-at-a-glance.html>
- Valentín-Cortés, M., Benavides, Q., Bryce, R., Rabinowitz, E., Rion, R., Lopez, W. D., & Fleming, P. J. (2020). Application of the Minority Stress Theory: Understanding the Mental Health of Undocumented Latinx Immigrants. *American Journal of Community Psychology*, 66(3-4), 325-336. doi:<https://doi.org/10.1002/ajcp.12455>
- Ventevogel, P. (2016). *Borderlands of mental health: Explorations in medical anthropology, psychiatric epidemiology and health systems research in Afghanistan and Burundi*.
- Wei, M., Liao, K. Y.-H., Chao, R. C.-L., Mallinckrodt, B., Tsai, P.-C., & Botello-Zamarron, R. (2010). Minority stress, perceived bicultural competence, and depressive symptoms among ethnic minority college students. *Journal of Counseling Psychology*, 57(4), 411.

- Wernesjö, U. (2012). Unaccompanied asylum-seeking children: Whose perspective? *Childhood*, 19(4), 495-507. doi:10.1177/0907568211429625
- White, A., Ní Laoire, C., Tyrrell, N., & Carpena-Méndez, F. (2011). Children's Roles in Transnational Migration. *Journal of Ethnic and Migration Studies*, 37(8), 1159-1170. doi:10.1080/1369183X.2011.590635
- White, L. C., Cooper, M., & Lawrence, D. (2019). Mental illness and resilience among sexual and gender minority refugees and asylum seekers. *The British journal of general practice : the journal of the Royal College of General Practitioners*, 69(678), 10-11. doi:10.3399/bjgp19X700349
- World Medical Association. (2013). World Medical Association Declaration of Helsinki: Ethical Principles for Medical Research Involving Human Subjects. *Jama*, 310(20), 2191-2194. doi:10.1001/jama.2013.281053
- Wright, K. (2015). Are Children Vulnerable in Research? *Asian Bioethics Review*, 7, 201-213. doi:10.1353/asb.2015.0017
- Zimmerman, C., Kiss, L., & Hossain, M. (2011). Migration and Health: A Framework for 21st Century Policy-Making. *PLoS Medicine*, 8(5), e1001034. doi:10.1371/journal.pmed.1001034

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