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The relationship between mental health and integration in refugees

Quantitative and qualitative investigations among refugees who arrived in Germany between 2013 and 2018

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Deutsche Zusammenfassung

Diese kumulative Dissertation führt zwei quantitative und zwei qualitative Studien zusammen, um das Verhältnis zwischen der psychischen Gesundheit und der Integration Geflüchteter zu untersuchen, die ab 2013 nach Deutschland gekommen sind. In der Forschung als auch im Policy-Bereich ist bekannt, dass Geflüchtete ein besonderes Risiko aufweisen, in Folge von prä-, peri- und post-migratorischen traumatischen Erlebnissen und anderen Stressoren an psychischen Problemen zu leiden – obgleich sie schon durch die erfolgreiche Flucht selbst eine enorme Resilienz demonstriert haben. In der Politik wird zudem zunehmend anerkannt, dass Integration als Prozess und als Ziel trotz ihres zunächst temporären Aufenthalts auch Geflüchtete betrifft und auch als Geflüchtete-betreffend gesehen werden sollte. Der theoretische Ausgangspunkt dieser Dissertation ist die Hypothese, dass mentale Gesundheit und Integration sich wechselseitig bedingen, sodass psychische Gesundheit essentiell für die Integration und Integration essentiell für die psychische Gesundheit ist.

Das erste Kapitel erfüllt eine einleitende Funktion. Es liefert Hintergrundinformationen zur globalen unfreiwilligen Migration und zur großen Zahl von fluchtbedingten Neuankünften in der Bundesrepublik seit ca. 2013. Zweitens wird das Konzept Integration vorgestellt, samt kurzem theoretischen Hintergrund und zentralen Integrationskonzeptionen, sowie wichtige Informationen zum Integrationskontext in Deutschland. Drittens werden zentrale Konzepte rund um die psychische Gesundheit und wesentliche Einflussfaktoren auf die psychische Gesundheit Geflüchteter eingeführt. Ein viertes einleitendes Unterkapitel präsentiert die Idee eines bidirektionalen Verhältnisses zwischen psychischer Gesundheit und Integration, in das auch Resilienz hereinspielt, und begründet die Zusammenführung dieser Konzepte. Im selben Unterkaptiel wird außerdem argumentiert, dass die Messung der Prävalenz psychischer Störungen unter Geflüchtetenpopulationen für die Gewährleistung einer adäquaten Gesundheitsversorgung als Integrationsverantwortung von Aufnahmeländern notwendig ist – als auch für die Einschätzung der Signifikanz möglicher Assoziationen zwischen psychischem Wohlbefinden und verschiedenen Aspekten der Integration. Des Weiteren werden bisherige Befunde zu diesen Assoziationen, zu Resilienz unter Geflüchteten und zu Störungsprävalenzschätzungen beleuchtet. Ein abschließendes einleitendes Unterkapitel skizziert die Forschungslücken und die Ziele dieses Dissertationsprojekts.

Das zweite Kapitel bietet einen tieferen Einblick in das Forschungsdesign und die Forschungsmethoden der vier Studien, die im Zentrum der Dissertation stehen – mit einem speziellen Fokus darauf, wie sich diese ins Gesamtdissertationsprojekt einordnen lassen und welche Vorteile mit der Durchführung quantitativer als auch qualitativer Studien einhergehen. Studien I und II, die in den Kapiteln 3 und 4 präsentiert werden, sind quantitative Untersuchungen basierend auf zwei verschiedenen Wellen der IAB-BAMF-SOEP Befragung Geflüchteter, einer großen Panelstudie zu Geflüchteten, die zwischen 2013 und 2016 in Deutschland angekommen sind. Studie I identifiziert Assoziationen zwischen der Stärke von Kernsymptomen von Depressionen und Angststörungen und mehreren integrationsbezogenen Faktroen: einem unsicheren Aufenthaltsstatus, dem Wunsch nach Familiennachzug, dem Wohnen in einer Gemeinschaftsunterkunft, der Arbeitslosigkeit, niedrigem Sprachniveau im Deutschen und geringem Kontakt zu Deutschen. Die Studie identifiziert außerdem mehrere Interaktionseffekte zwischen soziodemographischen Faktoren als auch der Anzahl an Fluchtgründen und den Umständen der Integration in ihrem Verhältnis zu psychologischem Distress als Zielgröße.

Studie II präsentiert national-repräsentative Schätzungen zur Prävalenz milden bis starken psychologischen Distresses bestehend aus Symptomen von Depressionen, Angststörungen und der Posttraumatischen Belastungsstörung in der Population Geflüchteter, die zwischen 2013 und 2016 nach Deutschland gekommen ist. Sie zeigt, dass ca. vier von zehn Geflüchteten Symptome aufweisen, die eine weitere Untersuchung, psychologisch-psychiatrische Behandlungen oder sogar besonders intensive Behandlungen indizieren. Unter Frauen, älteren Erwachsenen und Geflüchteten afghanischer Staatsbürgerschaft ist die Distressprävalenz besonders hoch. Das Verhältnis zwischen mehreren kontextuellen Faktoren und einem positiven Distress-Screeningergebnis wurde ebenfalls untersucht, was Assoziationen zwischen einem besonders unsicheren Aufenthaltsstatus, Alleinstehendsein als Mann und Wohnen in einer Gemeinschaftsunterkunft und positivem Distressbefund aufzeigte. Männliche Geflüchtete, die an Distress leiden, sind auch mit einer geringeren Wahrscheinlichkeit in Arbeit und haben zu einer geringeren Wahrscheinlichkeit an Integrationskursen teilgenommen; weibliche Betroffene befinden sich seltener in einer Ausbildung.

Studien III und IV, die in den Kapiteln 5 und 6 präsentiert werden, basieren beide auf Daten aus 54 qualitativen Interviews mit Geflüchteten, die zwischen 2013 und 2018 nach Deutschland gekommen sind. Studie III betrachtet das Verhältnis zwischen psychischer Gesundheit und Integration und bietet tiefgehende Details zum Zusammenspiel zwischen mentalem Wohlbefinden und der Motivation sowie der Kapazität für Teilhabe im Allgemeinen, dem Verhältnis zwischen psychischer Gesundheit und dem Asylprozess, dem Prozess, sich ein neues Leben mit Arbeit und anderen Tätigkeiten aufzubauen, Spracherwerb und bürokratischen Aufgaben als auch sozialen Beziehungen und Erfahrungen mit längerfristigen Mitgliedern der Aufnahmegesellschaft und mit Anderen mit Fluchthintergrund.

Studie IV untersucht Resilienz unter Geflüchteten – Manifestationen von Stärke im Angesicht schwerer Widrigkeiten sowie Faktoren, die mit dieser Stärke verknüpft zu sein scheinen. Themen sind kognitive als auch behaviorale Bewältigungsstrategien, Resilienz als persönliche Kapazität, die Verbindungen zwischen ehrenamtlichem Engagement und Aktivismus und Resilienz, die Wichtigkeit sozialer Unterstützung, die Vorteile des Jüngerseins sowie der Elternschaft als auch die protektiven Einflüsse auf die mentale Gesundheit, die mit der Wahrnehmung der Migration als Chance einhergehen. Somit liefert Studie IV indirekte Erkenntnisse zum Verhältnis zwischen psychischer Gesundheit und Integration: Sie zeigt, wie Geflüchtete ihre psychische Gesundheit gegen Widrigkeiten schützen, denen sie im Integrationsprozess begegnen, und wie dieser Schutz der psychischen Gesundheit die Integration unterstützten mag.

Das siebente und letzte Kapitel umfasst eine integrative Diskussion aller vier Studien. Diese bringt die Ergebnisse der vier Studien zusammen, um diese vergleichend zu diskutieren und qualitative Ergebnisse als komplementär und illustrativ mit quantitativen zu verbinden. Zunächst werden unter Einbeziehung der qualitativen Ergebnisse Befunde zur Prävalenz psychischen Distresses und Risikofaktoren diskutiert. Zweitens und ganz zentral werden einzelne Bereich der Integration in Bezug auf ihr wechselseitiges Verhältnis zu psychischem Wohlbefinden. Die Dissertation schließt mit Schlussfolgerungen, einem Abschnitt zu Stärken und Limitation der Forschung, die im Rahmen des Dissertationsvorhabens durchgeführt wurde, und mit offenen Forschungsfragen.

Diese Dissertation zeigt, dass ein großer Anteil Geflüchteter, die in der Hochphase der Neuankünfte zwischen 2013 und 2016 in Deutschland einreisten, eine signifikante Belastung durch Symptome von Depressionen, Angststörungen und der Posttraumatischen Belastungsstörung aufweist, und dass Frauen, ältere Erwachsene und Personen afghanischer Nationalität besonders betroffen sind. Diese Ergebnisse liefern Informationen, die dazu beitragen können, dass Deutschland als Aufnahmeland seinen Integrationsverantwortungen bezüglich der Gewährleistung einer adäquaten psychischen Gesundheitsversorgung – auch einer auf die speziellen Bedürfnisse besonders Betroffener ausgerichteten – gerecht wird. Sie deuten außerdem auf die Größenordnung hin, in der potentiell diagnostizierbare psychische Probleme eventuell mit Integration interagieren.

Im Wesentlichen zeigt diese Dissertation, wie mannigfaltig und tiefgehend die Wechselwirkungen zwischen psychischer Gesundheit und dem Integrationsprozess unter Geflüchteten sind. Verschiedene und scheinbar vielfach bidirektionale Verknüpfungen zwischen psychischer Gesundheit und Integration wurden innerhalb der folgenden Bereiche identifiziert: Asylprozess und Aufenthaltsstatus, Wohnsituation, Teilhabe am Arbeitsmarkt, an Bildung und an Integrationskursen, bürokratische Aufgaben innerhalb der Integration, Spracherwerb, soziale Verbindungen zu Deutschen und Erfahrungen mit Xenophobie von Deutschen sowie soziale Verbindungen innerhalb von Geflüchtetengemeinschaften – inklusive familiäre Verbindungs- und Trennungserfahrungen. Diese

Forschungsergebnisse legen nahe, dass die Rolle der mentalen Gesundheit in der Integrationspolitik beachtet werden und die Rolle der Integration in die Konzeption mentaler Gesundheitsinterventionen und -programme einfließen sollte.

Summary

This cumulative dissertation brings together two quantitative and two qualitative studies to explore the relationship between mental health and integration among refugees who arrived in Germany between 2013 and 2018. It is widely recognized in research and policy that refugees face a particular risk of experiencing mental health problems as sequelae of pre-, peri-, and post-migration traumatic experiences and stressors – despite demonstrating enormous resilience through resettlement itself. It is also increasingly recognized among policymakers that although their stays in receiving societies may be of a temporary nature, at least initially, integration as a process and aim does apply and should be seen as applying to refugee arrivals. The theoretical starting point of this dissertation is the hypothesis that mental health and integration are interrelated such that mental health is vital for integration and integration is vital for mental health.

The first chapter fulfills an introductory function. It provides background information on global forced migration and on the increased arrival of asylum seekers to Germany since around 2013. Second, it presents the concept of integration, including background theory and major frameworks, as well as key facts about integration processes in the German context. Third, it includes an overview of mental health concepts and factors linked to mental health among refugees. A fourth introductory section presents the idea of a bidirectional relationship between mental health and integration, into which resilience also figures, and raises motivations for bringing these concepts together. It also argues that assessing the prevalence of mental health problems among refugee populations is key to receiving societies fulfilling their responsibilities within integration as well as to understanding the overall significance of potential mental health and integration associations. Furthermore, this fourth section summarizes previous findings on associations between mental health and areas of integration, on resilience among refugees, and on estimates of prevalence of mental illnesses in refugee populations. A final introductory section outlines research gaps as well as the aims of this dissertation project.

The second chapter provides an in-depth look at the research design and methods of the four research studies at the heart of this dissertation with a focus on how they relate to the overall dissertation project as well as on the benefits of using both qualitative and quantitative methods. Studies I and II, which are presented in chapters 3 and 4, are quantitative investigations based on two different waves of the IAB-BAMF-SOEP refugee survey, a large-scale panel study on refugees and asylum seekers who arrived in Germany between 2013 and 2016. Study I identifies associations between the severity of core symptoms of depression and anxiety and several integration-related factors: less secure legal status, seeking family reunification, residing in a refugee housing facility, being unemployed, low German language ability, and limited contact to German nationals. It also identifies several interaction

effects between sociodemographic factors as well as the number of flight reasons and circumstances of integration in relation to psychological distress as an outcome.

Study II estimates the prevalence of mild to severe psychological distress comprising symptoms of depression, anxiety, and post-traumatic stress disorder among the population of refugees who arrived in Germany between 2013 and 2016 using nationally representative data, showing that roughly four in ten refugees show symptom levels indicative of a need for further assessment, mental healthcare, or even urgent and comprehensive care. Women, older adults, and Afghan nationals show particularly high rates of distress. The relationship between several contextual factors and screening positive for psychological distress was also assessed, revealing associations between having the least secure legal status, being a single male, and residing in a refugee housing facility and screening positive for distress. Those who were distressed were also found to be less likely to be employed or to have participated in integration courses if they are male and less likely to be in education if they are female.

Studies III and IV, which are presented in chapters 5 and 6, are both based on data from 54 qualitative interviews with adult refugees who arrived in Germany between 2013 and 2018. Study III examines the relationship between mental health and integration, providing rich detail on the association between mental health and the motivation as well as the capacity to participate generally, mental health and the asylum procedure, the process of trying to build a new life with regard to work and other meaningful activities, language learning and bureaucratic tasks, and social connections and experiences with longer-term members of the receiving society as well as with fellow refugees.

Study IV examines resilience among refugees – both manifestations of strength in the process of facing adversities and factors that appear to relate to this strength. Themes address cognitive and behavioral coping strategies, resilience as a personal capacity, the links between volunteering and activism and resilience, the importance of social support, the benefits of being a young adult and being a parent, as well as how experiencing migration as an opportunity in various ways may protect mental well-being and overall functioning. In doing so, Study IV provides indirect insights into the relationship between mental health and integration: it shows how refugees protect their mental health against adversities faced within integration as well as how the protection of mental health may facilitate integration.

The seventh and final chapter represents an Integrative Discussion of the four studies. It brings together results from the studies, comparatively discussing these and using qualitative results to complement and illustrate potential mechanisms underlying quantitative results. First, results on the prevalence of psychological distress as well as risk factors are discussed, bringing in insights from the qualitative studies. Second, and centrally, different domains of integration are discussed in turn with regard to their relationship to mental health. The dissertation closes with conclusions, strengths and limitations of the research conducted within this dissertation project, and a research outlook.

This dissertation shows that a large proportion of refugees who arrived in Germany at the height of new arrivals between 2013 and 2016 exhibits significant levels of symptoms of depression, anxiety, and post-traumatic stress disorder, and that women, older individuals, and Afghans are particularly affected. These results have the potential to inform Germany's efforts to fulfill its receiving society responsibility of providing adequate and needs-tailored mental healthcare within integration. They also demonstrate the scale at which potentially diagnosable mental health problems may be interacting with integration.

Centrally, this dissertation shows how multiply and deeply different aspects of the integration process and mental health are intertwined among refugees. Various and often seemingly bidirectional links between mental health and integration were identified within each of the following areas: asylum procedure and legal status, housing, participation in the labor market, education, and integration courses, bureaucratic tasks within integration, German language learning, social bridges to Germans and experiences of xenophobia from Germans, and social bonds within refugee communities – including experiences of family connections and separation. These findings suggest that the role of mental health should be considered in integration policy and that the importance integration should be considered in the conception of mental health interventions and programs.

CHAPTER 1: INTRODUCTION

1.1. Background

1.1.1. Global forced migration on the rise

Forced migration has been steeply on the rise globally over the past decade. In 2013, over 50 million individuals were forcibly displaced worldwide for the first time since World War II, approximately 17.9 million of them refugees and asylum seekers (UNHCR, 2014). By the end of 2016, 65.6 million individuals were forcibly displaced, including 25.3 million refugees or asylum seekers (UNHCR, 2017). By the end of 2019, 79.5 million individuals were displaced, including 30.2 million refugees or asylum seekers (UNHCR, 2020).

As defined by Article 1 of the 1951 United Nations Convention Relating to the Status of Refugees, a refugee is a person who "owing to well-founded fear of being persecuted for reasons of race, religion, nationality, membership of a particular social group or political opinion, is outside the country of his nationality and is unable or, owing to such fear, is unwilling to avail himself of the protection of that country; or who, not having a nationality and being outside the country of his former habitual residence as a result of such events, is unable or, owing to such fear, is unwilling to return to it." The UNHCR defines an asylum seeker as follows: "an individual who is seeking international protection. In countries with individualized procedures, an asylum-seeker is someone whose claim has not yet been finally decided on by the country in which the claim is submitted. Not every asylum-seeker will ultimately be recognized as a refugee, but every refugee was initially an asylum-seeker." (UNHCR, 2013). For the sake of brevity, refugees and asylum seekers will be referred to jointly as "refugees" throughout most of the rest of this dissertation, except where the distinction is important.

Most people who became refugees in recent years have fled from the Syrian Arab Republic (UNHRC, 2014-2019), where a civil war with international involvement that began in connection to the so-called "Arab Spring" has continued unabated since 2011 and left the country in ruins, facing the "worst humanitarian crisis in modern history" (Sorenson, 2016; Staněk, 2017, p. e1). Afghanistan has consistently been one of the primary origins of refugees globally for four decades (Schmeidl for Bundeszentrale für politische Bildung (BPB), 2019). As summarized in an overview published by the BPB (Schmeidl, 2019), the country has been in a permanent state of civil war since the Soviet-supported April Revolution of 1978. The subsequent Soviet-Afghan war from 1979 to 1989 led to a first mass exodus. While many refugees returned following the war, internal displacement rose only a few years later in connection to civil war escalations and the Taliban's rise to power. Post-9/11 bombings by the United States and allies again forced large numbers of Afghans to flee. After a brief phase of refugee return, political and economic instability continued to grow from 2007, again causing internal displacement and flight abroad. From 2015, a further deterioration of safety and economic

conditions led to further flight abroad and internal displacement, with a simultaneous return of substantial numbers of Afghan nationals to Afghanistan. Further countries that have been listed in the UNHCR's top three or top five countries of origin of refugees since 2014 include Somalia, South Sudan, Myanmar, and Venezuela (UNHCR, 2014, 2015, 2016, 2017, 2018, 2019, 2020).

Most refugees were hosted by countries neighboring their countries of origin (Grote, 2018), with Turkey, Pakistan, the Islamic Republic of Iran, Lebanon, Jordan, Ethiopia, Uganda, Sudan, Bangladesh, and Colombia reported as the top hosts of refugees by the UNHCR between 2014 and 2020. However, since 2018, Germany has been listed among the top hosts (UNHCR 2018-2020[1]).

In 2014 and 2015, in particular, there was a sharp increase in flight to European Union member states (UNHCR, 2015, 2016; Korntheuer et al., 2017). This increase was driven largely by the Syrian exodus (Kingsley, 2015). With no end in sight after over three years of conflict, many Syrians gave up hope for stability returning in the near future (ibid.), and Syrian refugees were finding it increasingly difficult to obtain secure legal statuses and to build lives for themselves in Arab countries such as Turkey, Lebanon, and Jordan (ibid.). The increased migration to Europe was also due to the ongoing conflicts in Afghanistan, Iraq, Eritrea, and Somalia, among other countries (Korntheuer et al., 2017). In 2015 alone, over 1 million migrants crossed the Mediterranean and Aegean Seas (UNHCR, 2015, 2016), forced to risk their lives to escape conflict. Many tragically died on this journey (UNHCR, 2015). The perilousness of the journey is part of the reason why refugees arriving in Europe are majority male (Hatton, 2017).

1.1.2. Forced migration to Germany

Almost 50% of the asylum applications lodged within the European Union in this time were lodged in Germany and Sweden (UNHCR, 2016). 2013 had already seen the highest number of first-time asylum applications in Germany since 1996 (116,367 applications), with 109,580 applications (BAMF, 2020)[2]. This made Germany the largest recipient of new asylum applications worldwide for the first time since 1999 (UNHCR, 2014). 2014 saw a further substantial increase with 173,072 new applications[3]. After the opening of the German borders in September of 2015, 441,899 and 722,370 first-time asylum claims were made in 2015 and 2016 respectively, again making Germany the single largest recipient of new individual applications worldwide in both years (UNHCR 2016, 2017).

As summarized by the BPB (Herbert & Schönhagen, 2020), Germany's borders were opened in September 2015 following a series of events that pressured the German government to act: Tensions and public outcry over the Hungarian government's aggressive attempts to halt refugee arrivals via the

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[1] As stated in the UNHCR's 2014 report on 2013, only refugees with particular protection statuses hosted in Germany were counted toward the number being hosted. This is why Germany did not appear as one of the top hosts until 2018.

[2] This is compared to 41,332, 45,741, and 64,539 first-time asylum applications lodged in Germany each year between 2010 and 2012, respectively.

[3] Only the Russian Federation received more asylum applications, due to the conflict in eastern Ukraine (UNHCR, 2015).

Balkan route were rising. Additionally, there was a leak of the German Federal Agency for Migration and Refugee's (BAMF's) internal communications stating that Syrian refugees intending to enter Germany should no longer be turned down even if they had not been previously registered in another EU country in order to alleviate pressure on the overwhelmed agency. This leaked agreement was understood to mean that Germany would grant all refugees entry without border checks. Eventually, in what was called the "march of hope", thousands of refugees made their way from Hungary to Germany along a motorway on foot in September, 2015. Hungary's government declared itself unable to register further refugees and sent refugees to Germany and Austria by bus. The German and Austrian governments, recognizing the crisis that would ensue if they decided otherwise, agreed to receive these refugees. This decision resulted in large numbers of refugee arrivals to Germany until the summer of 2016, mostly from Syria, Afghanistan, Iraq, Eritrea, the Balkan region, and Pakistan (Korntheuer et al., 2017).

The political repercussions of these refugee arrivals to Germany were enormous. The "refugee question" or the "refugee crisis", as it was commonly referred to, shaped Germany's political discourse for years (Herbert & Schönhagen, 2020). The issue was and remains extremely polarizing: On the one hand, the term "welcome culture" became a part of Germany's self-image, and substantial numbers of Germans volunteered in or financially supported refugee-related causes (Funk, 2016). On the other hand, right-wing, anti-immigrant, and also specifically anti-refugee sentiments and political movements grew rapidly (ibid.).

Beyond these more general migration debates, Germany has faced a multitude of concrete challenges in the past years in the process of providing newcomers with the necessary services, infrastructure, and opportunities. These challenges were summarized by Grote (2018, p. 5) as follows: "The high number of newly arrived asylum seekers within a comparatively short space of time placed a huge burden on established administrative structures, accommodation at initial reception facilities, registration, the asylum procedure as well as the administrative courts that have had to deal with a significant increase in appeals against asylum decisions, follow-up accommodation and timely participation in society."

Of course, it depends on policymakers' beliefs and attitudes to what extent "participation in society" or *integration* is the aim in refugee resettlement. In fact, the term *integration* was, until recently, explicit not used in reference to refugees and asylum seekers (Hoesch, 2018). However, since 2014, policy in Germany has tentatively moved toward the integration of refugees and asylum seekers into German society as an explicit aim (Funk, 2016; Hoesch, 2018).

The number of new arrivals has decreased substantially and consistently from 2017[4], largely due to measures designed to restrict arrivals, such as the EU-Turkey-Statement (Grote, 2018). However, the numbers of new applications remain elevated, and the majority of refugees remains in host countries

[4] 198,317 applications in 2017, 161,931 in 2018, 142,509 in 2019, and 83,735 by October 2020 (BAMF, 2020)

for years to decades (UNHCR, 2014). In other words, the facilitation of refugee arrivals and longer-term integration remains a pressing challenge for receiving countries such as Germany.

1.2. The concept of integration

1.2.1. Beginnings: "assimilation"

The earliest investigations of the processes of change that occur when migrants arrive in a new environment gave rise to the "classical assimilation model" (Feldmeyer, 2018). This research had its infancy at the Chicago School in the early 20th century, where sociologists began studying the dynamics of Chicago's rapid population increase due to immigration from European countries (Alba & Nee, 2003; Feldmeyer, 2018). As summarized by Feldmeyer (2018), these Chicago School researchers referred to the process of immigrants becoming a part of American society as "assimilation" and described an inevitable, straight-line, one-directional, multi-generational process of interaction and adaptation culminating in the seamless incorporation of immigrants into existing mainstream American society. The view was that immigrants "increasingly begin to live with, speak, act, work, play, and think like Americans" (Feldmeyer, 2018, p. 42). "Absorption" by the host society was seen as the endpoint of assimilation (Feldmeyer, 2018, e.g. p. 39).

Today, "assimilation" is one of the most controversial terms in the field of immigration studies for its suggestion that immigrants are simply absorbed, abandoning their own characteristics and demanding nothing from the receiving society (Feldmeyer, 2018). Alternatives concepts that have been proposed to capture the process or state of immigrants post-migration are: "inclusion", "participation", "adaptation", "incorporation", "insertion", "settlement", and "integration" (Castles et al., 2002).

1.2.2. Definitions of "integration"

In the present dissertation and in the studies presented herein, the term "integration" is used, primarily because it is the term widely used in German policy and public discourse (e.g. Funk, 2016). It is also highly prevalent in the academic literature – albeit not without controversy deriving in part from its potential connotational overlap with "assimilation", particularly in public discourses (e.g. Penninx & Garcés-Mascareñas, 2016; Grzymala-Kazlowska and Phillimore, 2017). A related criticism is that the term is "vague and slippery and seems to mean whatever people want it to" (Castles et al., 2002, p. 115). Similarly, Hoesch (2018) characterizes the term as a "chameleon that constantly changes its color depending on the speaker or writer" (p. 79, own translation from German).

However, several key academic texts addressing the concept in the context of migration studies have put forth candidate definitions as well as frameworks of integration aiming to make the concept more concrete and analytical, and less normative (Penninx & Garcés-Mascareñas, 2016). Broadly, they

define integration as the process of newcomers or otherwise previously excluded individuals joining a society:

"*The process of becoming an accepted part of society*" (Penninx & Garcés-Mascareñas, 2016, p. 14)

"*A generations-long process of inclusion and acceptance of migrants in the core institutions, relations and statuses of the receiving society*" (Heckmann, 2006, p. 18)

"*The inclusion [of individual actors] in already existing social systems*" (Esser, 2004, p. 46)

"*The process through which immigrants and refugees become part of the receiving society involving changes in values, norms, and behavior for both newcomers and members of the existing society*" (Castles et al., 2002, p. 115)

1.2.3. Integration as a two- or three-way process

Within public discourses, integration is frequently still treated as one-directional, in keeping with classical assimilation models (Castles et al., 2002; Grzymala-Kazlowska and Phillimore, 2017). However, the academic consensus has moved away from the original unidirectional classical assimilationist accounts whereby integration entails newcomers adapting to their new surroundings toward the view that integration is or should be two-way: that it causes or demands adaptations both from newcomers and from the receiving society. Heckmann (2006) argues that this need not, indeed, be considered a moral or political view, but simply one that reflects reality: "the 'openness' of the receiving society is a necessary precondition for the integration of immigrants" (ibid., p. 14). Heckmann concludes that this means that barriers to integration created by the receiving society, including concrete structural and institutional barriers as well as societal attitudes, are as much part of integration or part of what integration research should study. In fact, in a study on integration in European cities came to the conclusion that these receiving society factors are more consequential for how integration progresses than features or actions by migrants (Penninx & Martiniello, 2004). Major policy papers also embrace concepts of integration as two-way or even three-way (European Commission, 2011), with the countries of origin also playing a part. In the academic literature, transnational accounts of integration consider present-day integration it to be "multi-directional" (Snel et al., 2006; Wagner, 2017).

1.2.4. Integration into what?

As a more theoretical point, albeit one that is gaining in recognition, the literature has raised the question: into what do immigrant and refugees integrate (Castles et al., 2002; Grzymala-Kazlowska & Phillimore, 2018)? The classical assimilation model idea of a "mainstream" within receiving societies

into which migrants integrate is one of the central aspects of this model that has been criticized (Castles et al., 2002; Safi, 2011). The degree to which industrialized receiving societies are even still cohesive units into which newcomers can integrate has been called into question (Urry, 2000; Grzymala-Kazlowska & Phillimore, 2018). Grzymala-Kazlowska and Phillimore (ibid.) argue that the so-called superdiversification of industrialized societies, which was originally described by Vertovec (2007) as the "diversification of diversity" (p. 1025) and refers to the increasing demographic complexity and changeability of some present-day societies, calls for new ways of thinking about integration. They criticize that too much of policy writing still juxtaposes "us and them", "minorities and majorities" as though either were cohesive, clearly delineated groups simply defined by their national origins. Instead, just like industrialized receiving societies of today are not homogenous units, neither are arriving populations: "new migration" (Grzymala-Kazlowska & Phillimore, 2018, p. 181) encompasses diverse groups forming temporary connections to multiple countries, living in transnational social networks (ibid.).

Just like it is unclear what the mainstream is, it is also unclear whether integration into it needs to be the target. Elwert (1982) argued that becoming incorporated into same-ethnic subgroups within the receiving society can be an important step in integration. Weinfeld (1997) characterized integration as a "nested process" that begins within migrants' very immediate surroundings – with the adaptation of relationships with members of the existing social network to the new situation post-migration, and reaches progressively further – to subgroups within the receiving society, neighborhoods and cities, and, finally, to the receiving society as a whole.

While there are now calls such as Grzymala-Kazlowska and Phillimore's (2017) for integration research to take the outlined complexities into account, these questions remain rather theoretical.

1.2.5. Integration frameworks

In research and in policy, however, several integration frameworks have been put forth that specify the process of integration beyond a general notion of "integration into the receiving society" by creating taxonomies of the domains, dimensions, or aspects of integration, as presented in the next section. The question "Integration into what?" may affect some domains of integration – in particular, those related to social relationships and cultural changes following relocation – while others allow for a more straightforward perspective. The frameworks presented below and the dimensions or domains of integration they posit are central to the perspective on integration taken throughout the remainder of this dissertation.

One of the most influential specifications of dimensions of integration, particularly in the German-speaking context, is by Hartmut Esser (2001, 2006). As summarized in Hoesch's book (2018) on migration and integration from a German perspective, Esser calls integration "social integration" and

distinguishes four interconnected dimensions. “Culturation” is the process of acquiring the knowledge and skills necessary for life in the receiving society, including language learning. “Placement” or “structural integration” refers to the process of participating in education and the labor market, as well as achieving full rights and political participation by means of, eventually, naturalization. “Interaction” is the process of establishing social relationships with receiving society in everyday life. Finally, “identification” is a sense of belonging to the social system within which one lives. Importantly, Esser considers these dimensions of social integration as applying to non-migrants in a society as well. Esser’s framework is also one of the few to make explicit what it considers successful integration or an end to the integration process to be: his “assimilation”, defined as the disappearance of systematic differences between different groups, although individual inequalities and cultural differences can remain (Esser, 2001, 2006).

Penninx and Garcés-Mascareñas (2016) present a framework that centers around the relationship between immigrants and host society, moving away from frameworks such as Esser’s, which they suggest lacks this relational perspective (p. 14). They distinguish between different dimensions along which the long-term process of “becoming an accepted part of society” (p. 14) takes place: the legal-political, the socio-economic, and the cultural-religious. The legal-political dimension pertains to the extent to which “immigrants [are] regarded as fully fledged members of the political community” (p. 14) in the receiving society. The socio-economic dimension pertains to the extent to which migrants have “equal access to institutional facilities for finding work, housing, education, and healthcare” (p. 15). The cultural-religious dimension addresses the “perceptions and practices of immigrants and the receiving society as well as their reciprocal reactions to difference and diversity” (p. 15).

A frequently cited model – also within this dissertation – specifically on the integration of refugees is by Ager & Strang (2008). Interestingly, their model is the result of empirical data on conceptions of integration collected from refugees and those working in refugee integration in the United Kingdom as well as an analysis of European Union integration policy papers and a review of academic literature from integration studies. The result was a “conceptual framework defining core domains of integration” (p. 170). The framework consists of an inverse pyramid of what can be described as functional categories, including, from bottom to top, “foundation”, “facilitators”, “social connection”, and “markers and means”. Each category encompasses specific domains: “foundation” – “rights and citizenship”; “facilitators” – “language and cultural knowledge” and “safety and stability” (safety from racial discrimination and crime generally, highlighting the importance of experiences of racism and xenophobia for refugee integration); “social connection” – “social bridges”, “social bonds”, and “social links”; “markers and means” – “employment”, “housing”, “education”, and “health” (p. 170). Social connection subcategories are derived from Putnam’s (1993) writing on social capital, notably emphasizing the value not just of relationships between refugees and members of other communities (“social bridges”) and institutions (“social links”) of the receiving society, but also of relationships

within communities that share an ethnic, national, or religious identity ("social bonds"). In the context of this dissertation, health as a marker and means of integration is an important aspect of this framework that will be revisited in section 4 on the relationship between mental health and integration.

An adjacent term central to investigations of integration and settlement within social and cultural psychology that comes up several times within this dissertation and should briefly be introduced is the term "acculturation" (Berry, 1997, 2006). "Acculturation" broadly refers to any instance of "changes that take place as a result of contact with culturally dissimilar people, groups, and social influences" (Schwartz et al., 2010, p.1, referencing Gibson, 2001). It pertains to the dimensions of cultural practices, values, and identifications (Schwartz et al., 2010). As Heckmann (2006) makes explicit, within the context of migrant and refugee integration, "acculturation" corresponds to the cultural dimension of integration in frameworks such as Esser's.

In summary, these frameworks overlap in many regards, starting with the basic principle of breaking integration down into different domains, dimensions, or areas that include structural, social, cultural, civic, and political participation-related, as well as identity-related domains and processes (as summarized in Spencer & Charsley, 2016). Within every dimension or domain, both newcomers and those who are already embedded in a society are involved in shaping the integration process. Castles and colleagues (2002) emphasize the large number of social players ("every level and sector of society", p. 113) who are involved in integration as a consequence of its multidimensionality. As addressed in the next section on integration measures in Germany, integration policy and the public discourse often focus on integration as integration into core institutions, most importantly the labor market, as well as cultural dimensions (Chemin & Nagel, 2020).

Castles and colleagues (2002) additionally point out that the an immigrant or refugee's conditions of exit from their countries of origin and the situation of others from the same ethnic community who are already in the receiving country should be considered part of the "integration matrix" of factors related to how integration proceeds. Furthermore, all frameworks consider the different dimensions or domains of integration to be interconnected. For example, Esser (2006) surmises that structural integration may be what makes interaction and identification possible – also because structural integration may change the way other members of the receiving society approach migrants (Spencer & Charsley, 2016). Several accounts of integration also point out that it need not be a linear process, that there can be setbacks, and that integration can proceed at different speeds within different domains (e.g. Castles et al., 2002; Spencer & Charsley, 2016).

Importantly, Castles et al. (2002) and Spencer (2016) highlight that integration begins at the point of arrival in a new environment. They permit for a distinction between short- and long-term integration,

but argue against the notion that integration only pertains to those with prospects of staying in a society long-term (by contrast, see e.g. Heckmann, 2006).

While some (Esser, 2006; Kuhlman, 1991) have put forth ideas of what it means for migrants to have achieved successful integration, Spencer (2016) firmly asserts that there is no endpoint for integration, no "integrated society." Unlike the identification of domains of integration, defining what successful integration would look like remains highly normative and political. As the concept of an "integrated society" suggests, and as previously mentioned in the summary of Esser's integration framework, integration and the state of being more or less integrated can, of course, be seen more broadly as applicable to all members of a society, whether they migrated or not.

Finally, it is important to note that refugees face specific challenges in integration compared to other migrants (Castles et al., 2002; Desiderio, 2016): these arise from the fact that in many cases, refugees are unable to plan ahead for their resettlement. As addressed in subsequent sections, they are also frequently exposed to highly distressing or traumatic events before or during their migration. Additionally, refugees face asylum procedures to determine their right to stay in a receiving society and may encounter particular forms of discrimination. This migrant population may also come from lower socioeconomic backgrounds than other migrant populations and have fewer established networks in the receiving society (Schwartz et al., 2010).

1.2.6. German integration context

This section briefly presents integration measures and conditions encounter by refugees in Germany that are relevant background information for the studies included in this dissertation. Firstly, the asylum procedure following an application for asylum with the Federal Agency for Migrants and Refugees is central to most refugees' experiences. Applicants are permitted to reside in Germany throughout the application process (Jacobsen et al., 2020). As summarized by Korntheuer (2017), the possible outcomes of the asylum process include asylum (according to §16a of Germany's Basic Law) or refugee (according to the Geneva Convention) protection, subsidiary forms of protection (term used by Hatton, 2017 – protection from being returned to where life is threatened) – including the subsidiary protection status and a national ban on deportation, suspension of deportation, and deportation. The first two forms of protection come with the longest duration and the most rights. Subsidiary protection status and national ban on deportation usually grant a one-year right to stay initially (BAMF, 2019). Suspensions of deportation are granted to those whose application has been rejected but cannot be deported (e.g. due to missing travel documents) (Korntheuer, 2017). It represent a highly uncertain legal status, and is granted for different durations, usually only up to six months (Dienelt, 2016). Due to the large number of applications, many have experienced and are experiencing a protracted asylum procedure (Degler et al., 2017). Those who are not granted asylum or refugee protection can appeal the BAMF's decision, returning to applicant status (Korntheuer, 2017). A

minority of refugees also arrives in Germany through humanitarian resettlement programs and does not need to go through the asylum procedure (Korntheuer et al.,, 2017).

The central focus in German integration policy has, for the most part, been on labor market integration (Chemin & Nagel, 2020). Recent policies (between 2013 and 2016) have enabled earlier (from three months after arrival) and less bureaucratic labor market participation for refugees and asylum seekers, including those with very insecure legal statuses, and apprenticeships have been incentivized (Jacobsen et al., 2020). However, certain groups, particularly those from "safe countries" who are obligated to reside in initial reception centers are still excluded from labor market participation (ibid.). The difficult process of having qualification certificates obtained prior to resettlement recognized is another obstacle to labor market integration (Degler et al., 2017). While all refugees and asylum seekers now have the right to have their certificates assessed, equivalency may not be granted and missing or incomplete documents are a common problem (ibid.). For those who have been granted a protection status, labor market integration is supervised by the "Jobcenters" which are tasks with facilitating labor market integration for all recipients of benefits in Germany (ibid.).

Because learning German is, of course, another crucial first step before entering the labor market or educational programs, so-called integration courses have been made more broadly available. These integration courses, which were opened to asylum seekers in 2015, include language courses as well as civics lessons on political structures, rights and practices (Prem, 2017). In other words, these courses also address sociocultural integration, which has been emphasized as an additional priority within integration policies more recently (Chemin & Nagel, 2020). There are also further language courses, such as language courses in preparation for employment, funded by the BAMF (ibid.). However, access to courses is complicated by high demand and limited capacities (Degler et al., 2017). It is also often restricted to those with protection statuses or good prospects of being granted a protection status and may require special permission (Prem, 2017). This means that it can take substantial bureaucratic effort to gain access.

With regard to housing, when asylum seekers first arrive in Germany, they are placed in initial reception centers, which can be described as mass accommodation facilities, for up to six months (Schmid & Kück, 2017). However, asylum seekers may end up staying in these facility for even longer than the intended maximum duration (Ekren, 2018). Living conditions in these facilities can be very poor; in fact, they were once designed as a deterrent (Aumüller et al., 2015; Schmid & Kück, 2017). Following this initial accommodation, refugees reside in shared accommodation – refugee housing facilities, where conditions are heterogeneous – or private housing (Schmid & Kück, 2017).

Those granted a protection status and those who have been waiting for a decision on their asylum application for over 15 months receive full healthcare access (Bozorgmehr & Razum, 2015; Klein,

2016; summarized in Hettich, 2017). For others, only urgent treatment is provided. Under these circumstances, psychotherapeutic care is only accessible upon special request when an acute need has been found. Psychosocial centers throughout Germany are designated to provide mental healthcare to asylum seekers. However, these centers are underfunded and can only treat about half of those seeking help (Hettich, 2017). Language barriers and difficulties around securing funding for therapeutic translators are further obstacles to mental healthcare for refugees in Germany (ibid.).

While family unity has been put forth as a human right (e.g. Article 16 of the Universal Declaration of Human Rights; Löbel & Jacobsen, 2021), refugees' family reunification rights are highly disputed in receiving societies, including in Germany (see e.g. Löbel & Jacobsen, 2021). Generally, family reunification for adult refugees living in Germany is possible for minor children and spouses (section 26 of the Asylum Act (AsylG) (1), Section 36 a of the Residence Act (2)); however, as of 2018, quotas for family reunification have been put in place, and reunifications were entirely refused to those granted only subsidiary protection between 2016 and 2018.

1.3. Refugee mental health

1.3.1. Mental health: concepts

According to The Lancet Commission on Global Mental Health and Sustainable Development (Patel et al., 2018), whose definitions are very slightly altered versions of definitions from the WHO (2001), mental health is: "*the capacity of thought, emotion, and behavior that enables every individual to realize their own potential in relation to their developmental stage, to cope with the normal stresses of life, to study or work productively and fruitfully, and to contribute to their community*" (Patel et al., 2018, p. 10); and mental disorders are: "*disturbances of thought, emotion, behavior, and relationships with others that lead to substantial suffering and functional impairment in one or more major life activities, as identified in the major classification systems such as the WHO International Classification of Diseases and the Diagnostic and Statistical Manual of Mental Disorders*" (ibid., p. 10). "Mental well-being" and "psychological well-being" are also used as synonyms for "mental health" in this dissertation.

The three mental disorders that are by far the most commonly investigated with regard to refugee populations are depression, anxiety, and post-traumatic-stress disorder (PTSD) (e.g. Bogic et al., 2015; Turrini et al., 2017; Morina et al., 2018; Lindert et al., 2018; Peconga & Thøgersen, 2020; Blackmore et al., 2020). Depression is a complex disorder characterized by a wide range of symptoms including low mood, loss of interest in activities, low energy, low self-esteem, inappropriate feelings of guilt, problems concentrating, sleep and appetite disturbances, psychomotor retardation, irritability, as well as somatic symptoms such as aches and pains (WHO, 2004, International Statistical Classification of

Disease and Related Health Problems, 10th Revision (ICD 10)). Generalized anxiety disorder is characterized by symptoms including excessive and seemingly uncontrollable worries, fear, dread, restlessness, bodily tension, problems concentrating and sleeping, heart racing, sweating and dizziness, and irritability (ICD 10). PTSD is a trauma and stressor-related disorder (Pai et al., 2017) and encompasses a range of symptoms including reliving the traumatic event in the form of intrusive thoughts or dreams, having physical reactions when recalling the traumatic event, negative alterations in mood such as feeling emotionally numb, and an exaggerated startle response (American Psychological Association, 2013; Hollifield et al., 2016).

"Psychological distress", or "emotional distress", refers to a more general emotional suffering, as the name suggests. It is usually operationalized as being characterized mainly by symptoms of depression and anxiety (Mirowsky & Ross, 2002) – although symptoms of other disorders, including post-traumatic stress disorder (PTSD), have also been included in distress measures (Hollifield et al., 2013; Hollifield et al., 2016). Psychological distress is the central mental health concept in two of the studies presented in this dissertation.

Another concept that features in the studies presented in this dissertation is resilience. The literature presents a wide range of definitions, conceptions, and operationalizations of resilience (Windle, 2011). A commonality among definitions is the notion that resilience is to do with "effectively negotiating, adapting to, or managing, significant sources of stress or trauma" (Windle, 2011, p. 163) or "successful adaptation despite challenging or threatening circumstances" (Masten et al., 1990, p. 426) – or, in the most everyday understanding "'bouncing back' from difficult experiences" (Windle, 2011, p. 156). What constitutes "bouncing back", "successful adaptation", or "effective negotiation" is thought to depend on the severity of the adversities faced (Windle, 2011; Fletcher & Sarkar, 2013). In all cases, mental health and well-being and functioning are the parameters that this adaptation comprises (Luthar, 2006). Among the disputed aspects of resilience is a) what type of thing resilience is: a process, a capacity, a trait, or an outcome, b) whether related constructs such as cognitive and behavioral coping mechanisms or protective factors are a part of resilience or distinct from resilience, c) the scope of resilience: whether it refers to an individual and psychological phenomenon or to something that encompasses external resources (e.g. Ungar et al., 2007) or that can be exhibited by communities (e.g. Kirmayer et al., 2009) (Windle, 2011; Fletcher & Sarkar, 2013; Rice & Liu, 2016).

In this dissertation, the focus is on resilience as an individual, psychological phenomenon. With regard to the type of thing resilience is, the research article presented in Chapter 6 remains flexible, basing its definition of resilience on a key work from developmental psychology: "the process of, capacity for, or outcome of successful adaptation despite challenging or threatening circumstances" (Masten et al., 1990, p. 426). While cognitive and behavioral coping are considered to be separate concepts from resilience in this study (Fletcher & Sarkar, 2013; Rice & Liu, 2016), they are taken to be part of the

process of managing adversity in this dissertation, as described by Rice and Liu (2016). Factors that promote positive adaptation are not considered a part of resilience, but of great interest to our understanding of it (as in e.g. Hjemdal et al., 2006).

1.3.2. Risk of mental health problems among refugees: pre- and peri-migration stressors

As Papadopolous writes, "[t]o begin with, it is important to remember the obvious fact that becoming a refugee is not a psychological phenomenon per se; rather, it is exclusively a socio-political and legal one, with psychological implications" (Papadopolous, 2007, p. 301). This bears mentioning in light of the prevalence of research on and discourse around refugees' (poor) mental health. Indeed, this almost exclusive focus on struggles has been rightfully criticized given the resilience that is evident in this population (Papadopoulos, 2007; Murray et al., 2010; Hutchinson & Dorsett, 2012; Simich, 2014; Siriwardhana, 2014). In part based on this critique, the study presented in chapter 6 of this dissertation takes a strengths-based view.

Nevertheless, throughout the literature, refugees and asylum seekers have been found to be at a particular risk of suffering from reduced mental well-being as a consequence of pre-, peri-, and post-migration stressors (e.g. Porter & Haslam, 2005; Steel et al., 2009; Kalt et al., 2013; Bogic et al., 2015; WHO, 2018).

Prior to flight, refugees are highly likely to experience so-called "potentially traumatic events", such as witnessing or experiencing violence during war, witnessing killings and violence between and within families, torture, detention, fearing for their lives under political, religious, or other forms of persecution, gender-based oppression or violence, collective and sexual violence, life-threatening hunger or thirst (WHO, 2018; Kalt et al., 2013; Jesuthasan et al., 2018). Many refugees' pre-migration experience will also have been marked by other severe stressors (Pai et al., 2017), including poverty, homelessness, lacking access to facilities such as education and medical care, forced separation, deaths of loved ones, and loss of social support (Porter & Haslam, 2005; Jesuthasan et al., 2018).

Due to the lack of legal routes (UNHCR, 2015) – primarily owing to European Union Directive 2001/51/EC that made it impossible for the majority of refugees who have been arriving in Europe in recent years to use air travel, flight itself is an immensely perilous period in many refugees' lives. For refugees arriving in Europe from Middle Eastern and African countries, this period rife with potentially traumatic events and other severe stressors can be protracted and highly uncertain, spanning several years with stays in several transit countries (UNHCR, 2016; Brücker et al., 2016). Refugees' journeys take them through conflict zones, deserts, and for many, on an extremely dangerous crossing of the Mediterranean Sea (UNHCR, 2016; UNHCR, 2018). En route, many – if not the overwhelming majority (e.g. Jesuthasan et al., 2018) – are at the mercy of smugglers, face

threats of imprisonment, kidnappings and torture for ransom, experience sexual or physical abuse, witness death and violence (UNHCR, 2016; Brücker et al., 2016; UNHCR, 2018; Jesuthasan et al., 2018).

Studies show that refugees who arrived in Europe in the past decade have experienced a high number of potentially traumatic events before and during migration (Tinghög et al., 2017; Georgiadou et al., 2018; Jesuthasan et al., 2018; Peconga & Thøgersen, 2020). As summarized by Peconga and Thøgersen (2020), Syrian refugees appear to have experienced on average between 3.7 and 17.2 potentially traumatic event. A study on adult Syrian refugees in the German city of Erlangen found that 75.3% have experienced and/or witnessed potentially traumatic events (Georgiadou et al., 2018). In a study on refugee women who arrived in Germany between 2015 and 2016, 40.8% reported having had a near-death experience in their country of origin or en route to Germany, 26.3% experienced the killing of a family member or a friend, and 14.1% experienced torture, among other harrowing experiences (Jesuthasan et al., 2018).

A substantial body of research on refugee mental health has focused on the link between these pre- and peri-migration stressors and poor mental health outcomes (e.g. reviewed in Steel et al., 2009; Miller & Rasmussen, 2010; Bogic et al., 2015). The primary framework on the role of stressful experiences in the etiology of mental health problems is the "life events model of stress" whereby stressful life events such as loss trigger or cause depression, anxiety disorders, alcoholism, and other disorders (Thoits, 1983; Kendler et al., 2003; Porter & Haslam, 2005; Steel et al., 2009). Another model is that of PTSD itself as a reaction to traumatic events. The disorder can last from months to years in refugees (Mollica et al., 2001; Shalev, 2009), and may develop over time post resettlement (Roth et al., 2006). The fact that many refugees experience multiple potentially traumatic events puts them at a particular risk of developing symptoms of PTSD, generalized anxiety, and depression (Steel et al., 2009; Knipscheer et al., 2015; Georgiadou et al., 2018; Mahmood et al., 2019). Apart from major life events and potentially traumatic events, lower-intensity "daily stressors" are also considered to drive mental health problems and to be pervasive and of great urgency within refugee communities (Miller & Rasmussen, 2010).

1.3.3. Post-migration factors and mental health

Research has become increasingly interested in the links between post-migration experiences and mental health in refugees, criticizing the previous exclusive focus on pre-migration experiences as the source of mental health problems within both the general scientific and the clinical practice-oriented literature (Miller & Rasmussen, 2010; Li et al., 2016; Hynie, 2018). A brief contemplation of the circumstances refugees face in receiving countries, including industrialized receiving countries like Germany, reveals that refugees continue to face a range of stressors well after they have left behind their countries of origin and their perilous flight journeys. These stressors include an uncertain and protracted asylum process, challenging to precarious living conditions in overcrowded reception

centers and other refugee housing facilities, restricted access to institutions and services. Refugees also face the challenges of language acquisition, struggles to have their educational certificates recognized, prolonged unemployment or employment in jobs for which they are overqualified, and financial difficulties. They must navigate a completely unfamiliar institutional and sociocultural environment. Isolation, loss of social networks, separation from family that may be left behind in danger, discrimination and threats of or actual xenophobic violence from members of the receiving society, and stigmatization as refugees are further burdens of the post-migration phase. Of course, all of these factors are, in one way or another, closely related to or part and parcel of the integration process according to any of the frameworks of integration presented in section 1.2.5 above. In other words, research has increasingly addressed different aspects of the relationship between mental health and integration.

1.4. Mental health and integration

1.4.1. Theoretical background

Previous literature that has examined the relationship between mental health and circumstances refugees encounter in receiving societies largely focuses on "post-migration stressors" rather than "integration" (exceptions include De Vroome & Van Tubergen, 2010; Bakker et al., 2014; Beiser et al., 2015; Schick et al., 2016 – see section 1.4.2 below). Perhaps this is due to the psychological rather than sociological focus of most of these studies: the stressor-stress relationship is the central focus of this research. Accordingly, several major studies have used scales on post-migration stress which capture subjective experiences of the intensity of various stressors rather than facts about circumstances (e.g. Chen et al., 2017; Tinghög et al., 2017). "Post-migration stressors" may also be favored as a more neutral term considering the controversies over "integration" (see section 1.2). However, this dissertation is framed with an explicit focus on the relationship between mental health and *integration*.

There are three central motivations behind bringing the integration concept and refugee mental health together. First, the interdisciplinary project ("Affective and Cultural Dimensions of Integration as a Result of Flight and Immigration (AFFIN)") within which the studies presented in this dissertation were conducted explicitly aims to address the paucity of investigations of subjective, affective factors within integration research. Although mental health and well-being have been increasingly included as important factors or outcomes in integration research (Hadjar & Backes, 2013; Malmusi, 2015; Levecque & Van Rossem, 2015; Sand & Gruber, 2018), the lack of emphasis on subjective factors compared to e.g. socioeconomic factors has been criticized (e.g. Amit & Litwin, 2010; Raijman & Geffen, 2017). In line with the overall goals of the AFFIN project, this dissertation aims to highlight the importance of affective and subjective experiences within integration processes. Second, the concept of integration emphasizes the fact that the various ways in which receiving societies and

refugees interact is a societal process. While the literature on post-migration stressors does make appeals for policy changes, evoking the concept of integration, which is central to the political and public discourse – at least in Germany –, highlights receiving society responsibilities. Third, "stressors" imply a one-directional relationship whereby stressors result in adverse effects on mental health. Looking at the relationship between mental health and integration, by contrast, emphasizes the possibility of bi-directionality.

Bi-directionality is to be expected in the relationship between mental health and integration based on the life events model of stress touched upon in the previous section on the one hand and based on knowledge of how many mental health problems are accompanied by functional impairment on the other. It is generally agreed among mental health experts that conditions such as depression (McKnight & Kashdan, 2009), generalized anxiety (Stein, 2004), and PTSD (Holowka & Marx, 2012) can have any degree of negative impact on functioning across various life domains. Because integration places high demands on newcomers, mental disorders can be expected to have a negative effect on individuals' integration progress (e.g. Bakker et al., 2014; Schick et al., 2016). Bakker and colleagues (2014) view mental health as a personal resource necessary for integration.

Khoo (2007) and Beiser and colleagues (2015) point out that while this perspective – that mental health may impact different facets of integration – is underrepresented in the scientific literature, it is often noted in more policy-related publications that mental health problems may be one of the reasons why integration is particularly difficult for refugees – and, indeed, several recent German reports have made this point (e.g. Degler et al., 2017; Leopoldina, 2018; Kiziak et al., 2019). For example, a committee of experts on mental health and migration in Germany argued that the psychological problems that some refugees face can lead to problems with everyday functioning and participation (Leopoldina, 2019). They caution that past traumatic experiences can also lead to withdrawal and learning difficulties, resulting in reduced benefits from programs specifically designed to facilitate integration.

The only major integration framework that includes the notion that (mental) health might be both an outcome of and a prerequisite for successful integration is the one put forth by Ager and Strang (2008) based on literature searches and empirical research. The authors position health as a "marker and means" of integration (p. 170) alongside housing, employment, and education. In their elaboration on health as a marker and means, they explain that while health was not mentioned as frequently as other areas related to integration in their fieldwork, their documentary analysis suggested that it was generally viewed as "an important resource for active engagement in a new society" (p. 172) – and in that sense a means for integration. The authors do not elaborate on ways in which health is a marker of integration beyond addressing the importance of access to health services, not just for the sake of

promoting health, but also as an indicator of participation in a central receiving society institution – and in this sense an indicator of integration.

There are general reports and policy papers that go further in describing this twofold importance of health within integration. For example, Ingleby (2009) posits that health impacts integration and that, conversely, the way in which the "transition to a new society" (p. 3) takes place impacts health. Ingleby and colleagues (2005) point out that this bidirectional relationship has the potential to create a "downward spiral" because "illness exacerbates marginalization and marginalization exacerbates illness" (ibid. p. 1). Appealing to the concept of "health in all policies" (see WHO, 2014), Ingleby (2009) argues that while access to adequate healthcare is, of course, important, environmental factors also have a large impact on health.

Similarly, the WHO Regional Office for Europe (2018) identified "promoting mental health *through* social integration" (p. 6, emphasis own) as one of eight "action areas", citing evidence that integration factors, particularly education, housing, employment, social isolation, are linked to mental health. This report argues that although the direction of effects is unclear, in case integration factors are a cause, integration policy should be modified for the sake of improving mental health outcomes. Previously, the Office had emphasized the importance of "promoting the social integration of these groups to help to prevent the occurrence of new mental disorders and to improve the outcomes of pre-existing ones" (Priebe et al., for WHO, 2016, p. 10). Similarly, an article on paradigms in mental health posits: "The social dimension of mental illness should be an intrinsic component of intervention and not just a concession in etiological modeling" (Saraceno, 2004, p. 5).

Importantly, the literature has also acknowledged that refugee experiences should not be pathologized through an exclusive focus on mental health problems (Papadopoulos, 2007; Murray et al., 2010; Hutchinson & Dorsett, 2012; Simich, 2014; Siriwardhana et al., 2014). However, positive mental health, strength, and resilience do not seem to figure in contemplations of the relationship between mental health and integration – except implicitly, qua representing an opposite to or an absence of struggles. Perhaps one could say that resilience links into the mental health and integration relationship in two ways: First, as explained above, integration requires a high level of functioning, and mental health problems as sequelae of adversity are likely to threaten functioning. As described in the brief introduction into the resilience concept in section 1.3.1, maintaining some level of functioning and mental health in the face of adversity is a core feature of the "positive adaptation" that is central to resilience. Because adversity is near-ubiquitous to refugee experiences (see sections 1.3.2 and 1.3.3), accomplishing integration requires a degree of mental health and functioning in the face of adversity – it requires resilience. Second, the ways in which refugees protect their mental health against adversities arising from the integration process itself are clearly a facet of the mental health and integration nexus.

Mental health and integration also relate on a different level from the immediate one of mental well-being potentially impacting integration and vice versa: linking back to a point made by Ager & Strang (2008) regarding health as a marker of integration raised above, (mental) healthcare provision is considered to be among the main policy responsibilities of receiving societies within integration (see also Castles et al., 2002). This means that receiving society policymakers require an understanding of the mental healthcare needs of migrant and refugee populations, and also major sociodemographic subgroups within these populations, in order to do their part in the two- or multi-way process of integration, particularly considering the known elevated risk among refugees (e.g. Porter & Haslam, 2005; Steel et al., 2009; Kalt et al., 2013; Bogic et al., 2015; WHO, 2018). Knowing the prevalence of mental health problems among refugees is also crucial to assessing the overall significance of any potential mental health and integration interactions. In the longer run, estimates of refugee population-wide mental well-being, particularly how they develop over time, may also function as one indicator of how well integration is going (see in particular Hadjar & Backes, 2013), as mentioned above.

Given these theoretical background considerations, this dissertation examines the relationship between mental health and integration by bringing together results on the associations between different domains or areas of integration and mental health, on resilience related to integration, and on prevalence rates of mental health struggles. Before the research aims are specified, previous findings on these facets and research gaps are outlined.

1.4.2. Previous findings on associations between areas of integration and mental health

Investigations on the relationship between post-migration factors or stressors (formulation used in most studies) – or areas of integration – and refugee mental health have become more numerous and have demonstrated ample links, sometimes stronger than the links between pre-migration stressor and mental health (Miller & Rasmussen, 2010; Li et al., 2016; Hynie, 2018). Beyond relating negatively to mental health in and of themselves, post-migration stressors may also adversely affect refugees' well-being by thwarting their ability to overcome past trauma (Hynie, 2018). Presented below are previous findings on major integration factors addressed in relation to mental health in the literature. These are also almost all of the factors addressed in the studies presented in this dissertation.

Several studies have found links between the asylum procedure and its outcome and poor mental health (Li et al., 2016; Silove et al., 2017; Hynie, 2018). These factors are part of "placement" or "structural integration" in Esser's (2001, 2006) integration concept, the legal-political dimension of integration in Penninx and Garcés-Mascareñas' (2016) framework, and the "foundation" of integration in Ager and Strang's (2008) framework, as summarized in section 1.2.5. One study found that longer asylum procedures are associated with increased rates of anxiety, depression, and somatoform

disorders; more so than pre-migration trauma exposure (Laban et al., 2004). A study on Syrian refugees who arrived in Germany after 2014 found that a shorter future validity of residence permits correlated with more severe PTSD (Georgiadou et al., 2018), demonstrating that symptoms related to past events are susceptible to modulation from current stressors. Similarly, another study found that among refugees being treated for PTSD and depression, a less secure legal status was associated with greater symptom severity (Knipscheer et al., 2015). The transition from temporary to permanent residence permits has been linked to an improvement in symptoms of depression and PTSD (Nickerson et al., 2011). Interestingly, this association was mediated by favorable changes in living conditions, suggesting that one of the ways in which insecure legal statuses may impact refugees' mental health is by limiting them in other aspects of their lives in receiving countries (ibid.). Asylum procedures may also retraumatize refugees (Drožđek et al., 2013).

A less frequently explored area of post-migration life that has been linked to refugee mental health is housing, which represents part of "placement" or "structural integration" (Esser, 2001, 2006), the socio-economic dimension of integration (Penninx & Garcés-Mascareñas, 2016), or the "marker and means of integration" category (Ager & Strange 2008) in integration frameworks. In their meta-analysis, Porter & Haslam (2005) found that refugees living in institutional accommodation rather than private accommodation exhibited worse mental health, arguing that the former promotes dependency and demoralization. More recently, Leiler and colleagues (2019) found unusually high levels of depression, anxiety, and PTSD as well as low quality of life ratings among residents in Swedish refugee housing facilities, even among those who had received a residence permit. They argue that the poor conditions in the housing facilities in addition to the uncertainty and passivity that often characterize life in these facilities are likely to blame. In their integration framework based on empirical work, Ager & Strang (2008) stress the deleterious effects of housing in refugee accommodation on feelings of community and safety. Indeed, attacks on refugee housing facilities are not uncommon in Germany (Jäckle & König, 2017). The role of housing in promoting feelings of safety and community was also highlighted in a qualitative study on the relationship between housing and health in refugees in Australia (Ziersch et al., 2017). Within the German context, two qualitative studies have shed light on the links between housing and mental health, finding that residing in refugee housing facilities can increase discrimination experiences, passivity, feelings of missing a home, and more (Haase et al., 2019; Gürer, 2019).

Labor market participation – and with it preparatory steps such as integration courses in Germany and education – is a central focus of German integration policy and, along with cultural dimensions, often what is meant by "integration" in public discourses (Chemin & Nagel, 2020). Labor market participation, participation in educational programs and in integration courses are, again, part of the "placement" or "structural integration" dimension of integration (Esser, 2001, 2006), the socioeconomic dimension (Penninx & Garcés-Mascareñas, 2016), or the "markers and means of

integration" category (Ager & Strang, 2008), but arguable also of "culturation" (Esser 2001, 2006) or "language and cultural knowledge" among the "facilitators of integration" (Ager & Strang, 2008) to an extent. As outlined in section 1.2.6, refugees face several challenges in labor market participation in Germany and other receiving country contexts, including difficulties entering the labor market in the first place as well as difficulties finding employment in the same occupation as in the country of origin (e.g. Degler et al., 2017). Participation in programs such as German integration courses and educational programs has scarcely been investigated with regard to its relationship to mental health. Unemployment in the receiving country and other markers of insufficient socioeconomic integration (e.g. financial security and job satisfaction) as post-migration stressors, on the other hand, have been linked to worse mental health outcomes among refugees in a range of studies (Porter & Haslam, 2005; Khoo, 2010; De Vroome & Van Tubergen, 2010; Beiser & Hou, 2001; Warfa et al., 2012; Bakker et al., 2014; Beiser et al., 2015; Bogic et al., 2015; Wood et al., 2019).

Interestingly, many of these studies focus on the potential deleterious effect of poor mental health for economic participation in their interpretation of correlative findings, rather than the other way around. For example, De Vroome & Van Tubergen (2010) investigated the link between various factors, including general and mental health problems and economic integration, concluding that both poor general health and depression may represent barriers to the latter. Bakker and colleagues (2014) investigated the role of mental health as a mediator between "post-migration stressors" (long stay in housing facility and insecure residence status) and socioeconomic integration, arguing that mental health can be seen as a personal resource necessary for the latter. Beiser et al. (2015) examined the relationship between symptoms of PTSD and pre-migration adverse events and various integration indicators along two dimensions, economic and social. They found that PTSD symptoms are related to reduced economic integration (including factors such as employment, financial situation, and homeownership), while adverse pre-migration experiences are linked to reduced social integration (including social connections and sense of belonging).

Further elucidating the relationship between mental health and labor market participation, one study showed that male refugees living in refugee camps may experience boredom and feel hurt in their pride due to unemployment and limited chances of finding work (Cantekin, 2019). Another study identified a sense of fulfillment and belonging, self-esteem and a sense of purpose as going hand in hand with the relief from mental health burdens experienced by refugees through paid as well as voluntary work (Wood et al., 2019). This study also emphasized the importance of labor market participation for facilitating integration into receiving society communities.

Several studies have identified links between refugee mental health and host country language abilities (e.g. Bogic et al., 2015), a facet of culturation (Esser, 2001, 2006), "language and cultural knowledge" within "facilitators of integration" (Ager & Strang, 2008), or of the cultural-religious dimension of

integration (Penninx & Garcés-Mascareñas, 2016). One study found that host country language ability was particularly predictive of mental health outcomes at later stages in the integration process (ten years in) (Beiser & Hou, 2001). Another study identified a mediating effect of host country language ability on the relationship between traumatic experiences and anxiety and PTSD post-migration (Kartal et al., 2019), highlighting the potential of language not just to impact mental health of its own but to impact aftermath of traumatic experiences. A mediation analysis in another study revealed that the relationship between host country language ability and mental health may be mediated by intergroup contact between refugees and members of host country communities (Tip et al., 2019), demonstrating the importance of host country language ability for accessing resources for good mental health, such as social contact and support. Language proficiency also impacts ease of access to healthcare (Kirmayer et al., 2011; Renner et al., 2020).

A major "softer" area of integration is "social connections" (Ager & Strang, 2008): "becoming an accepted part of society" (Penninx and Garcés-Mascareñas, 2016, p.14), of course, entails forming social relationships and social networks upon resettlement. While many integration frameworks focus on the social connections between newcomers and those already living in the receiving society ("interaction" (Esser 2001, 2006)), Ager & Strang (2008) include not only "social bridges" but also "social bonds" between co-nationals, same-ethic, or otherwise same-background individuals in their understanding of integration (building on Putnam, 1993, as outlined in section 1.2.5).

Social connection and support are widely recognized as crucial to mental health, particularly in the face of adversities and life stressors (Gottlieb, 1981). Literature on resilience among refugees consistently identifies social support as one of the central factors that enable refugees to manage mental health struggles as well as stressors and practical aspects of integration (Siriwardhana et al., 2014), and a lack of social support was linked to depression across studies in a large review (Bogic et al., 2015). Several studies have also identified isolation and loneliness as common problems related to mental health among refugees (Hynie, 2017). Strang & Quinn (2021) suggest that the negative effects of isolation may be cumulative in the sense that initial isolation begets further isolation. They also point out that refugee housing facilities often contribute to isolation (ibid.).

Regarding social bridges, a study on the relationship between well-being, host country language skills and contact to host society communities found that greater contact early was associated with better mental health down the line (Tip et al., 2019). Bridges are also considered beneficial for fostering a sense of belonging[5] and feelings of acceptance, safety, and security, as well as for providing "bridging capital" that facilitates structural integration (Ager & Strang, 2008). However, intergroup social contacts may also convey exclusion, xenophobia, or overt racism (ibid.), experiences which,

[5] For theory and findings linking sense of belonging, mental health, and social embeddedness, as well as a new scale on sense of belonging, see Fuchs, Jacobsen & Walther and colleagues (2021).

unsurprisingly, have been linked to depression and general poor mental health among refugees (Noh et al., 1999; Ellis et al., 2008; Haase et al., 2019; Ziersch et al., 2020).

The role of extra-familial social bonds in refugee mental well-being is generally underexamined. One study found that lacking social bonds with their own community can negatively impact refugees' mental health (Beiser, 1993). Familial social bonds – and particularly their disruption, have received far greater attention in the literature. Family separation relates to integration not just on the level of social connections, but also or particularly in so far as enabling family reunification is one of the legal obligations that receiving societies have – according to human rights law, which elevates family unity to a right (e.g. Article 16 of the Universal Declaration of Human Rights). In other words, it can also be placed in the legal-political dimension of integration (Penninx & Garcés-Mascareñas, 2016) or the "foundation" of integration (in Ager & Strang, 2008). More generally, as summarized by Löbel and Jacobsen (2021), previous studies have framed family networks as a resource for refugee well-being as well as for integration (Ryan et al., 2008; Honohan, 2009; Wilmsen, 2013).

Family separation and fear for family remaining in the country of origin has been found to be related to higher symptom levels of PTSD as well as depression (Nickerson et al., 2010) and overall poor mental health (Löbel, 2020). A mixed-methods study showed that family separation burdens refugees by causing fear for relatives left behind in the country of origin, feelings of "cultural disruption", as well as feelings of helplessness (Miller et al., 2018).

Resilience among refugees, particularly adult refugees, is an under-researched aspect of refugee mental health, as previously mentioned. Beyond the central role of social support within resilience noted above (e.g. Schweitzer, 2007; Khawaja et al., 2008; Sossou et al., 2008; Sherwood & Liebling-Kalifani, 2012; Liebling et al., 2014; Newbold et al., 2013; Renner et al., 2020; Zbidat et al., 2020; Liu et al., 2020), cognitive coping strategies (e.g. Khawaja et al., 2008; Shakespeare-Finch & Wickham, 2009; Sherwood & Liebling-Kalifani, 2012; Liebling et al., 2014; Zbidat et al., 2020; Liu et al., 2020) and faith (Schweitzer, 2007; Sherwood & Liebling-Kalifani, 2012; Khawaja et al., 2013; Newbold et al., 2013; Zbidat et al., 2020; Rayes et al., 2021) are often identified as elements of resilience among refugees in the literature. Post-migrations stressors are mentioned in many of these studies as adversities faced with resilience.

1.4.3. Estimating the prevalence of mental health problems among refugees

Several meta-analyses have been undertaken in the past two decades in an effort to estimate prevalence rates of the most common disorders among refugees. In an early meta-analysis of studies on the prevalence of PTSD, depression, and anxiety among refugees who migrated to high-income countries conducted between 1986 and 2004, Fazel and colleagues (2005) found rates of 9% for PTSD, 5% for major depressive disorder, and 4% for generalized anxiety disorder. Higher quality

studies reviewed by these authors were found to arrive at lower prevalence rates than studies with more methodological limitations. While the overall prevalence rates this meta-analysis arrived at are far lower than later meta-estimates, the study does find that the PTSD prevalence rate of 9% means that refugees may be ten times more likely to experience PTSD than age-matched peers in general populations of Western receiving countries.

Many other prominent meta-analyses conclude higher rates of PTSD and depression, usually around 30%-40%, respectively. For example, a meta-study carried out by Steel and colleagues (2009), which looked at refugees and other groups impacted by military conflict found much higher rates of 30% for PTSD and 30% for depression. Lindert and colleagues (2018) found a mean prevalence of 32% for PTSD and 35% for depression among studies on newly arrived refugees from different background and in different receiving countries. Focusing specifically on studies looking at Syrian refugees residing in different receiving countries, Peconga and Thogersen (2019) report a 43% prevalence of PTSD, a 41% prevalence of depression, and a 27% prevalence of anxiety. Bogic et al. (2015) found that higher quality studies suggest that refugees may be roughly up to 14 times more likely to have depression and 15 times more likely to have PTSD compared with the general Western adult population (Bogic et al., 2015). A high comborbidity of depression, PTSD, and anxiety was reported across these meta-analyses.

A large heterogeneity in prevalence estimates is reported across the literature (e.g. Turrini et al., 2017; Tinghög et al., 2017; Morina et al., 2018; Lindert et al., 2018; Peconga & Thogersen, 2019; Blackmore et al., 2020). Of course, one overarching difficulty is that the determination of the presence of mental health problems is not straightforward: research employs a range of clinical interviews and short screening instruments depending on the study design, which can all produce different results and also vary in their cross-cultural validity (e.g. Turrini et al., 2017; Morina et al., 2018; Blackmore et al., 2020). A further methodological source of heterogeneity is the common use of small and non-representative samples recruited through different sampling procedures (Tinghög et al., 2017). Beyond these methodological issues, the heterogeneity in prevalence rates also reflects the heterogeneity of refugee populations themselves – regarding cultural, national, sociodemographic and economic backgrounds as well as experiences in the country of origin, migration journeys and receiving country contexts, and the duration of stay (Peconga & Thogersen, 2019; Blackmore, 2020). For example, Chung and colleagues (2018) compared PTSD prevalence between refugees living in Turkey and refugees living in Sweden and found significantly higher rates among the former group. Ibraheem and colleagues (2017) showed that cross-context differences in prevalence can also be reverse for different symptom clusters: they found that while PTSD was more common among Syrian refugees displaced within Syria than among those who resettled in the Netherlands, the opposite pattern emerged for depression. As a results of these complexities, it would appear that prevalence is best determined

separately and specifically for different contexts using large-scale and representative data (Lindert et al., 2018).

1.5. Research gaps and aims

1.5.1. Research gaps

While the body of research on the associations between factors of integration and mental health among refugee populations has grown substantially over the past two decades, and the significance of these associations is increasingly recognized (Miller & Rasmussen, 2010; Li et al., 2016; Hynie, 2018), several research gaps remain to which the studies presented in this dissertation aimed to respond. First of all, every receiving country context is different, every receiving country context also changes with time (see some notes on how German integration context has changed in sections 1.1.2 and 1.2.6.), and every refugee population is different depending on factors such as region of origin and circumstances of flight. This means that, in any case, up-to-date research within different contexts is always needed (see e.g. Lindert et al., 2018). It can also be argued that it is one of the receiving society responsibilities within the two- or more-way process of integration to collect and analyze this context-specific data on refugee integration, health, and other factors.

Second of all, regarding research based on quantitative methods, studies based on large, receiving country-wide samples are scarce. In particular, almost all of the studies presented above, which focus on concrete post-migration living conditions, are based on smaller convenience samples or local context (exceptions: De Vroome & Van Tubergen, 2010; Bakker et al., 2014). Two more recent studies from Sweden (Tinghög et al., 2017) and Australia (Chen et al., 2017) used subjective, psychometric scales to get at post-migration stress rather than examining concrete factors. None of these larger-scale studies carried out prior to the studies presented in this dissertation come from Germany. While each receiving country context should be studied, as mentioned above, Germany is a particularly pertinent context to investigate given its status as one of the top receiving countries in recent years, as presented in section 1.1.1 on the rise of global forced migration.

The dearth of large-scale, nationally-representative surveys of refugee populations also presents a major research gap in addressing the prevalence of mental health disorders and general psychological distress within refugee populations, as well as key sociodemographic risk factors. The heterogeneity in estimates of the prevalence discussed above in section 1.4.3 calls for analyses based on context-specific, timeframe of arrival-specific, large-scale, and representative data. National representativity is key to enabling receiving countries to fulfill their healthcare provision responsibility within integration (Ager & Strang, 2008).

Despite their unique advantages (see section 2.3.1.), qualitative approaches to investigating refugee experiences, in general, have been under-utilized (Hoare et al., 2017; Rowley et al., 2020). As raised in Study III presented in chapter 5, no existing qualitative studies were found in the literature search conducted that were specifically dedicated to the mental health and integration nexus, and very few studies were from Germany.

Finally, as noted in sections 1.3.1 and 1.4.2 above, and as presented in Study IV (chapter 6), psychological resilience among refugees has been generally under-researched due to a focus on mental health struggles (Murray et al., 2010; Hutchinson & Dorsett, 2012), and even fewer qualitative strengths-focused studies have been conducted, especially pertaining to adult refugees (Murray et al., 2010; Hutchinson & Dorsett, 2012). Existing studies from Germany (e.g. Renner et al., 2020; Zbidat et al., 2020) have broader foci and consequently include only rather brief explorations related to resilience. This research gap also affects our understanding of the relationship between mental health and integration, given that knowledge of mechanisms and factors that protect mental health in the face of adversities within the integration process is also important evidence to deepen this understanding.

1.5.2. Dissertation project aims

Against the backdrop of the information, previous literature, theoretical considerations, and research gaps presented above, this dissertation examines the relationship between integration and mental health. It does so by presenting and then bringing together two large-scale quantitative studies (Studies I and II) based on survey data from refugees who arrived in Germany between 2013 and 2015 as well as two qualitative studies (Studies III and IV) based on an interview study with refugee participants from three locations in Germany who arrived between 2013 and 2018. Beyond contributing to our understanding of the mental health and integration association, the aim of the studies included in this dissertation and the dissertation as a whole is to inform both integration policy and health policy under the premise that good (mental) health policy may be essential to facilitating integration, and good integration policy may be essential to facilitating mental health among refugee populations.

Below is a brief presentation of the research questions addressed within each of the four studies presented as well as how they related to the overall dissertation project topic of "*The relationship between mental health and integration among refugees who arrived in Germany after 2012*":

Study I: This study addresses the association between mental health and different aspects of integration.
Study II: The first part of this study addresses: "*How prevalent is psychological distress among the population of refugees who arrived in Germany between 2013 and 2016, and how prevalent is it among major sociodemographic groups?".* These questions relate to the mental health and integration nexus in that healthcare provision is a central responsibility of receiving societies within integration,

and prevalence estimates are essential to adequate healthcare provision. Results on these research questions also give an indication of how pervasive experiences of poor mental health that may relate to integration are. The second part of the study addresses the association between mental health and different aspects of integration.

Study III: This study addresses the association between mental health and different aspects of integration, as well as more general associations between mental health and integration. The focus was very explicitly on poor mental health and mental health problems.

Study IV: The research questions are: "*How do the process of, capacity for, and the outcome of successful adaptation to adversity manifest among refugees who arrived in Germany between 2013 and 2018? What are the factors facilitating successful adaptation?*" These questions relate to the mental health and integration nexus in that mechanisms and factors that protect mental health against adversities within the integration process are an important but neglected facet of this relationship. More generally, resilience as the maintenance of mental health and functioning in the face of adversity is required for integration, as argued in section 1.4.1.

CHAPTER 2: RESEARCH DESIGN AND METHODS

Chapters 3 through 6, which comprise the complete articles for Studies I-IV, include their own methods sections, of course, including sample descriptions, information on dependent and independent variables and on the conception of the interview topic guide, as well as information on the statistical or thematic analyses performed. In what follows, the research design and methods of the quantitative and qualitative studies are introduced, respectively. Elaborations on some aspects of design and methodology that were described more briefly in the research articles as well as elaborations on aspects that embed the studies in this dissertation framework are provided below.

2.1. Research design and methods of the quantitative studies

2.1.1. Studies I and II: quantitative studies based on IAB-BAMF-SOEP data

The quantitative studies presented in chapters 3 and 4 were conducted to explore associations between various aspects of the integration process and different measures of mental health in a large Germany-wide sample. Study II also estimated the prevalence of psychological distress in the population of refugees who arrived in Germany between 2013 and 2016 on the whole and within different sociodemographic groups, in order to address the need for large-scale, representative, context-specific estimates (e.g. Lindert et al., 2018). Because understanding prevalence is key to mental healthcare provision and this, in turn, is a key responsibility of receiving societies within integration, these results are also discussed in this dissertation.

Studies I and II are both based on data from the IAB-BAMF-SOEP[6] refugee survey (see e.g. Kroh et al., 2016). This household panel survey has been conducted annually since 2016 across Germany. The survey's target population is adult refugees and asylum seekers who arrived in Germany between January 2013 and January 2016 and either applied for asylum in Germany or arrived in Germany through a humanitarian resettlement program. The survey waves used in the studies presented in this dissertation included 4,465 respondents and 2,639 second-wave returnees, respectively. As described by Kroh and colleagues (2017), recruitment involved a four-tranche random draw from among target population members in the register of foreign-nationals living in Germany who had been clustered by region. The individuals drawn in this procedure are the anchor persons; within the household design, all adult members of their household were interviewed. Sampling ensured a minimum number of participants from different regions in Germany, and sampling from each German state was proportional to the number of target population members residing in the state. Certain groups, particularly women and adults over 30, were oversampled to ensure adequate sample size in these

[6] IAB (Institute for Employment Research) - BAMF (Research Centre on Migration, Integration and Asylum of the Federal Office for Migration and Refugees) - SOEP (Socio-Economic Panel at the German Economic Research Institute)

groups. The Socioeconomic Panel provides survey weights that adjust for unequal sampling probabilities by gender, age, legal status, and country of origin. These weights also take into account the tranche- and cluster-design as well as non-response (based on factors including country of origin, asylum status, federal state of residence, and time since arrival in Germany) (ibid.). The weights also adjust for stratification by federal state. The weights for the second wave of the survey include survey dropout probability estimates (Kühne et al., 2019).

Survey items vary from wave to wave, but each year covers a large range of sociodemographic, economic, migration-related, social, psychological, and health-related topics. The survey is conducted in face-to-face computer-assisted interviews in seven different languages (German, English, Arabic, Farsi/Dari, Pashto, Urdu, and Kurmanji) (Kroh et al., 2016).

2.1.2. Studies I and II: outcome variables

Key outcome variables in Study I were psychological distress measured using the PHQ-4 and a single-item global life satisfaction measure[7]. In this dissertation, the focus is on findings related to the PHQ-4 as the mental health measure. The PHQ-4 comprises two items capturing key symptoms of depression (low mood and loss of interest) and two items capturing key symptoms of anxiety (nervousness and inability to stop worrying) experienced over the past two weeks (Kroenke et al., 2009). The depression items derive from the well-established PHQ-9 (Kroenke et al., 2001); the anxiety items derive from the GAD-7 (Spitzer et al., 2006). Each pair of items performs similarly well in screening for depression and anxiety as these longer scales (Kroenke et al., 2009). Taken together, the scale is conceived to represent "psychological distress" (Kroenke et al., 2009), a construct that is central to both Studies I and II. As mentioned in section 1.3.1, "psychological distress" refers to emotional suffering primarily characterized by symptoms of depression and anxiety (Mirowsky & Ross, 2002) – although there is a debate in the literature about how psychological distress and disorders relate (Payton, 2009). While Study I regards the whole spectrum of psychological distress severity in keeping with the skeptical view that severity cutoffs represent arbitrary points at which distress becomes disorder (Mirowsky & Ross, 2002; Payton, 2009), Study II, which centrally aims to capture the prevalence of psychological distress reaching a level classically considered indicative of a need for further assessment or intervention, takes a more pragmatic cut-off approach.

Study II uses a different measure of psychological distress, the Refugee Health Screener 13, specifically developed for refugee populations (RHS-13; Hollifield et al., 2013; Hollifield et al., 2016). The screener covers a large range of symptoms experienced over the past month: nine general

[7] Life satisfaction is considered to capture a dimension of subjective well-being – "people's multidimensional evaluation of their lives, including cognitive judgements of life satisfaction and affective evaluations of emotions and moods" (Eid & Diener, 2004, p. 245). While subjective well-being, and life satisfaction more specifically, has been found to correlate with measures of mental health, the constructs are considered distinct (e.g. Lombardo et al., 2018).

symptoms of depression and anxiety, including somatic symptoms (aches and pains, faintness or dizziness, low mood, overthinking, helplessness, fear without cause, nervousness, restlessness, tearfulness); and four symptoms of PTSD (reliving traumatic experiences, physical reactions to memories, numbness, exaggerated startle response). These final four items are prefaced with an explicit note that these symptoms may be related to traumatic experiences. Particularly in its inclusion of somatic symptoms and symptoms of PTSD, the RHS-13 captures psychological distress more broadly than the PHQ-4, and in doing so, has particular advantages in measuring mental health among persons with a refugee background: There is evidence that symptoms of somatisation are highly prevalent among refugee populations (Rohlof et al., 2014); however, research on the mental health of refugees rarely addresses them (Rohlof et al., 2014; Jongedijk et al., 2020). Capturing symptoms of PTSD within a general distress screening is, of course, also especially relevant in refugee populations (see section 1.3.2). The items comprising the RHS[8] were derived from the longer New Mexico Refugee Health Symptom Checklist (Hollifield et al., 2009), which, in turn, was based on a preliminary qualitative study with Vietnamese and Kurdish refugees. Hollifield et al. (2013) conducted a validation study for the RHS-15 among refugees from Bhutan, Burma, and Iraq residing in the United States which showed good sensitivity and specificity when compared to the more extensive and established Hopkins Symptom Checklist-25 (Derogatis et al., 1974) and the Posttraumatic Symptom Scale-Self Report (Foa et al., 1993). In a further study with refugees from Bhutan, Burma, and Iraq residing in the United States, Hollifield et al. (2016) presented evidence in support of the RHS-15 as well as RHS-13's suitability as a screening instrument in the context of a general public health examination. It is because of its broader scope in terms of symptoms – including the crucial symptoms related to PTSD and somatisation – and its having been constructed for refugee populations that the RHS-13 was used to assess overall and subgroup-specific prevalence of psychological distress in Study II.

2.1.3. Studies I and II: key independent variables – factors of integration

The independent variables of interest used in Studies I and II represent aspects of integration that are included in every integration framework presented in section 1.2.5. Both studies examine the association between *legal status or outcome of the asylum status* (part of "placement" in Esser's (2001, 2006) framework, the legal-political dimension of integration in Penninx and Garcés-Mascareñas' framework (2016), and the "foundation" of integration in Ager and Strang (2008), as summarized in section 1.2.5), *type of housing* (socio-economic dimension of integration (Penninx & Garcés-Mascareñas, 2016), "marker and means of integration" (Ager & Strange 2008)), f*amily separation* (seeking family reunification with members of the nuclear family members in Study I; fact of separation from members of the nuclear family in Study II) (legal-political dimension of integration

[8] The original Refugee Health Screener has 15 items and is called the "RHS-15" (Hollifield et al., 2013). The "RHS-13" was developed and validated as a slightly shorter version that excludes an item with a visual answering tool for improved efficiency (Hollifield et al., 2016).

(Penninx & Garcés-Mascareñas, 2016); "foundation" of integration (in Ager & Strang, 2008); family connections are also part of "social bonds" within the "social connections" domain of integration (ibid.)), *employment status and participation in education in Germany, as well as participation in language and integration courses* (both "placement" and "culturation" (Esser 2001, 2006), socioeconomic dimension (Penninx & Garcés-Mascareñas, 2016), "markers and means of integration" and "language and cultural knowledge" as "facilitators of integration" (Ager & Strang, 2008)). These last factors are central to policy and public discourse perspectives on integration (e.g. Chemin & Nagel, 2020).

While Study II explicitly focuses on aspects of integration that can be ascertained in the form of objective, factual data in its focus on addressing policymakers, Study I takes a broader view and also includes psychometric measures of *frequency of contact to Germans* ("social bridges" within "social connections" (Ager & Strang, 2008), "interaction" (Esser 2001; 2006)), *frequency of contact to co-nationals* ("social bonds" (Ager & Strang, 2008); not frequently mentioned in other integration frameworks), *frequency of contact to third nationals* ("social bridges" (Ager & Strang, 2008); not frequently mentioned in other integration frameworks), and *self-rated German language speaking, reading, and writing proficiency* (culturation (Esser, 2001, 2006), "language and cultural knowledge" as "facilitators of integration" (Ager & Strang, 2008), cultural-religious dimension (Penninx & Garcés-Mascareñas, 2016)).

2.1.4. Comparing methodologies used in Studies I and II

A brief discussion of the ways in which Studies I and II, based on data from wave 1 and wave 2 of the IAB-BAMF-SOEP refugee survey, respectively, are methodologically different and the ways in which they might provide a robustness check for one another is warranted. While Study II has a central focus on prevalences and Study I includes life satisfaction as another outcome, they both examine the relationship between a measures of psychological distress and several overlapping factors of integration. Of course, the measures of psychological distress are different. While the PHQ-4 is an ultra-brief screener for core symptoms of depression and anxiety, the RHS-13 features a section on the effects of traumatic experiences as well as several items on somatic complaints, as described in section 2.1.2 above. Integration processes may relate differently to the symptoms captured by these outcome variables, respectively.

The studies also differ in their analytical strategy. While Study I includes ordinary least squares regressions including all integration-related variables in one model to test the relationship between psychological distress and different facets of integration, Study II uses modified Poisson regressions with a binary outcome variable (positive or negative screen for psychological distress) with separate models for each facet of integration. These differences are largely owing to the different primary focus of the studies. Study I was not concerned with clinical cutoffs, but instead with improving chances of

capturing all associations by regarding the full variance of outcomes (see e.g. Mirowsky & Ross, 2002). Study I also took a complete-picture look at associations between mental health and integration, investigating and controlling for all factors of interest simultaneously, and comparing the variance explained between models including only sociodemographic predictors, sociodemographic and pre-flight variables, and, finally, factors related to integration. Study II takes a binary perspective throughout because its focus is prevalence and relative risk of mental health disorders. In other words, the focus is more clinical and the study aims to speak in more direct terms to health and integration policymakers by addressing prevalence and relative risk. Predictor variables of interest were entered into individual models alongside basic sociodemographic control variables because relative risk for the binary outcome was of interest in a more absolute sense rather than whole-picture-of-integration sense: from a more clinical and health policy oriented perspective, it is of interest that risk is elevated in refugee housing facilities, for instance, regardless of whether this may be confounded by some other integration factor. This is because elevated risk in refugee housing facilities can be meaningfully addressed, for example, through the introduction of mental health screening in these facilities, regardless of whether some other factor mediates this association.

These factors limit the comparability of these studies somewhat: in addition to potentially arising from the different nature of the outcome variables, differences in results may be due to binary versus continuous treatment of outcome variables, model specification, as well as associations changing between survey years. Nevertheless, results can and will be compared in the Integrative Discussion in chapter 7.

2.2. Research design and methods of the qualitative studies

2.2.1. Studies III and IV: qualitative studies based on semi-structured interviews

Studies III and IV are both based on an interview study including 54 interviews with adult refugees living in Berlin, Mülheim an der Ruhr, Dinslaken, or Duisburg, Northrhine Westphalia, or Leipzig, Saxony. The aim of Study III was to analyze various links between mental health struggles and integration that came up in the interviews in depth. The aim of Study IV was to understand manifestations of and factors related to resilience among refugees. Although the relationship between mental health and integration was not the focus of this study, by examining resilient responses to various adversities – including those stemming from integration processes – this study sheds light on strengths that protect refugees' mental health in the integration process.

The interviews were semi-structured, meaning that both open and closed questions were asked and that in place of a rigid questionnaire, interviewers used a "topic guide" or "interview guide" which they were free to use with some flexibility according to how the interview developed (e.g. Adams, 2015). In other words, interviewers were instructed to adapt questions depending on the answers to

previous questions, ask spontaneous follow-up questions for comprehension, further pursue interesting unforeseen topics brought up by the interviewee, and to use their discretion to phrase questions in a way that they deemed sensitive and appropriate to the individual in front of them. Its allowance for these accommodations makes a semi-structured interview approach particularly suitable for asking interviewees about sensitive issues (Kallio et al., 2016) – which the interview study presented here did. Greater flexibility also enables interviewees to be more active in shaping the course of the interview and thus to share their subjective perspective – a key focus of qualitative research (e.g. Flick et al., 2004).

2.2.2. Studies III and IV: study topic guide

As described in Chapters 5 and 6, the topic guide used in Studies III and IV consisted of three sections: an initial section to ascertain basic personal information and migration background; a large section on values, belonging, and intercultural experiences; and another large section on feelings and stressors, the interplay of emotional states and building a life in the receiving country, the importance of the past versus the present for mental well-being, opinions on the overall mental health situation in the refugee community and more (please see the topic guide in the online supplementary materials for Study IV).

Of course, prior knowledge went into formulating questions and interviewer instruction (Kallio et al., 2016). Interviewers were asked to refrain from explicitly mentioning “mental health” or any other specific mental health term early in the mental health section of interview for two reasons: first, in light of the stigmatization of mental health and mental healthcare as subject matters, which may be substantial within refugee communities (Sossou et al., 2008; Byrow et al., 2019). Second, we aimed to capture the full spectrum of emotions and experiences that comprise mental health and well-being, as laid out in section 2.2.3. Questions about emotions, burdens, worries in a more general sense were formulated to ensure that participants felt free to speak about their experiences independent of a potentially stigmatized or otherwise charged or overly pre-defined concept: “Which feelings dominate your daily life since your arrival in Germany?”; “How have these areas of life made you feel in Germany?”; “What currently burdens you the most? / What do you currently worry about the most?”.

Importantly, the first three questions in the topic guide are also open with regard to whether positive or negative emotions are meant; a question about where participants’ strength comes from and a question about activities that bring comfort in the first cultural experiences section of the topic guide also encourage expressions of strengths, positive mental health, and resilience, as does a question about how feelings and emotions influence the process of building a life in Germany.

For any participants who may exhibit a reluctance to report on their emotions, and also to tap into how participants perceive the situation of others with similar backgrounds, the topic guide also included

questions about mental health among refugee communities generally: “What do you think other people who fled from the same country as you have predominantly felt like since arriving in Germany – the same as you, or different?”; “Do you think refugees in general face mental health challenges/ emotional stress?”. Given the discussion on this contrast in the literature on refugee mental health (see section 1.3), the topic guide asks participants to assess whether the past or present has a stronger impact on their well being.

With regard to inquiring about areas of integration, the topic guide and interviewer instruction allowed for participants to raise areas and issues that were most important from their perspectives. The question “What has made you feel the way you do?” (following an initial question about dominant emotions in Germany) allows participants to bring up any aspects of the integration process or other past of present life experiences. “What currently burdens you the most?” is open in the same way. In order to inquire into different areas of integration as demarcated in the literature presented in section 1.2.5, interviewers were also instructed to ask about how different specific areas of participants’ lives make them feel in Germany, including social life (“social bridges and bonds” within “social connections” (Ager & Strang, 2008); “interaction” (Esser 2001; 2006)), work life or education (both “placement” and “culturation” (Esser 2001, 2006); socioeconomic dimension (Penninx & Garcés-Mascareñas, 2016); “markers and means of integration” and “language and cultural knowledge” as “facilitators of integration” (Ager & Strang, 2008)), housing situation (socio-economic dimension of integration (Penninx & Garcés-Mascareñas, 2016); “marker and means of integration” (Ager & Strange 2008)), legal and bureaucratic matters (part of “placement” in Esser’s (2001, 2006) framework, the legal-political dimension of integration in Penninx and Garcés-Mascareñas’ framework (2016), and the “foundation” of integration in Ager and Strang (2008)), and new cultural environment (“language and cultural knowledge” (Ager & Strang, 2008); cultural-religious dimension (Penninx & Garcés-Mascareñas, 2016; “culturation” and “identification” (Esser 2001, 2006); “acculturation” (Berry, 1997, 2006).

The first part of the topic guide on values and intercultural experiences also covered experiences with the new cultural environment, acculturation, and sense of belonging – i.e. matters of “identification” (Esser, 2001, 2006). Questions such as “How do you feel when interacting with Germans? Do you notice any cultural barriers?”, “What do you like most about Germany and the way of living here? What do you like less?”, and “Do you sometimes feel torn between your home country and Germany?” were suited to capturing ways in which mental health relates to the cultural and identificational facets of integration. The question about feeling torn between Germany and the country of origin as well as a question in the mental health section of the topic guide addressing the role of events in Germany versus events in the country of origin for shaping well-being acknowledge that the country of origin context and how migrants continue relate to it as they settle in a new environment are also a part of the integration process, as addressed in section 1.2.3. The question “Do

you feel accepted in German society?" was designed to ascertain sense of belonging as well as potential discrimination experiences – also recognized as a factor in integration by Ager & Strang (2008, "safety and stability"). It also echoes Penninx and Garcés-Mascareñas' (2016) general understanding of integration as a "process of becoming an accepted part of society" (p.14).

The topic guide was conceived to reflect the potential bi-directionality of the mental health and integration nexus, as introduced in section 1.4. While questions about sources of stress and worry in Germany asked participants to reflect on the impact of factors of integration on mental health, a question on how emotions influence the ability to build a new life in Germany was included to get at the potential influence of mental health on integration. Questions about mental healthcare provision and stigma related to healthcare provision address health as an "indicator of integration" in the sense that it reflects the extent to which a receiving society grants newcomers access to health services, as framed in Ager and Strang's understanding (2008).

2.2.3. Studies III and IV: thematic analysis

Both Studies III and IV applied thematic analysis as described by Braun and Clarke (2006), which essentially identifies patterns in qualitative data. Thematic analysis was chosen for its straightforwardness and flexibility (see e.g. Roberts et al., 2019): while it is a method in its own right, as asserted by Braun and Clarke (ibid.), it is also the foundation of many other analyses (ibid.; Boyatzis, 1998) and, as such, considered to be a basic and open method (Braun & Clarke, 2006). Particularly because the studies conducted within this dissertation project are directed not just at the scientific community, but at policymakers and health practitioners, results in the form of graspable themes were desirable. In the same vein, Studies III and IV both took an essentialist or realist approach within the thematic analysis, assuming a largely straightforward relationship between what interviewees said and what they meant (Braun and Clarke, 2006). The fact that a large part of the data was translated also limited the level of nuance possible in the analysis, favoring more direct interpretations.

Chapters 5 and 6 describe the thematic analyses carried out in detail, summarizing an overall approach largely in-keeping with Braun and Clarke's (ibid.) six-phase analysis process for both studies. The formation of themes was guided by the following idea about the relationship between themes and research questions: "A theme captures something important about the data in relation to the research question, and represents some level of patterned response or meaning within the data set" (Braun & Clarke, 2006, p. 82)." Given the research question "how do mental health problems and integration relate?", the analysis involved identifying mental health and integration-related contents of the interviews, respectively, and particularly contents about their intersection. Chapter 5 describes the identification of mental health problem-related contents in the interviews: all explicit mentions of symptoms and mental health conditions by interviewees as well as expressions of distress and negative

emotions that appeared to be of significance to interviewees were regarded as relevant to the research topic at hand. The identification of integration-related contents was similarly flexible: all reports on processes involved in arriving and building a life in Germany were considered. Because unique links between mental health problems and different aspects of integration were apparent in the data, areas of integration ended up being a main organizing element and a clear way of linking the data to the research question.

Chapter 6 details how the same interview data was thematically analyzed to understand how the process of, capacity for, and the outcome of successful adaptation to adversity manifest among refugees and what the factors facilitating successful adaptation are. These research questions are not directly related to the overall dissertation project topic. However, because many of the adversities refugees face are parts of the integration process itself and because successful adaptation includes "functioning", which, in turn, includes the ability to carry out activities vital to integration, the resulting themes do, inevitably, provide insights into the relationship between mechanisms and factors that appear to protect mental health and integration.

2.3. Bringing Studies I-IV together

2.3.1. Quantitative versus qualitative approaches

The fact that this dissertation project includes both quantitative and qualitative studies has major advantages with regard to the insights gained on the overarching research question. Each method has distinct strengths and limitations that the other does not have (Flick, 1998). Quantitative studies, particularly large-scale, representative studies, can be used to test for correlations within samples that are generalizable to populations (Martin & Bridgmon, 2012; Queirós et al., 2017). Quantitive studies in the social and psychological sciences employ standardized and repeatedly validated measurement instruments that ensure some degree of reliability and also comparability between groups (Steckler et al., 1992). Quantitative approaches also offer estimates of the strength of associations and, arguably, some objectivity (Choy, 2014): participants are not, for example, asked for their subjective impression of how their legal status makes them feel; instead, the statistical association between legal status and a mental health score is tested. In other words, associations of which participants themselves may not be aware can be identified at the supra-individual, aggregate level (Kelle & Erzberger, 2004). Quantitative approaches are also not nearly as subject to interpretation biases by researchers and other researcher subjectivities as qualitative studies (Flick, 2004; Choy, 2014). Finally, statistical analyses allow for an adjustment for potential confounding factors.

Of course, it is invaluable to scientific understanding as well as policymakers to be able to make (adjusted) generalizations about associations and risk factors as well as their relative strength, provide population prevalence estimates, all based on established standardized measures and replicable

analyses. In this vein, Studies I and II, both of which are quantitative and based on analyses using a large-scale dataset, provide evidence for associations between mental health and factors of integration as well as for prevalences of mental health problems among different groups that are generalizable to the population of refugees and asylum seekers who arrived in Germany between 2013 and 2016.

However, quantitative approaches to investigating complex social and psychological phenomena can be rather reductionist (Choy, 2014): statistical associations between constructs operationalized as standardized survey items and scales do not allow for in-depth, context-specific perspectives by respondents and do not shed light on exactly how or why things might relate or what experiences and ideas mean to respondents. By contrast, qualitative approaches are concerned with drawing on and presenting "*in-depth* and *illustrative* information" (Queirós et al., 2017, p. 370; emphasis own) rather than predictions (Steckler et al., 1992), "meanings, motives, aspirations, beliefs, values and attitudes" (Maxwell, 2013; Queirós et al., 2017, p. 370), as well as how and why things may be as they appear (Steckler et al., 1992). Qualitative data and analyses may offer rich and contextualized perspectives (Steckler et al., 1992; Queirós et al., 2017) that enhance our understanding of "life-worlds" from a necessarily subjective perspective (Flick et al., 2004). These features may be particularly important in an increasingly complex social world marked by ever less clearly defined identities (Flick, 1998). As noted above, semi-structured interviews such as the ones conducted for the studies presented in this dissertation allow for participants to bring in their own topics, ideas, and priorities (Choy, 2014), making qualitative research ideally suited for discovering new facets of a phenomenon (Steckler et al., 1992) and rendering it particularly valuable for under-researched areas (Flick et al., 2004). While quantitative approaches can be conceived as offering verification over discovery and as more reliable than valid, qualitative approaches offer discovery over verification and are more valid than reliable (Steckler et al., 1992); quantitative approaches can be extensive, covering a large number of respondents, whereas qualitative studies can be intensive (Sayer, 1992).

In the context at hand, specific advantages of qualitative studies include, as stated in section 1.5.1 on research gaps, the fact that refugee experiences are understudied (Hoare et al., 2017), and qualitative approaches are particularly useful for increasing our understanding of understudied phenomena (Flick et al., 2004). Because contexts of integration are ever in flux, each context of integration is also always likely to be understudied and to benefit from investigation using particularly context-sensitive research methods. An advantage of applying a qualitative approach to the study of subjects related to refugee mental health is that while most scales used to measure facets of mental health in quantitative research are based on Western constructs, qualitative research allows participants to express themselves in their own words, which is particularly important in cross-cultural research (Hoare et al., 2017; Rowley et al., 2020). Qualitative methods allow individuals from refugee communities to clarify their psychological reality (Ahearn, 2000; Hoare et al., 2017). Giving voice to members of refugee populations through different channels, including in research using more open-form interviews, would

appear to be a responsibility of any receiving society that is serious about integration as a multi-way process (see section 1.2.3). A richer understanding of lived experiences and realities may also facilitate the development of better mental health-related interventions (Rowley et al., 2020). Despite these advantages, quantitative methods have been far more prominently applied to the study of refugee mental health (Rowley et al., 2020).

2.3.2. Triangulating between studies within this dissertation

In the Integrative Discussion (chapter 7) in this dissertation, all four studies are brought together in what may be referred to as a "triangulation" (see e.g. Olsen, 2004; Flick, 2004; Kelle & Erzberger, 2004; Tonkin-Crine et al., 2015). Flick (2004) takes "triangulation" in the social sciences to mean "the observation of the research issue from at least two different perspectives" (p. 178). The Integrative Discussion below is an instance of both within and between methods triangulation (Flick, 2004): evidence from the two quantitative and two qualitative studies, respectively, are brought together to address the overarching dissertation project topic, and qualitative results are utilized as complementary to quantitative results. Given the substantial differences in approaches outlined above, an understanding of qualitative and quantitative results as complementary to each other has become dominant over an alternative view that they can be used for reciprocal validation (Flick et al., 2004; Kelle & Erzberger, 2004; Flick, 2004*)*. The idea is that bringing together quantitative and qualitative research findings amounts to "shedding light on the same object from different perspectives, thereby giving a more comprehensive and valid picture" (Kelle & Erzberger, 2004, p. 172-173).

"*More* comprehensive and valid" is key: due to differences in methods and other differences in study context (Flick, 2004), as well as the fact that there can be no end to context-dependent inquiries, combining qualitative and qualitative results can add breadth and depth and compensate for some shortcomings within each method, but the results of triangulation should not be taken to represent a complete picture of some truth and should be treated with some caution (Fielding & Fielding, 1986; Flick, 2004). Using a pragmatic and realist approach to qualitative data, as Studies III and IV do, reduces clashes of philosophies between the research methods (O'Cathain et al., 2010; Tonkin-Crine et al., 2015). All four studies presented here share basic assumptions and frameworks regarding mental health and integration, a precondition for complementarity (Kelle & Erzberger, 2004). Furthermore, while Studies I and II come from different survey years, and Studies III and IV are based on data collected from a sample with no known overlap with the sample in Studies I and II and also collected at a different points in time, all studies do pertain to members of the same population of refugees and asylum seekers who arrived in Germany from 2013 onward (2013-2016 in the case of Studies I and II; 2013-2018 in the case of Studies III and IV). On this basis, the Integrative Discussion brings together all studies, providing a *more* comprehensive picture of the relationship between mental health and integration. Results from the qualitative studies are predominantly used to explain or illustrate in depth some of the statistical associations in identified in the quantitative studies (Kelle & Erzberger, 2004).

The following chapters comprise the research articles for Studies I-IV in full and, in the case of the three published studies, in the published format. Of course, each research article presents its own research focus or question and includes its own introduction, methods, results, and discussion sections. In chapter 7, the results of all studies are, as described above, brought together to address the overall dissertation project question.

CHAPTER 3: STUDY I

Living Conditions and the Mental Health and Well-being of Refugees: Evidence from a Large-Scale German Survey

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ORIGINAL PAPER

Living Conditions and the Mental Health and Well-being of Refugees: Evidence from a Large-Scale German Survey

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Abstract
Refugees are at an increased risk of mental health problems and low subjective well-being. Living circumstances in the host country are thought to play a vital role in shaping these health outcomes, which, in turn, are prerequisites for successful integration. Using data from a representative survey of 4325 adult refugees who arrived in Germany between 2013 and 2016, we investigated how different living conditions, especially those subject to integration policies, are associated with psychological distress and life satisfaction using linear regression models. Our findings show that an uncertain legal status, separation from family, and living in refugee housing facilities are related to higher levels of distress and decreased life satisfaction. Being employed, contact to members of the host society, and better host country language skills, by contrast, are related to reduced distress and higher levels of life satisfaction. These associations should inform decision making in a highly contested policy area.

Keywords Refugees · Mental health · Well-being · Integration

Introduction

Research has consistently shown that refugees are at a particular risk of facing mental health problems (reviewed in [1–5]). Despite a substantial between-study heterogeneity in refugees' mental illness prevalence rates, forced migration has persistently been linked to increased rates of mental illnesses, chiefly, post-traumatic stress disorder (PTSD), depression, and anxiety disorder [5–7]. Even considering that those who embark on flight are likely to exhibit resilience ('Healthy Immigrant Effect' [8]), refugees are particularly at risk of facing psychological distress as sequelae of traumatic or stressful experiences before or during flight [4, 9, 10].

However, studies also indicate that the refugee mental health burden has roots beyond discrete traumatic experiences or the experience of displacement. A review of studies on refugee mental health and its predictors shows that the psychological burden of the refugee experience is substantially elevated even when refugee mental health is compared to the mental health of other groups exposed to war and violence [11].

Studies based on large-scale survey data have also shown substantially lower levels of overall subjective well-being amongst immigrant populations compared to natives [12, 13]. Even when migration leads to economic prosperity, it may remain associated with lower levels of well-being [14, 15].

Importantly, well-being and mental health are not just outcomes of past experiences, but also of present social, cultural, and economic circumstances [16]. While research on the effects of pre-migration stressors on mental health dominates the literature, post-migration stressors seem to have an equally substantial impact. In addition to migration-related acculturative stress (see [17–19]), factors associated with refugees' mental health and well-being include uncertainty related to legal proceedings, detainment in refugee

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camps, discrimination, social isolation, financial problems, unemployment, separation from family, safety concerns, and uncertainty about the country of origin's future (reviewed in [5, 10, 11, 20]). Further studies show that the subjective well-being of migrants in general is associated with host country language proficiency and identification [21] and that it is linked to the quality of public goods, the climate of immigrant reception, and the extent of economic inequality after migration [22].

Some of these post-migration stressors are directly affected by integration policies and measures in a hosting country. Since successful integration depends on mental health and well-being as vital personal resources [20, 23], what is at stake is the prevention of a vicious cycle between poor mental health as a consequence of traumatic experiences and post-migration stress, functional impairments, and the exacerbation of post-migration stressors.

The present study therefore investigates how *psychological distress* (comprising the most prevalent symptoms of poor mental health) and *life satisfaction* (the cognitive dimension of subjective well-being) of recently arrived refugees in Germany are associated with integration measures aimed at promoting integration and with other, more general post-migration living conditions. Controlling for sociodemographics and pre- as well as peri-migration stressors, we model psychological distress and life satisfaction as functions of (a) the outcome of the asylum process, (b) seeking family reunification, (c) type of housing, (d) being in education, (e) being employed, (f) attendance of integration and language courses, (g) time spent with co-nationals, with German nationals, and with persons from other countries, and (h) German language ability.

Methods

Data and Participants

The data used in this study comes from the first wave (2016) of the IAB-BAMF-SOEP dataset, an annual, representative survey of 4465 adults (at least 18 years of age), predominantly refugees and asylum seekers who arrived in Germany between January 1, 2013 and January 31, 2016 (see [24, 25] for details). Respondents completed the survey in computer-assisted face-to-face interviews by trained interviewers using audio files in five different languages. Participation was voluntary.

We excluded 21 respondents from our analyses due to missing corresponding household interviews. A further 27 respondents were excluded on the basis that they were mandated to leave Germany within the coming month. In these cases, self-reported measures of mental health and well-being are unlikely to reflect the integration measures and living conditions we are interested in evaluating. We excluded 92 further respondents from our analysis on the basis that they were members of the sampled asylum seekers' households who were not themselves refugees who had arrived in Germany between 2013 and 2016, resulting in an analysis sample size of 4,325 respondents.

Measures

Dependent Variables

Psychological Distress To measure psychological distress, we used the *Patient Health Questionnaire for Depression and Anxiety* (PHQ-4), a very brief and well-validated measurement instrument [26–28]. This 4-item battery uses a 4-point Likert-type scale (scores 0–3, (0) meaning symptoms not at all experienced in past 2 weeks, (1) on several days, (2) on more than half the days, (3) nearly every day) to screen for the core symptoms of depression (depressed mood, anhedonia) and anxiety (uncontrollable worrying and feeling nervous) with two separate scores or to yield a single overall measure of the degree of psychological distress ranging from 0 (no distress) to 12 (severe distress) [26, 29]. We used the total score of the PHQ-4, measuring psychological distress characterized by symptoms of depression and anxiety, in order to capture the complete spectrum of variance [29]. Despite its brevity, the PHQ-4 performs very similarly to the combined longer PHQ-8 and the GAD-7 [26], which, in turn, are well-established as excellent screening tools for depression and anxiety, respectively [30, 31]. Previous studies have shown that the two depression items in the PHQ-4 match outcomes of the DSM-IV Structured Clinical Interview with a sensitivity of 87% and a specificity of 78% for major depressive disorder [32]. The two anxiety items perform very well at diagnosing generalized anxiety disorder (Area Under the Curve (AUC) = 0.91), panic disorder (AUC = 0.85), social anxiety disorder (AUC = 0.83), and PTSD (AUC = 0.8) [26]. In another sample, the PHQ-4 diagnosed depression and anxiety disorders with AUCs of 0.84 and 0.79 [28]. The PHQ-4 also shows good internal reliability with Cronbach's alphas of 0.79 for a Tanzanian [33], 0.84 for a Colombian [34], and 0.78 for a German sample [27]. In our sample, the internal consistency of the scale was equally acceptable (Cronbach's alpha = 0.77).

Life Satisfaction We assessed life satisfaction, understood as the cognitive-evaluative dimension of subjective well-being, using a standard single-item measure widely applied in large national surveys where the costs of administering more comprehensive multi-item scales are prohibitive [35–37]. This measure yields acceptable reliability (range

of r scores: 0.68–0.74) when tested longitudinally [38], good criterion validity when compared to a well-established multi-item scale, and similar construct validity to the multi-item scale [39]. Many studies have also demonstrated high correlations between judgments of global life satisfaction and more comprehensive measures of satisfaction in key life domains [40, 41].

Independent Variables

Sociodemographic Control Variables Levels of education were aggregated according to ISCED standards as follows: low (early childhood education, primary education, lower secondary education), medium (upper secondary, post-secondary non-tertiary education, short-cycle tertiary education), and high (bachelor's or master's degree or equivalent, doctoral or equivalent degree). Nationality was reduced to categories with at least 100 observations: Syrian, Afghan, Iraqi, Eritrean, Other. Time in Germany was measured in years passed between arrival in Germany and the time of the interview. Marital status was assessed with the categories 'Married', 'Single', and 'Divorced or Widowed', religious affiliation with the categories 'Muslim', 'Christian', 'Other', 'None'.

Pre- and Peri-migration Control Variables Negative flight experiences were coded 'yes' if any of a list of seven possible negative experiences (financial scams or exploitation, sexual assault, physical assault, shipwreck, robbery, extortion, imprisonment) was reported. They were coded 'no' if none of these experiences were reported and 'wished not to report' if the respondent chose not to answer the section on flight experiences. To count the number of distressing flight reasons, we created a numeric variable summing up the number of the following flight reasons: 'fear of violent conflict or war', 'fear of military draft or forced recruitment into armed groups', 'persecution', 'discrimination', 'bad personal living conditions'. We did not include the following flight reasons in this index because of their lack of an obvious stressor status: 'my family sent me', 'because family members left this country', 'because friends/acquaintances left this country', 'general economic situation in the country of origin', 'other reasons'. Finally, we created a two-level categorical variable capturing whether respondents came to Germany by themselves, combining the categories 'arrived with family members', 'with friends/acquaintances', 'with other persons' into one level juxtaposed with the category 'arrived alone'.

Integration Measures and Post-migration Living Conditions The legal status variable was created by combining the report of a received refugee or asylum status into one category, and counting both reports of awaiting the outcome of the initial asylum procedure and reports of awaiting the outcome of an appeal against the initial asylum procedure decision as 'awaiting outcome'. The family reunification variable was conceived as a binary variable assigning a 'yes'-category to reports of having either a spouse or any number of children born after 1998 and planning to bring these family members to Germany. Currently in education includes any kind of education (school, university or doctoral studies, vocational training, professional development course). Our employment status variable comprises a 'yes' category for any form of employment reported (full or part time, marginally employed, internships or traineeships), a 'no' category for a report of no current employment but seeking employment and a 'not seeking employment' category. Course participation was measured as the total number of courses attended out of five integration courses and general language courses. Social contacts were measured as amount of time spent with members of different communities, ranging from 'never' to 'daily'. German language ability was measured as the averaged self-reported speaking, reading, and writing ability. See the SI Appendix for details.

Analysis

All statistical analyses were conducted using R version 3.5.0 [42]. We imputed missing data in all of the variables used for analysis through multiple imputation using chained equations with the "mice" R package [43] (10 imputed datasets created, 10 iterations, seed = 41) (see SI Appendix Table A1 for missings per analysis variable). To improve the accuracy of the imputation, we used auxiliary variables selected for their theoretical relatedness to the to-be-imputed variables (see SI Appendix). Only auxiliary variables with a minimum correlation of r = 0.1 with to-be-imputed variables were used in the imputation [44].

We calculated descriptives, as shown in Appendix Tables A2 and A3, as means and standard deviations with 95%-confidence intervals or proportions with 95%-confidence intervals. The weighted values shown in the final two columns were produced using the survey weights supplied by the Socio-economic Panel of the DIW Berlin [24].

In our main analysis, we calculated and pooled 10 multiple, hierarchical linear regressions to estimate associations between psychological distress, life satisfaction, and variables reflecting integration measures as well as refugees' post-migration living conditions. The baseline models (1a, 1b in Fig. 1) predict psychological distress and life satisfaction from the sociodemographic control variables federal state of residence (not included in Figure, see SI Appendix Tables A4 and A6), age, gender, education, nationality, marital status, religious affiliation, and time since arrival in Germany. Subsequent models (2a, 2b in Fig. 1) include variables representing pre- and peri-migration stressors

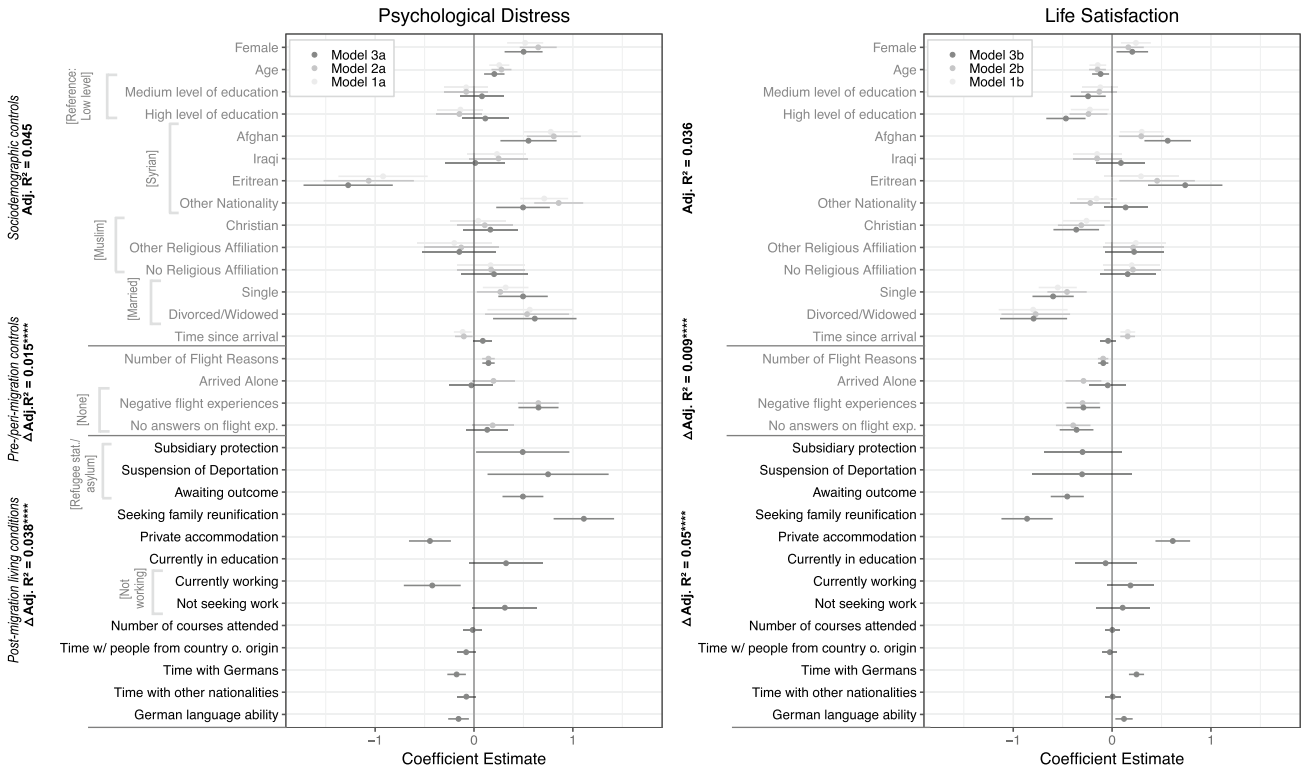

Fig. 1 Plotted estimated regression coefficients with error bars (95% confidence intervals). Hierarchical linear regressions comprising three models each (Models 1–3a and Models 1–3b). Regression coefficient estimates pooled across 10 imputed datasets. Predictor variables are standardized for comparison purposes. Reference categories for the binary categorical predictors: gender—male, arrived in Germany alone—did not arrive alone, family reunification—not seeking reunification with a spouse or an underaged child, currently in education—currently not in education. The control variable federal state of residence was omitted from the plot for the sake of clarity. Complete numeric results for both of these models are included in the SI Appendix (Tables A4, A6). *p < .05; **p < 0.01; ***p < 0.001; ****p < 0.0001 for model comparison

as further controls: the number of flight reasons, whether the respondent fled alone, and negative experiences during flight. For the full models (3a, 3b in Fig. 1), we added all key predictors (a–h) mentioned above. We did not weight our regression, but included the main factors that went into Kroh and colleagues' [24] calculation of individual weights (gender, age, time, nationality, since arrival in Germany, legal status, and federal state of residence) as independent variables [45] (p. 57).

We assessed the statistical significance of the difference between Models 1 and 2 and Models 2 and 3, respectively, using Wald tests implemented using a function for the comparison of nested models fitted to imputed data [43, 46]. We used the same tests to confirm the joint significance of all categorical variables with significant differences between levels. Our SI Appendix includes the models using non-imputed data as robustness checks (Tables A5 and A7). A further robustness check shown in the SI Appendix (Table A8) replicates Model 3a as a proportional odds cumulative logit model using the PHQ-4 as a four-category ordered outcome ('none', 'mild', 'moderate', 'severe').

To investigate potential moderation effects between our control variables and the post-migration variables of interest, we computed interactions between key sociodemographics (gender, age, nationality, education) and each of our post-migration variables, and ran stratified regressions to examine significant interactions further. Following Chen and associates [47], we also examined possible interactions between the number of flight reasons (our best proxy for traumatic experiences in the country of origin) and post-migration living conditions in their relationship with psychological distress and life satisfaction. Because this part of the analysis is exploratory, we looked into all interactions significant at the $\alpha = 0.05$ level, despite multiple comparisons (see SI Appendix for details).

Results

Descriptives

Descriptive analyses (see Table A2 of the SI Appendix) show that the mean psychological distress score (sample mean = 3.14 [95% CI 3.05–3.22], population mean = 3.37 [3.24–3.51]) is slightly above the threshold for the PHQ-4's cutoff for mild distress and well above the average of 1.76 (95% CI 1.7–1.81) previously established for the general German population [27]. Mean life satisfaction is 7.26 (7.19–7.33) in our sample and 6.9 (6.78–7.02) in the population—similar to means found in the German general population (e.g. mean = 6.98 [SD = 0.78], [48]). Tables A2 and A3 also shows descriptive statistics for all independent variables in the following analyses.

Main Analyses

Sociodemographic and Pre-/Peri-migration Control Variables

Figure 1 shows that several sociodemographic and pre-/peri-migration stressors relate to psychological distress and life satisfaction. Being female, older, Afghan or of an 'Other' nationality, being single, divorced or widowed are associated with increased psychological distress across Models 1–3a and 1–3b. Being Eritrean is associated with decreased psychological distress across models. A longer time in Germany is associated with decreased distress and increased life satisfaction in Models 1a and 2a. Being male, younger, more educated, Christian, single or divorced/widowed are all associated with decreased life satisfaction in Models 1–3b, whereas being Afghan and Eritrean appears to correlate with greater satisfaction. In the category of pre- and peri-migration stressors, those reporting a greater number of flight reasons and having had adverse experiences during flight exhibit elevated distress and reduced life satisfaction across models. The addition of these pre-/peri-migration factors constitutes a significant, albeit small improvement in model fit.

Integration Measures and Post-migration Living Conditions

Adding post-migration contextual factors again constitutes a significant improvement in model fit, with a greater increase in R^2 in the life satisfaction than in the distress model. The legal outcomes "protection" and "suspension of deportation", both of which grant a mere one-year right to stay, are linked to elevated levels of psychological distress compared to the positive outcome of being granted the status of refugee or asylee. However, neither is linked to life satisfaction. Crucially, awaiting the outcome of the legal proceedings, either for the initial asylum application or after an appeal against a negative decision, is associated with significantly higher levels of psychological distress and lower life satisfaction compared to the positive response of having a refugee or asylum status. Those seeking to reunite with underage children or with a spouse living outside Germany are more distressed and less satisfied with life than those not seeking family reunification.

Housing conditions are significantly associated with our outcome measures. Private housing is related to lower levels of psychological distress and higher levels of life satisfaction compared to residence in refugee housing facilities. Furthermore, being in the workforce is associated with reduced levels of distress. Interestingly, however, employment does not relate to life satisfaction according to our analysis. Finally, more time spent with the native German population and better German language skills are associated with lower levels of distress and increased life satisfaction.

Exploration of Interaction Effects

As shown in Table 1, in our complete model for psychological distress, interactions between gender and seeking family reunification, employment status, course participation, time with co-nationals, and German language are significant at $\alpha = 0.05$. Stratification by gender revealed that seeking family reunification is only significantly associated with elevated distress in males, but still trending for females. Only employed male respondents experience lower levels of distress. Regarding participation in integration courses, associations with distress have opposite though insignificant effects for females and males. Females who spend more time with co-nationals experience reduced distress, unlike male. Finally, higher German language ability is related more strongly to reduced distress in male. For life satisfaction, gender interacts with family reunification and being in education, with a significant negative association between family reunification and life satisfaction in male, but not in female respondents, and, conversely, a negative association between currently being in education in females but not in males. Finally, time spent with co-nationals has an opposite relationship to life satisfaction for males and females. We found no significant interactions with age.

Nationality interacts with several post-migration factors in its association with psychological distress. Afghans and Iraqis with insecure legal statuses experience greater increases in distress compared to Syrians with this status. Unlike other nationalities, Eritreans who live in private accommodation actually experience greater levels of distress and lower life satisfaction than fellow nationals living in refugee housing facilities. 'Other' nationalities exhibit

Table 1 Interactions between gender, age, nationality, and level of education and the post-migration variables that were significant at α = 0.05

	Psychological distress	Life satisfaction
Interactions with gender		
× *Seeking family reunification*	Wald = 4, p = 0.046	Wald = 5.286, p = 0.022
Stratified female (seeking)	Beta = 0.542, CI − 0.013; 1.096	Beta = − 0.357, CI − 0.773; 0.078
Stratified male (seeking)	Beta = 1.276, CI 0.902; 1.651	Beta = 1.128, CI − 1.459; − 0.797
× *Currently in education*		Wald = 3.951, p = 0.047
Stratified female (in education)		Beta = − 0.715, CI − 1.326;-0.105
Stratified male (in education)		Beta = 0.123, CI − 0.246; 0.493
× *Employment*	Wald = 5.1, p = 0.006	
Stratified female (employed)	Beta = 0.274, CI − 0.432; 0.98	
Stratified male (employed)	Beta = − 0.513, CI − 0.83; − 0.2	
× *Course participation*	Wald = 4.32, p = 0.038	
Stratified female (course participation)	Beta = 0.058, CI − 0.109; 0.225	
Stratified male (course participation)	Beta = − 0.542, CI − 0.164; 0.056	
× *Time with co-nationals*	Wald = 5.22, p = 0.02	Wald = 3.841, p = 0.05
Stratified female (amount of time)	Beta = − 0.236, CI − 0.384; − 0.09	Beta = 0.075, CI − 0.036; 0.186
Stratified male (amount of time)	Beta = − 0.054, CI − 0.164; 0.058	Beta = − 0.072, CI − 0.174; 0.03
× *German language ability*	Wald = 4.33, p = 0.037	
Stratified female (German language ability)	Beta = − 0.107, CI − 0.286; 0.072	
Stratified male (German language ability)	Beta = -0.236, CI − 0.384;-0.09	
Interactions with nationality		
× *Legal status*	Wald = 3.067, p = 0.016	
Stratified Syrian (insecure/waiting)	Beta = 0.288, CI 0.014; 0.563	
Stratified Afghan (insecure/waiting)	Beta = 0.746, CI 0.137; 1.355	
Stratified Iraqi (insecure/waiting)	Beta = 1.017, CI 0.446; 1.587	
× *Type of accommodation*	Wald = 3.294, p = 0.01	Wald = 3.091, p = 0.015
Stratified Syrian (private accommodation)	Beta = − 0.521, CI − 0.841; − 0.2	Beta = 0.759, CI 0.487; 1.03
Stratified Eritrean (private accommodation)	Beta = 0.763, CI 0.043; 1.484	Beta = − 0.419, CI − 1.142; 0.304
× *Employment*	Wald = 2.158, p = 0.027	
Stratified Syrian (employed)	Beta = − 0.178, CI − 0.581; 0.225	
Stratified Other (employed)	Beta = − 0.883, CI − 1.483; − 0.282	
× *Course participation*	Wald = 2.42, p = 0.046	
Stratified Syrian (course participation)	Beta = 0.068, CI − 0.057; 0.193	
Stratified Other (course participation)	Beta = − 0.088, CI − 0.304; 0.128	
× *Time with co-nationals*	Wald = 3.362, p = 0.009	
Stratified Syrian (amount of time)	Beta = − 0.06, CI − 0.187; 0.068	
Stratified Other (amount of time)	Beta = − 0.369*, CI − 0.588; − 0.15	
× *German language ability*		Wald = 3.399, p = 0.009
Stratified Syrian (German language ability)		Beta = 0.224, CI 0.103; 0.345
Stratified Afghan (German language ability)		Beta = − 0.121, CI − 0.374; 0.131
Interactions with level of education		
× *Currently in education*	Wald = 2.644, p = 0.071	Wald = 3.453, p = 0.032
Stratified low level (in education)	Beta = 0.352, CI − 0.175; 0.879	Beta = 0.245, CI − 0.197; 0.0687
Stratified high level (in education)	Beta = 0.98, CI 0.116; 1.845	Beta = − 0.66, CI − 1.346; 0.026

Wald test results comparing linear regression models predicting psychological distress or life satisfaction (complete regression models, including sociodemographic and pre-/peri-migration controls and all post-migration factors, as in Models 3a and 3b, pooled from 10 imputed datasets) with and without each interaction term (each term added to the model on its own) as well as regression terms and 95% confidence intervals (CI) for follow-up stratifications

slightly different patterns of associations, with employment status and time spent with co-nationals being significantly

Table 2 Interactions between number of flight reasons and the post-migration variables that were significant at α = 0.05

	Psychological distress	Life satisfaction
Interactions with number of flight reasons		
× *Seeking family reunification*	Wald = 4.905, p = 0.027	
Stratified one or none (seeking)	Beta = 0.82, CI 0.426; 1.213	
Stratified two or three (seeking)	Beta = 1.316, CI 0.695; 1.936	
Stratified four or five (seeking)	Beta = 1.276, CI 0.902; 1.651	
× *Type of accommodation*	Wald = 4.852, p = 0.028	Wald = 4.036, p = 0.045
Stratified one or none (private accom.)	Beta = −0.299, CI −0.577; −0.02	Beta = 0.455, CI 0.228; 0.682
Stratified two or three (private accom.)	Beta = −0.586, CI −1.019; −0.152	Beta = 0.271, CI −0.094; 0.636
Stratified four or five (private accom.)	Beta = −0.660, CI −1.010; −0.310	Beta = 0.812, CI 0.534; 1.090
× *Currently in education*	Wald = 5.651, p = 0.017	
Stratified one or none (in education)	Beta = −0.053, CI −0.525; 0.418	
Stratified two or three (in education)	Beta = 0.535, CI −0.196; 1.267	
Stratified four or five (in education)	Beta = 0.901, CI 0.284; 1.519	
× *Time with Germans*	Wald = 5.268, p = 0.022	
Stratified one or none (time with Germans)	Beta = −0.112, CI −0.234; 0.009	
Stratified two or three (time with Germans)	Beta = −0.209, CI −0.398; −0.020	
Stratified four or five (time with Germans)	Beta = −0.283, CI −0.434; −0.132	
× *German language ability*		Wald = 4.393, p = 0.036
Stratified one or none (German language ability)		Beta = 0.078, CI −0.036; 0.191
Stratified two or three (German language ability)		Beta = 0.131, CI –0.051; 0.313
Stratified four or five (German language ability)		Beta = 0.186, CI 0.047; 0.326

Wald test results comparing linear regression models predicting psychological distress or life satisfaction (complete regression models, including sociodemographic and pre-/peri-migration controls and all post-migration factors, as in Models 3a and 3b, pooled from 10 imputed datasets) with and without each interaction term (each term added to the model on its own) as well as regression terms and 95% confidence intervals (CI) for follow-up stratifications, for which the numeric variable was split into three categories: no or one evidently potentially distressing flight reason, two or three, four or five

associated with lower levels of distress only in this group. Participation in integration courses is related to distress in the opposite direction for 'Others' compared to Syrians. German language ability is only significantly related to higher life satisfaction among Syrians.

Education interacts with currently being in education in predicting life satisfaction. Highly educated respondents who are in education are less satisfied; there is no such relationship in respondents with low or medium levels of education.

We also found several interactions with the number of flight reasons (Table 2) (our indicator of traumatic experiences). The more flight reasons respondents report, the stronger the relationship between seeking family reunification and living in refugee housing facilities and elevated distress, as well as living in refugee housing facilities and reduced life satisfaction. Also, the higher the number of flight reasons, the more distressing currently being in education appears to be and the more distress-reducing spending time with Germans. Finally, having multiple reasons for flight is associated with an increase in the positive association between language and life satisfaction. It should be noted that none of our interaction effects would be statistically significant under standard corrections for multiple comparisons.

Discussion

Overall, our results support and specify previous claims linking refugees' mental health and well-being in the first years after arrival to post-migration living conditions, many of which are subject to integration policies. In particular, our study shows that after controlling for key sociodemographics as well as pre- and peri-migration stressors, the legal hurdles refugees face while securing their future life in the host country are related to higher levels of psychological distress. Policy makers should thus consider the potentially negative impact of an uncertain legal status, acknowledging that a large proportion of refugees who are granted a less secure status (mostly cases of subsidiary protection) end up having this status renewed, still remaining in their host country for several years [49]. This is further corroborated by our finding that refugees who are awaiting the outcome of

the asylum process exhibit both higher levels of distress and lower life satisfaction compared to those with a relatively secure legal status. This is consistent with previous studies indicating the detrimental consequences of lengthy asylum procedures for mental health [50]. The much criticized [51, 52] lack of full access to healthcare for asylum seekers in many countries becomes even more problematic in light of these findings. Our results suggest that policies facilitating family reunification could enhance life satisfaction and reduce psychological distress among refugees. While the UN Refugee Convention states that family unity is among the essential rights of refugees, and Article 8 of the European Convention on Human Rights calls for flexible and prompt decision making, many European countries have restricted the options for reunification since 2015 [53]. Mental health care professionals working with refugees should be briefed on their patients' possible legal battles.

Looking beyond these legal aspects, we find that living in refugee rather than in private accommodation is associated with greater distress and reduced life satisfaction. Although self-selection might play an important role here, it seems plausible that residing in refugee housing facilities, which often means living in crowded quarters with limited privacy, restricted autonomy, and isolation from the local community, in fact causes or exacerbates health issues, as has been previously examined in detail [54]. Residing in refugee housing facilities may also come with safety concerns, for example in light of the frequency of attacks on refugee accommodation in many host countries [55]. Beyond efforts to improve living conditions in refugee housing facilities, the strengthening of infrastructural links between these facilities and psychosocial services would be an adequate response to this finding.

Whilst being employed is associated with reduced psychological distress in our study, as well as in other studies [56], it is not linked to higher levels of satisfaction as in most studies using general population samples [57]. These cases in which measures related to mental health and well-being diverge demonstrate that many of the established integration measures miss the emotional toll of certain circumstances [58]. The lack of a link between employment and life satisfaction here might be due to the expectations of refugees regarding the norm of being employed. In contrast to the native population, in which being part of the workforce is the social norm, refugees might have different expectations, particularly in the first years after arrival. The association between unemployment and distress applies to other populations as well [59]. It is thought to be a bidirectional relationship, calling for a similar reciprocal relationship in employment and health policies [60], especially in the case of a vulnerable population like the one at hand.

Finally, like some previous studies [61], our study shows that contact with the native population and host country language ability are associated with distress and life satisfaction. As with employment, the causal direction of this relationship is just as likely one or the other. It is noteworthy that time spent with Germans is positively associated with both distress and life satisfaction, while time spent with non-relatives from the country of origin and with people from other countries is related to neither. This suggests that it is interactions with the host population, specifically, that relate to distress and life satisfaction. The relationship between German language ability and our outcome measures underscore the importance of addressing the language barrier in refugees' access to mental health services [62]. If those with lower levels of German language ability are more distressed, the language barrier is an even more pressing issue.

Our analyses also show that several sociodemographic as well as pre- and peri-migration stressors moderate associations between post-migration living conditions and psychological distress and life satisfaction. Our exploratory analyses suggest that this is the case for gender, nationality, level of education, and the number of flight reasons. Future research should address these potential moderations.

Limitations

The primary limitation of our study is the correlative nature of the evidence. Our study design did not allow for conclusions about a causal relationship between living conditions and mental health and well-being. We have also limited our study to examining post-migration living conditions captured by the survey data we used that are amenable to host country integration policy measures. There are, of course, many descriptors of life in the host country beyond these factors, also including the cultural dimensions of the acculturation process. Furthermore, whilst the cross-cultural validity of the PHQ-4 has been tested in Arabic-speaking refugees in Germany [27], the validity of mental health scales across cultural backgrounds is contentious [63, 64]. Given the size of the survey, outcome measures need to be brief. While both of our measures have shown good reliability and validity, the brevity of our scales is a limitation. In the case of psychological distress, for example, the four-item screener only measures the central symptoms of depression and anxiety, not other symptoms such as somatization. A selection bias favoring those with higher levels of mental health and well-being is also likely to underlie sampling for this survey [65]. Finally, the applicability of our findings to other host societies is questionable, considering the vast differences in policies and other contingencies even between Western European countries. Nonetheless, Germany is a highly relevant case because it has adopted the largest number of refugees in the European Union. By the end of 2016, the population of refugees reached 1.3 million people, with 441,900

new asylum applications submitted in 2015 and 722,400 claims made in 2016 [66].

New Contributions to the Literature

In summary, our study finds that greater certainty and stability, in the form of a secure legal status, non-temporary housing, family reunification, and social anchoring in the host society through language abilities and contacts are linked to certain aspects of better mental health and well-being in the early years after arrival. To our knowledge, these associations have not been shown in a similarly large, rigorously collected survey dataset on newly arrived refugees.

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Compliance with Ethical Standards

Informed Consent All participants provided informed consent; the Institutional Review Board of the German Institute for Economic Research approved the study.

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CHAPTER 4: STUDY II

Psychological distress among refugees in Germany: a cross-sectional analysis of individual and contextual risk factors and potential consequences for integration using a nationally representative survey

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Psychological distress among refugees in Germany: a cross-sectional analysis of individual and contextual risk factors and potential consequences for integration using a nationally representative survey

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ABSTRACT

Objectives Responding to the mental health needs of refugees remains a pressing challenge worldwide. We estimated the prevalence of psychological distress in a large refugee population in Germany and assessed its association with host country factors amenable to policy intervention and integration indicators.

Design A cross-sectional and population-based secondary analysis of the 2017 wave of the IAB-BAMF-SOEP refugee survey.

Setting Germany.

Participants 2639 adult refugees who arrived in Germany between 2013 and 2016.

Main outcome measures Psychological distress involving symptoms of depression, anxiety and post-traumatic stress disorder was measured using the Refugee Health Screener-13.

Results Almost half of the population surveyed (41.2% (95% CI: 37.9% to 44.6%)) was affected by mild, moderate or severe levels of psychological distress. 10.9% (8.4% to 13.5%) of the population screened positive for severe distress indicative of an urgent need for care. Prevalence of distress was particularly high for females (53.0% (47.2% to 58.8%)), older refugees (aged ≥55, 70.4% (58.5% to 82.2%)) and Afghans (61.5% (53.5% to 69.5%)). Individuals under threat of deportation were at a greater risk of distress than protection status holder (risk ratio: 1.55 (95% CI: 1.14 to 2.10)), single males at a greater risk than males with nuclear families living in Germany (1.34 (1.04 to 1.74)) and those in refugee housing facilities at a greater risk than those in private housing (1.21 (1.02 to 1.43)). Distressed males had a lower likelihood of employment (0.67 (0.52 to 0.86)) and reduced participation in integration courses (0.90 (0.81 to 0.99)). A trend of reduced participation in educational programmes was observed in affected females (0.42 (0.17 to 1.01)).

Conclusion The finding that a substantial minority of refugees in Germany exhibits symptoms of distress calls for an expansion of mental health services for this population. Service providers and policy-makers should consider the increased prevalence among female, older and Afghan refugees, as well as among single males, residents in housing facilities and those under threat of deportation. The associations between mental health and integration processes such as labour market, educational programme and integration course participation also warrant consideration.

Strengths and limitations of this study

- This is the first large-scale, representative study investigating the prevalence of psychological distress and its potential link to the process of integration in a whole (multi-national and multi-cultural) population of recently arrived refugees in Europe during the height of the refugee influx— between 2013 and 2016 in Germany.
- The psychological distress measure, which assesses central symptoms of the most common mental illnesses among refugees, was developed specifically for refugees and has shown good psychometric properties in a range of refugee subpopulations.
- As necessitated by the large-scale survey design, the psychological distress measure was self-reported, which comes with the limitation of individual readings of the items and recall bias, and a diagnostic proxy rather than a diagnostic tool that can also distinguish between the conditions whose symptoms it comprises.
- This study is correlational, meaning that it is not possible to draw conclusions about causality or directions of effects.

INTRODUCTION

Due to the Syrian exodus and ongoing conflicts in Iraq, Afghanistan, Eritrea and Somalia, Europe has seen a sharp increase in the number of asylum applications lodged in its member states in the past years, with a peak 1.6 million applications in 2015.[1] Germany

is a particularly important case because it received the largest number of refugees in Europe, with 890 000 new registrations in 2015.[2] The countries of origin as well as the reasons for flight are diverse, and the great influx of refugees creates entirely new postmigration challenges for host societies and refugees alike.

Prior research has consistently shown that refugees are at a particular risk of poor mental health both as a consequence of adverse or traumatic premigration and perimigration experiences and as a result of postmigration difficulties.[3–6] It is, therefore, imperative to get reliable estimates of the prevalence of mental health problems among refugee populations and to understand how health as a potential key 'marker and means'[7] of successful integration is related to different aspects of postmigration life.

Meta-analyses indicate that depression and anxiety are at least as common as post-traumatic stress disorder (PTSD)[8 9] and suggest that one or a combination of these conditions affects at least one in three refugees.[9 10] However, considerable heterogeneity of prevalence rates is reported.[6 8–10] Reasons for this heterogeneity likely include methodological differences, such as the use of different scales (with varying levels of cultural sensitivity) and sampling procedures, or methodological shortcomings such as small and non-representative samples.[10] There are also substantive differences between the refugee populations studied—such as their cultural and national origins, their living conditions in their host countries and varying lengths of stay since arrival. These complications underscore the need for host country-specific, duration of stay-specific, large-scale and representative epidemiological studies to understand overall prevalence and prevalence by key sociodemographic categories, like gender, age, country of origin and level of education.

It has become increasingly recognised that the relationship between conditions of postmigration life and refugees' mental health should be studied in addition to the effects that past experiences in the country of origin and during flight. Large-scale, representative investigations into these associations, however, are scarce. The few studies that do exist (e.g. from Sweden[11] and Australia[12]) underscore the importance of postmigration stressors such as economic strain, problems learning the language and adapting culturally, perceived discrimination and worries about the family. These studies focused mainly on subjective, psychometric indicators of postmigration difficulties rather than objective indicators of integration.

Employing objective assessments, meaning facts about living circumstances, has two distinct advantages: responses to these items are not susceptible to response bias due to poor mental health, and they also translate readily into concrete integration and health policy recommendations.

Smaller studies have shown that the following three primary contextual factors of refugees' lives after resettlement are negatively related to mental health: legal status insecurity,[13] residing in refugee housing facilities[14 15] and family separation.[16] In Germany, legislation on matters of legal status and family reunification has been central to integration policy and discourse.[17 18] Providing private housing for refugees has been a challenge due to shortages in affordable housing, and conditions in refugee accommodation are heterogeneous due to an absence of federal regulations.[19] As chief responsibilities of and challenges for host societies, these domains are amenable to intervention both as protective and risk factors for refugees' mental health.

There are also aspects of integration that are much more subject to the agency of individual refugees, namely: labour market participation, which has also been associated with mental health,[20 21] participation in formal education and participation in programmes designed by the host society to facilitate integration, such as the so-called 'integration courses' in Germany that were opened to refugees and asylum seekers in 2015.[22] The mental health of refugees may influence their ability to use these routes of integration, as has been found in previous studies,[23 24] for example, by limiting their capacities to overcome the bureaucratic obstacles that are associated with gaining access to these institutions.[22] Understanding these underresearched associations between mental health and integration[23 24] is of key importance both to health policy and to integration policy, which can play its part in easing access.[25]

In sum, the literature on refugee mental health lacks population-based estimates of the prevalence of mental health problems among refugees, also by sociodemographic subcategories. Large-scale studies examining the association between mental health and objective measures of postmigration contextual factors and integration are also scarce. The present study fills this gap by estimating the prevalence of psychological distress indicative of poor mental health using a rare large-scale, representative survey of refugees who arrived in Germany between 2013 and 2016. It also identifies sociodemographic characteristics and postmigration factors that could put members of this population at risk: legal status, family separation and housing. Finally, we examine the relationship between psychological distress and the key aspects of integration mentioned above: employment, participation in education and integration courses.

METHODS

Sample

The data analysed in this study come primarily from the second wave (conducted throughout 2017) and partly from the first wave (conducted throughout 2016) of the refugee survey carried out by the Institute for Employment Research (IAB), the Research Centre on Migration, Integration and Asylum of the Federal Office for Migration and Refugees (BAMF-FZ) and the Socio-Economic Panel (SOEP) at the German Economic Research Institute; the IAB-BAMF-SOEP refugee survey. The survey sample is representative of adults who arrived in Germany

between 1 January 2013 and 31 January 2016 and applied for asylum or were part of a humanitarian resettlement programme, and also includes adult members of their households. As explained in detail elsewhere,[26 27] these core respondents were drawn from the German Central Register of Foreign Nationals (AZR), with different sampling probabilities applied based on factors such as country of origin, age, gender and legal status to ensure the representation of different individual characteristics (see section S1.1–3 of the online supplementary material). The first wave of the survey comprised 4527 adults; the response rate was 48.7%. The follow-up rate for the second wave was 73%, with 2639 participants returning to the survey (for details on the response rate, see S1.2 in the online supplementary materials). While there were also new participants in the second wave, only those 2639 participants returning from the first wave filled out the Refugee Health Screener 13 (RHS-13) screener. We analysed data from 2569 of these participants, having excluded 70 participants who were not themselves refugees or asylum seekers who arrived in Germany between 2013 and 2016, but household members.

Most of our variables were observed in the second wave; nationality, year of arrival in Germany and family constellation (see details on postmigration variables below) were observed in the first wave, as was one level of the legal status variable ('Protected since 2016'). Since the level of education variable had 16.7% missing values in the second wave, and level of education is unlikely to shift between the two waves, we substituted second wave missing values with first wave values.

Respondents completed the questionnaire in computer-assisted face-to-face interviews with professional interviewers aided by audio files in seven different languages: English, German, Arabic, Farsi, Pashtu, Urdu and Kurmanji.

Mental health measure

We measured psychological distress encompassing symptoms of depression, anxiety and PTSD using the 13-item version of the RHS-13.[28 29] Its reliability and validity in a sample representative of the refugees who arrived in Germany at the end of 2015 or the beginning of 2016 were evidenced in a recent study.[30] The psychological distress screening cut-off score for the RHS-13 was set at 11 or more points in total and designed to capture mild forms of distress indicative of a need for further assessment or perhaps preventive treatment, as well as more severe forms.[29 31] A later study validated further cut-off points for moderate symptoms levels indicative of a likely need for treatment and severe levels indicative of an urgent need for care (18 and 25 points, respectively).[31]

Sociodemographic characteristics

We analysed gender, age, nationality and level of education as potential risk factors for psychological distress based on previous literature. We categorised age as 10-year bins, with the exception of a bin for young adults (18 to 24-year-olds) and a bin for those aged 55 or older due to the limited number of older respondents. Out of the 51 nationalities represented among respondents, only nationalities represented by at least 100 respondents were included individually in the analysis; the remaining nationalities were grouped into an 'Other' category. Level of education was ascertained based on the International Standard Classification of Education of 2011, grouped into 'low', 'middle' and 'high'.

Postmigration factors

We focused on three aspects of postmigration life: legal status, family constellation in Germany and housing situation. We chose these factors for their potential to inform integration policy. Legal status was divided into 'Protected since 2016' and 'Protected since 2017', which include various different protection statuses reported in either the 2016 and 2017 survey waves ('since 2016') or only in 2017 ('since 2017'), as well as 'Applicant', 'Suspension of Deportation' and 'Other'. We created a 3-category family constellation variable from first wave data (the location of children was not ascertained again in 2017; births since the first wave were taken into account) with the following levels: individual (1) has minor children or a spouse, but all of them live in Germany, (2) has a spouse or at least one minor child abroad, (3) is unattached (no spouse or minor children). In order to contrast residency in refugee housing facilities with residency in private housing, we included a binary housing variable.

Integration measures

We chose employment and participation in education programmes and integration courses as measures of integration, as they are essential indicators of structural integration into the host society.[7] Our employment status variable includes any form of employment reported. Educational programmes include any form of in-person education. Course participation is assessed as a binary of having participated in at least one of seven language or integration courses or not.

Statistical analysis

All analyses were carried out in R (V.3.5.1). We applied survey weights multiplied by a longitudinal weight provided with the survey data[26 27 32] in all calculations except where otherwise specified. The weights are provided by the SOEP survey and combine design weights (for stratified sampling from the registry), household non-response corrections and poststratification to known demographic characteristics (based on the registry information, see section S1.3 of the online supplementary materials for details on the survey weights). Due to a small percentage of missing data from item non-response in our primary outcome variable and some independent variables (<10%), we imputed our data using multiple imputation using chained equations[33] (for details of our imputation and missing proportion per variable, see the S1.4 and online supplementary table S1 in the online

supplementary materials). All analyses with imputed data were pooled across our 50 imputed datasets using Rubin's Rule.[34]

To describe our sample and population, we calculated proportions and, for the population estimates, 95% CIs for all analysis variables. As a preliminary step to the remaining analyses, which all centre around the RHS, we assessed the scale's internal consistency using Cronbach's alpha and its factor structure using parallel analysis in our sample (unimputed, unweighted data). In the first main analysis step, we estimated the prevalence of psychological distress (and 95% confidence intervals (CIs)) per sociodemographic category. In the second part of the analyses, we estimated risk ratios (RRs) and Wald-type CIs from gender-stratified multivariable robust (modified) Poisson regression models[35] predicting the binary RHS score at the 11-point cut-off from each of the host country contextual factors outlined above, adjusting for sociodemographic characteristics and year of arrival. Finally, we estimated the RRs of psychological distress (binary RHS score category at the 11-point cut-off) as an independent variable predicting current employment status (yes=1 or no=0), participation in education programmes (yes=1 or no=0) and participation in integration courses (yes=1 or no=0) from gender-stratified modified Poisson regression models, adjusting for sociodemographic characteristics and year of arrival. All models, estimated with the 'svyglm'-function in the R package 'survey', used robust variance estimation (sandwich estimator).[32] All regression estimates were exponentiated to produce RRs. This is the advantage of using modified Poisson models instead of logistic regression, for which the direct interpretation of the coefficients as relative risks is only possible in approximation under the 'rare disease' assumption (prevalence <10%),[36] which does not hold for many of our outcomes.

Patient and public involvement

There was no patient or public involvement in this study.

RESULTS

Sample and population characteristics

The main sociodemographic characteristics of the sample (raw data) and the population under study (imputed and weighted) as well as other characteristics used in our analyses are summarised in table 1. The sample is 36.6% female; mostly aged between 25 and 44, with 16.9% aged 18–24 and only 17.6% aged 45 and older; 53.4% Syrian, 12.6% Afghan and 12.1% Iraqi; and mostly has a low level of education, with 59.6% without upper secondary education. Table 1 also shows sample and population proportions of the postmigration and integration factor subcategories. Online supplementary table S2 of the online supplementary file shows gender-stratified population proportions for the analysis variables that are used in gender-stratified analyses below.

RHS-13 scale reliability

The RHS-13 exhibits excellent internal reliability in our sample (Cronbach's alpha=0.91). Our parallel

Table 1 Sample and population characteristics

Sociodemographic characteristic	Raw data Proportion in % (absolute frequencies)	Weighted, imputed data Proportion (95% CI) in %
Gender		
Male	63.4 (1630)	74.6 (72.1 to 77.2)
Female	36.6 (939)	25.4 (22.8 to 27.9)
Age		
Ages 18–24	16.9 (434)	28.1 (24.9 to 31.3)
Ages 25–34	34.7 (890)	39.8 (36.6 to 42.9)
Ages 35–44	30.8 (792)	20.0 (17.5 to 22.4)
Ages 45–54	13.5 (347)	7.9 (6.6 to 9.2)
Over 54 years old	4.1 (105)	4.3 (3.0 to 5.6)
Nationality		
Syrian	53.4 (1372)	44.2 (41.1 to 47.3)
Afghan	12.6 (323)	13.6 (11.4 to 15.9)
Iraqi	12.1 (311)	8.5 (7.0 to 9.9)
Eritrean	6.5 (167)	6.2 (4.9 to 7.5)
Other	15.4 (396)	27.5 (24.1 to 31.0)
Level of education		
Low level of education	59.6 (1432)	58.7 (55.4 to 61.9)
Medium level of education	21.0 (505)	23.0 (20.2 to 25.9)
High level of education	19.4 (466)	18.3 (16.0 to 20.7)
Legal status		
Protected since 2016	54.5 (1384)	43.7 (40.5 to 46.8)
Protected since 2017	21.3 (540)	23.0 (20.1 to 25.9)
Applicant	15.5 (393)	22.2 (19.2 to 25.3)
Suspension of deportation	4.6 (118)	6.7 (4.7 to 8.6)
Other	4.2 (106)	4.5 (3.0 to 5.9)
Nuclear family constellation		
All in Germany	62.7 (1586)	36.4 (33.6 to 39.2)
Someone abroad	10.9 (277)	15.7 (13.3 to 18.2)
Unattached	26.4 (668)	47.9 (44.6 to 51.1)
Housing		
Private housing	80.3 (2064)	67.1 (63.8 to 70.5)
Refugee housing	19.7 (505)	32.9 (29.5 to 36.2)
Employment		
Not employed	77.9 (2001)	72.6 (69.6 to 75.5)
Employed	22.1 (568)	27.4 (24.5 to 30.4)
Education		
Not in education	91.5 (2343)	88.7 (86.6 to 90.7)
In education	8.5 (218)	11.3 (9.3 to 13.4)
Course participation		

Continued

Table 1 Continued

Sociodemographic characteristic	Raw data Proportion in % (absolute frequencies)	Weighted, imputed data Proportion (95% CI) in %
No course participation	23.3 (594)	24.4 (21.4 to 27.3)
At least on course attended	76.7 (1950)	75.6 (72.7 to 78.6)

Values in column 3 were weighted and pooled from 50 multiply imputed datasets.

analysis suggests a one or two-factor solution for the RHS-13 (adjusted eigenvalues and proportions of variance explained for the first three extracted factors: 6.08 (46.8%), 1.22 (9.4 %), 0.81 (6.2%)). Due to the low explanatory power of the second factor, treating the RHS-13 as representing a one-factor construct seems appropriate for our study.

Prevalence of different levels of psychological distress

As shown in table 2, overall 19.7% (17.0% to 22.4%) of refugees who arrived in Germany between 2013 and 2016 exhibit mild psychological distress indicative of a need for further assessment, 10.6% (8.5% to 12.7%) exhibit moderate levels of psychological distress indicative of a likely need for treatment and 10.9% (8.4% to 13.5%) are estimated to be severely distressed, indicative of an acute need for care. In total, 41.2% (37.9% to 44.6%) screen positive for psychological distress, comprising symptoms of depression, anxiety and PTSD according to the original 11-point scale cut-off for the RHS-13.

Table 2 shows that females experience more distress than males and more often require immediate care for severe levels of distress (females: 17.4% (11.7% to 23.0%), males: 8.7% (6.0% to 11.5%)). Those aged 35 or older are far more likely than younger refugees to exhibit severe psychological distress (e.g., in 35–44 category: 53.2% (46.3% to 60.1%) no distress, in 25–34: 65.2% (60.3% to 70.0%)). A distinction by nationality shows that Afghans experience the most distress. While mild distress is, broadly speaking, equally present between nationality categories, moderate and severe distress appears to be particularly prevalent among Afghans, with a noteworthy 18.9% (11.2% to 26.6%) prevalence of moderate distress and a 19.9% (11.6% to 28.2%) prevalence of severe distress, compared to, for example, 9.3% (6.7% to 11.9%) and 6.7% (4.6% to 8.8%), respectively, among Syrians. See the online supplementary table S3 for a regression analysis showing that the prevalence of distress among Afghans appears not to be due to legal status concerns alone: this analysis was stratified to include only those fully recognised as refugees, and Afghan nationality is still

Table 2 Unadjusted prevalence of different levels of psychological distress by sociodemographic characteristic in per cent

	None	Mild	Moderate	Severe
Overall	58.8 (55.4 to 62.1)	19.7 (17.0 to 22.4)	10.6 (8.5 to 12.7)	10.9 (8.4 to 13.5)
Gender				
Male	62.8 (58.8 to 66.7)	18.7 (15.6 to 21.9)	9.8 (7.3 to 12.3)	8.7 (6.0 to 11.5)
Female	47.0 (41.2 to 52.8)	22.6 (17.6 to 27.7)	13.0 (9.1 to 16.9)	17.4 (11.7 to 23.0)
Age				
Ages 18–24	61.8 (54.4 to 69.1)	19.5 (13.8 to 25.2)	8.4 (4.7 to 12.0)	10.4 (4.5 to 16.3)
Ages 25–34	65.2 (60.3 to 70.0)	17.4 (13.6 to 21.3)	11.2 (7.6 to 14.8)	6.1 (3.8 to 8.5)
Ages 35–44	53.2 (46.3 to 60.1)	21.4 (15.5 to 27.4)	9.6 (5.2 to 14.0)	15.8 (9.1 to 22.5)
Ages 45–54	45.8 (37.5 to 54.2)	18.9 (12.8 to 25.1)	12.4 (7.8 to 17.1)	22.8 (14.9 to 30.6)
Over 54 years	29.6 (17.8 to 41.5)	35.4 (19.2 to 51.6)	20.6 (6.9 to 34.4)	14.4 (1.1 to 27.6)
Nationality				
Syrian	65.0 (61.1 to 68.9)	19.0 (15.9 to 22.1)	9.3 (6.7 to 11.9)	6.7 (4.6 to 8.8)
Afghan	38.5 (30.5 to 46.5)	22.7 (15.6 to 29.8)	18.9 (11.2 to 26.6)	19.9 (11.6 to 28.2)
Iraqi	64.8 (56.8 to 72.7)	16.4 (10.1 to 22.8)	8.1 (4.2 to 12.1)	10.7 (5.5 to 15.9)
Eritrean	75.2 (66.4 to 83.9)	16.3 (8.4 to 24.3)	6.1 (1.6 to 10.5)	2.4 (-0.1 to 4.9)
Other	53.3 (45.0 to 61.6)	21.1 (14.0 to 28.1)	10.3 (5.5 to 15.1)	15.3 (8.4 to 22.2)
Level of education				
Low level of education	56.7 (52.1 to 61.2)	20.2 (16.4 to 24.0)	11.2 (8.4 to 14.1)	11.9 (8.6 to 15.3)
Medium level of education	61.6 (54.6 to 68.7)	18.9 (13.8 to 24.0)	8.0 (3.9 to 12.1)	11.5 (6.0 to 17.0)
High level of education	61.9 (54.8 to 69.0)	19.3 (13.8 to 24.8)	11.9 (6.9 to 16.8)	7.0 (1.6 to 12.4)

95% CIs in parentheses. Prevalence and CIs were weighted and pooled from 50 multiply imputed datasets. RHS-13 cut-off scores of 11 ('mild'), 18 ('moderate') and 25 ('severe') were used.

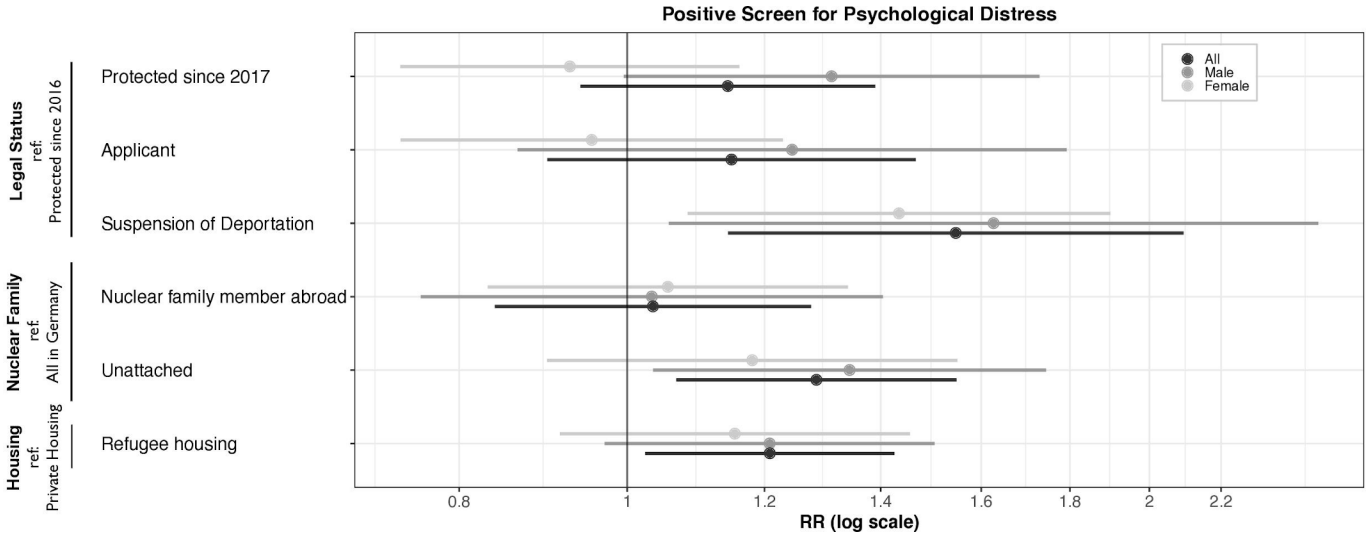

Figure 1 The association between postmigration factors and psychological distress. Risk ratio (RR) estimates and 95% CIs from nine separate modified poisson regression models predicting positive screens for psychological distress (cut-off used: 11 points on the RHS-13) from a) legal status (reference category: 'Protected since 2016'), b) nuclear family situation (reference category: 'All Nuclear Family Members in Germany'; data from 2016, since there was no information on children in second wave), c) housing type (reference category: 'Private Housing'), respectively, stratified and non-stratified by gender, adjusted for gender (when non-stratified), age, nationality, level of education and year of arrival in Germany. For the legal status regression, we omitted the non-significant results for the 'Other' category, whose legal meaning is unknown, for the sake of clarity. Results are pooled from 50 multiply imputed datasets and weighted. For complete regression results, please see online supplementary tables S5.

a risk factor. There also seems to be a trend of lower levels of moderate and severe distress among Eritreans, with a relatively high proportion of Eritreans in the no-distress category (75.2% (66.4% to 83.9%), e.g., compared to 65.0% (61.1% to 68.9%) of Syrians). The levels of distress are equally represented among refugees of different levels of education. Online supplementary table S4 shows the RRs of psychological distress with the 11-point cut-off (mild or greater distress levels) regressed on these sociodemographic factors adjusted for one another.

Postmigration risk factors for psychological distress

Figure 1 shows the RRs of legal status, family constellation and housing as independent variables predicting psychological distress. A highly uncertain legal status, namely, suspension of deportation, is related to an elevated risk of psychological distress (RR=1.55 (1.14 to 2.10)). For males, having been granted a protection status more recently also appears to be linked to greater distress (1.31 (1.00 to 1.73)), albeit with a high level of statistical uncertainty.

Furthermore, males without a spouse or children are at approximately 1.34 (1.04 to 1.74) times higher risk of psychological distress than those refugees who have their nuclear family in Germany. Living in a refugee housing facility is also associated with increased psychological distress (1.21 (1.02 to 1.43)). It is noteworthy that almost all of the effect sizes for postmigration factors are larger for males than for females, though with substantially overlapping confidence intervals. Online supplementary table S shows the numeric regression results plotted in figure 1.

Psychological distress and integration

Figure 2 shows the RRs for those who screened positive on the RHS for three indicators of integration. Values below 1 indicate that psychological distress is associated with reduced chances of integration in the different dimensions. Psychological distress is associated with a substantially reduced probability of being in employment in males (0.67 (0.52 to 0.86)). A lower probability of participating in educational programmes can also be found, especially for females (0.42 (0.17 to 1.01)), although the statistical uncertainty is high in this case. The participation in integration courses is associated with psychological distress to a lesser degree; we find no effect for females and a small association for males (0.90 (0.81 to 0.99)). Online supplementary table S6 shows the numeric regression results plotted in figure 1. Online supplementary table S7 additionally shows unadjusted prevalence of distress (11-point cut-off) per contextual and integration variable subcategory.

DISCUSSION

Our results provide policy-makers with representative estimates of the prevalence of psychological distress related to depression, anxiety and PTSD among refugees who arrived in Germany between 2013 and 2016. Almost half (41.2%) of the population is affected by psychological distress. More than every tenth refugee (10.9%) exhibits severe levels of distress indicative of an urgent need for care. Our study also identified a risk pattern including risk factors such as female gender, older age and Afghan

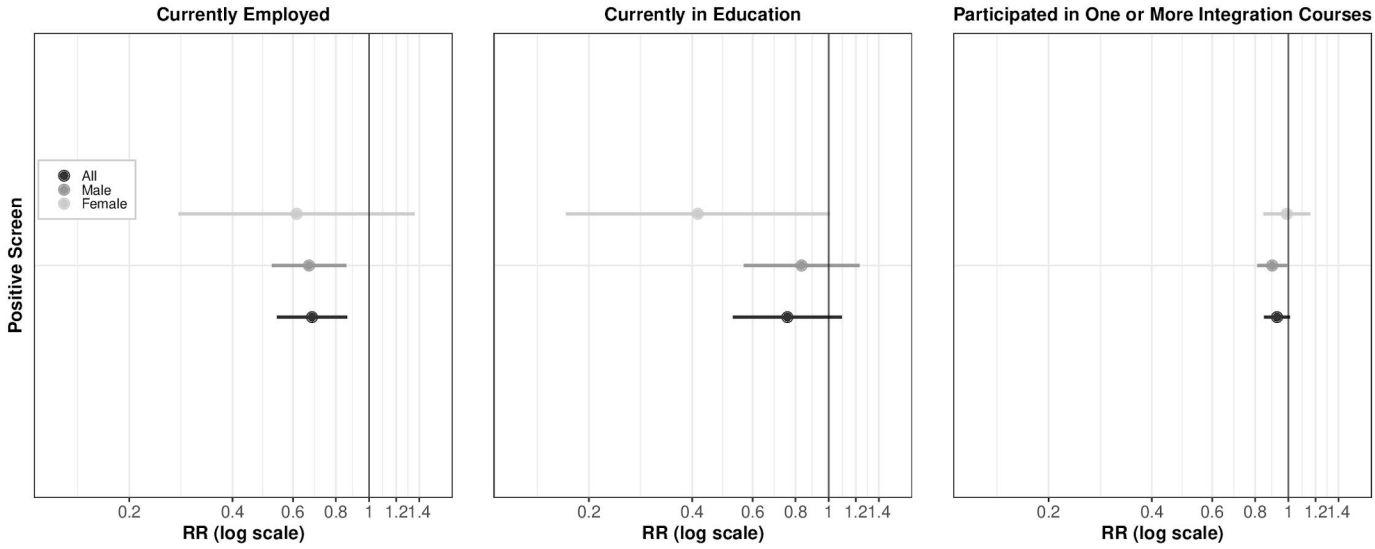

Figure 2 The association between psychological distress and indicators of integration. Risk ratio (RR) estimates and 95% CIs from nine separate modified poisson regression models predicting current employment (binary), currently being in education (binary) and course participation (binary) from psychological distress screening status (reference category: 'Negative Screen', cut-off used: 11 points on the RHS-13), respectively, stratified and non-stratified by gender, adjusted for gender (when non-stratified), age, nationality, level of education and year of arrival in Germany. Results are pooled from 50 multiply imputed datasets and weighted. For complete regression results, please see online supplementary table S6.

nationality. We further found that postmigration factors such as insecure legal status, residing in Germany without a spouse or children and living in refugee housing are associated with psychological distress. Finally, we showed that those male refugees who are distressed are less likely to be employed and participate in integration courses, and that female refugees who are distressed may be less likely to be participating in educational programmes.

Our findings indicate a mental illness burden similar to that established by the only comparable European representative study on Syrian refugees in Sweden,[11] which reports a prevalence of depression and PTSD of 40.2% and 29.9%, respectively. They also lend support to meta-analyses indicating that at least one in three refugees is likely impacted by symptoms of depression, anxiety and/or PTSD.[9 10 37]Our estimates of the prevalence of the different levels of psychological distress defined by Bjärtå and colleagues[31] suggest that the following treatment capacities have to be provided by the German healthcare system: Every tenth refugee is likely in urgent need of care, slightly more than one in ten further refugees is likely to require standard care following further evaluation, and one in five additional refugees have lower levels of distress requiring further assessment that might best be remedied through lower threshold psychosocial interventions.[37 38] For the sake of those in need, it is also imperative to reduce legal limitations to full access to the healthcare system for all asylum seekers, as is the case, for instance, in Austria and Switzerland.[39]

Our findings additionally provide information for a useful stratification of interventions, for example, towards gender-sensitive intervention: females are more often affected by mental health problems than males, particularly by severe levels of distress. This result corroborates many previous studies on refugees[3 4] as well as non-migrant populations.[40] Gender-based violence and discrimination before, during and after flight, limited formal education and pressure from changing gender and family dynamics are likely to contribute to distress among refugee women.[41] In addition, the likelihood of becoming a refugee in the country of origin also varies by gender and could be related to higher ex ante vulnerability among women.

The role of age in refugee mental health is a twofold story in the literature. Some studies, like ours, have found older age to be a risk factor.[11] Many previous studies may not have had a sufficiently large sample size to detect the risk in this minority within most refugee populations. Beyond common risk factors for older populations, such as physical health problems, elevated acculturation stress due to a reduced ability to adapt to a new environment might explain these age effects.[42] On the other hand, the literature emphasises the particular vulnerabilities of (unaccompanied) underage refugees,[43] which could not be examined in our adult sample.

The particular risk of poor mental health among Afghan refugees, especially of moderate and severe levels of distress, is likely related, at least in part, to the uncertainty Afghans have faced in the German asylum process.[44] However, our post hoc analysis including only those granted full refugee status reveals that Afghans with secure statuses are still particularly at risk of distress, indicating that struggles for legal recognition may not be the only explanation. Previous studies have highlighted the prevalence of traumatic experiences among Afghan refugees, having come from a country in severe unrest for over three decades.[42 45]

Regarding postmigration contextual factors, our finding that an insecure legal status is linked to poorer mental health is in keeping with the literature.[13 46 47] Some studies report that the process of seeking asylum could even lead to re-traumatisation or hinder the process of overcoming flight-related trauma.[46 47] In addition to the stress of uncertainty, the reduced access to services and institutions that less secure statuses often entail might underlie this association.[48] Our results furthermore indicate that males who received a protection status more recently may experience greater distress than those who have been protected for longer. This might be due to more prolonged exposure to uncertainty, but perhaps also to stressors associated with the transition into a more permanent residence in the host country. Many with insecure statuses will remain in the host society for long periods of time, so the psychological burden of insecure legal statuses should be carefully considered.[49]

Surprisingly, we did not find a relationship between having a nuclear family member abroad in 2016 and the psychological distress screening score in 2017. Previous studies using the larger first wave of the IAB-BAMF-SOEP survey (2016) did identify family separation as related to other distress measures.[50 51] We do not know whether there are cases in which family members have moved to Germany between 2016 and 2017. A process of adjustment to family separation may also have occurred. Our finding that male refugees without spouses or children exhibit increased distress resonates with studies identifying social isolation as a major risk factor.[47]

We also found an association between greater distress and living in refugee housing facilities, as has been previously shown.[14 15 46] Housing facilities often mean living in crowded quarters with limited privacy, restricted autonomy and isolation from the local community. It may also come with safety concerns in light of the frequency of attacks on refugee accommodation in many host countries, including Germany.[52]

Finally, the associations we found between a positive screen for psychological distress and employment and, to a lesser degree, participation in education and integration courses lend support to the putative harmful effects of poor mental health on integration.[23] The association between unemployment and poor mental health has been reported previously for refugees.[20] Khoo and colleagues[53] have already argued that this association underscores the shortsightedness of failing to prioritise mental health in immigrant and refugee communities. The potential of a vicious cycle between post-migration stressors, poor mental health and difficulties in integration should be taken seriously.[21 24]

Our data do not allow us to explain why many of the associations we observed between mental health and other factors are stronger or only present among male refugees, with the exception of currently being in education, which was only linked to (an absence of) distress in females. In some cases, the statistical power was lower for females due to the smaller number of observations, but in many cases, the effect size for females was smaller and even close to zero. Gender role expectations may render certain circumstances, such as unemployment, more stressful for males.[54] Gender differences in the experience of premigration stressful or traumatic experiences may also relate to differences in the impacts of stressors and functional impairments in the host country.

Limitations

This study's primary limitation is its correlational nature. Due to the survey design, we are unable to draw conclusions about causality or direction of effects. Another caveat is that our mental health measure is a self-report diagnostic proxy, not a diagnostic tool, and does not allow for distinctions between the conditions whose symptoms it comprises. Furthermore, the RHS also has not been validated in all nationalities represented in our sample to ensure cross-cultural validity.[55] While Kaltenbach and colleagues[30] validated the instrument in a general German refugee sample, their study did not examine different major refugee groups separately. The factor structure of the RHS-13 also requires further investigation given our and, for example, Hollifield and colleagues'[29] somewhat ambiguous results. Our study may be underestimating the prevalence of mental ill health because a selection bias favouring those with better mental health is likely to have been at work in the IAB-BAMF-SOEP survey sampling procedure, as is generally to be expected in population-based surveys.[56] Response rates at wave 1 were higher than in the SOEP general German population survey, but drop-out after the first wave was also higher due to the high mobility of the refugee population in the early years after arrival in Germany, introducing the possibility of selectivity and bias that cannot completely be compensated by our use of survey weights. Finally, whether our findings hold for other host countries and other refugee populations is unclear, considering the vast differences in circumstances even between Western European countries. However, Germany is a highly relevant case because it has adopted the largest number of refugees in the European Union.

CONCLUSION

First, a high overall prevalence of psychological distress in the general refugee population in Germany was observed. Second, refugees are not a homogeneous population with respect to risk of psychological distress, and individual and context-specific risk factors can have a large impact on the resilience or vulnerability of individuals. Third, our findings demonstrate the association of distress with markers of integration.

New strategies and concepts for improving the mental health of refugee populations are called for, and associations between post-migration factors in the host society as well as social participation and mental health should play a more prominent role in the development of health and integration policies.

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Contributors LW, HK, EH, TMTT and MB conceived of the idea for the paper. LW and HK planned the analyses. LW conducted the analyses with substantial input from HK. LW drafted the first version of the manuscript with substantial contributions from HK. LW and HK wrote and assembled the Supplementary Materials. ANT, EH, TMTT, MB, CvS and JS made edits to and gave critical feedback on the manuscript. All authors approved the final manuscript. JS is a member of the PI-team of the IAB-BAMF-SOEP Refugee Survey.

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CHAPTER 5: STUDY III

The mental health and integration nexus: A qualitative study on the struggles of recently arrived refugees in Germany

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The mental health and integration nexus: A qualitative study on the struggles of recently arrived refugees in Germany

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Abstract

Introduction: Forcibly displaced people are at particular risk of mental health problems and also face specific integration challenges. Existing literature suggests that mental health and integration are bidirectionally associated. The present study seeks to gain a deeper understanding of the interplay between integration processes and emotional struggles among adult refugees in Germany.

Method: Applying a qualitative approach, we conducted 54 semi-structured interviews with refugees and asylum seekers who arrived in Germany between 2013 and 2018 currently residing in Berlin, Leipzig, or a small town in North Rhine-Westphalia. Data was collected between December 2018 and September 2019. We analyzed transcripts primarily inductively using thematic analysis.

Results: Five themes covering the manifold links between integration and negative emotional states or mental health problems were identified. First, we found that the mental health consequences of past adverse experiences as well as ongoing worries about those left behind in the homeland can seriously impede refugees' ability to pursue activities key to integration. Second, the asylum process comes with burdensome uncertainty and fear, which, in turn, impact motivation to integrate. Third, many of our participants described a number of mental health ramifications that resulted from feeling resulted from feeling stuck and thwarted in the pursuit of building a life, especially in pursuit of work. Fourth, some participants described feeling so overwhelmed by fundamental tasks in the integration process, namely, language learning and bureaucratic processes, that these take a psychological toll. Fifth, we identified several forms of social disconnection between refugees and members of the host community due to xenophobia, cultural differences in social lives, and isolation in refugee camps, as well as with co-nationals and fellow refugees. Negativity, mistrust, and differences that come about through integration processes have the potential to erode social cohesion among refugee communities.

Conclusion: The impact of mental health on integration as well as the impact of integration on mental health are salient issues for refugees. Innovative solutions to challenges identified by members of the refugee community in Germany stand to simultaneously benefit mental health and integration outcomes.

Introduction

The integration of refugee and asylum-seeking populations (henceforth referred to as "refugees") is a pressing challenge for host societies worldwide. While the concept of integration has been extensively debated in the literature (Castles et al., 2001; Ager & Strang, 2008; Maehler & Brinkmann, 2015), it can be understood to represent a "process of becoming an accepted part of society" (Penninx, 2016, p. 11). This process is considered to be multidimensional, encompassing legal, political, economic, social, and cultural dimensions (Penninx, 2016; Diehl et al., 2016). It is also increasingly seen as a bidirectional process involving both migrant and host society communities (Ager & Strang, 2004). For refugees, integration can be particularly challenging (Desiderio, 2016) because, unlike other migrants, refugees are often unable to

plan ahead and choose their destination. They also face a number of structural barriers in the host country context, including uncertainty regarding residency status and discrimination.

Within their prominent framework for refugee integration, Ager and Strang (2008) position health as one of the "markers and means" of integration (p. 170). The importance of health, particularly mental health, as a potential prerequisite for and outcome of successful integration has received increased attention as the integration of refugees has become a migration research and policy focus (e.g. Ingleby, 2009). Refugees who resettled in Western countries have been repeatedly found to be at particular risk of poor mental health (Fazel et al., 2005; Porter & Haslam, 2005; Steel et al., 2009; Bogic et al., 2015), with the most common conditions being depression, anxiety disorders, and PTSD (Morina et al., 2018; Turrini et al., 2017; Lindert et al., 2018). While past research has focused on mental health problems as a consequence of traumatic experiences in pre-migration contexts or during migration (e.g. Johnson & Thompson, 2008; Lindert et al., 2016), it is now recognized that post-migration living conditions, including the circumstances and processes of integration, are also linked to mental well-being (e.g. Hynie, 2018).

Previous, mostly quantitative research has identified a range of associations between various measures of mental health and different aspects of integration. These include legal matters such as status insecurity (Laban, 2004) and challenges around family separation and reunification (Steel et al., 2004, Löbel, 2019), socioeconomic stressors such as poor housing conditions (Leiler et al., 2019) and unemployment (e.g. Walther et al., 2020), and social and interpersonal stressors such as host country language learning (Kartal et al., 2018) and discrimination experiences (Ziersch et al., 2020). While most research has emphasized the impact of post-migration conditions on mental health (Hynie, 2018), fewer explicitly take into account the opposite effect: the effect of poor mental health on the processes of integration (Bakker et al., 2014; Beiser et al., 2015; Schick et al., 2016).

Qualitative approaches, which have been under-utilized in the study of refugees' experiences (Hoare et al., 2017; Rowley et al., 2020), are ideally suited to delving deeper into the nuance of potential associations between integration and mental health. They are better suited than quantitative approaches for illuminating mechanisms behind these associations, providing insights at a level of specificity that is close to lived experience, and identifying previously unknown challenges by allowing individuals from the community under study to give their own accounts (Ahearn, 2000; Hoare et al., 2017; Rowley et al.; 2020; Flick, 2018). In the area of mental health research, qualitative studies can contribute to a more specific understanding of what individuals are experiencing than standardized symptom checklists (Flick, 2018). Existing qualitative studies on refugees' experiences regarding the relationship between mental health and integration have explored specific domains of integration, such as housing (Ziersch et al., 2017) and social integration (Strang & Quinn, 2014), full ranges of stressors and mental health ramifications (Cantekin, 2019; Rowley et al., 2020), and overall integration experiences with insights on well-being (Gürer, 2019; Mangrio et al., 2019). However, we have not come across qualitative analyses focused explicitly on the link between processes of integration and mental health struggles. Our study addresses this nexus in a diverse sample of refugees within the first five years in Germany.

Germany is among the five countries in the world that have received the largest number of refugees, with approximately 1.1 million living within its borders in 2018 (UNHCR, 2019). Just over half of refugees who arrived in Germany at the height of the influx were of Syrian (41.5%) or Afghan (9.8%) nationality (Brücker et al., 2016). With 890,000 new registrations by refugees in Germany in 2015 alone (BMI 2016), refugee integration became a focus of political and public discourse (Andritzky et al., 2016; Laubenthal, 2019) against a backdrop of anti-refugee sentiments on the rise (Laubenthal, 2019). One cornerstone of integration policy in Germany is the asylum procedure, which can take several years including appeals due to a large number of asylum applications. There are several different outcomes, including protection statuses with varying durations and levels of access to institutions (Hänsel et al., 2019). Providing housing has also proved a challenge: for up to six months, new arrivals are placed in refugee camps; then, municipal governments are responsible for providing housing, usually in shared refugee housing facilities (Schmid & Kück, 2017). Finally, efforts have been made to ease major aspects of structural integration into the workforce or education programs, with first steps taken to tackle bureaucratic obstacles like certificate recognition and legal restrictions (Rietig, 2016). "Integration courses", which provide language and civics instruction, are an essential part of this process; however, access is not guaranteed due to high demand (Prem, 2017).

The present study offers a deep and broad look at the dynamic relationship between integration and mental health struggles among refugees who arrived in Germany during the peak influx years between 2013 and 2018. We aim to provide insights to integration and health policymakers, health care providers, and

researchers, particularly in light of recent changes in asylum-seeking and integration policies in the German context.

1. Materials and Methods

1.1. Participants and sampling

The study sample included 54 participants living in Berlin, Berlin; Leipzig, Saxony; Mülheim an der Ruhr, Dinslaken, oder Duisburg, North Rhine-Westphalia, Germany. These locations were chosen to capture experiences from cities of different sizes from both former East and West Germany. Participants were recruited through community outreach (social media and refugee organizations, see Appendix for study flyer text) and snowballing. Inclusion criteria were having arrived in Germany in 2013 or later through forced migration (self-identified). We became increasingly selective in our recruitment to pursue the goal of maximum variation sampling (King et al., 2018) by age, gender, education background, and country of origin. We continued recruitment until these sampling goals were achieved. Of the people who showed interest in participating, 31 either pulled out or were excluded due to not meeting the inclusion criteria or sampling needs.

Participants' ages are given within a 5-year range with each quote, gender is given in capital letters 'F' or 'M' behind the age age (e.g. '30-35F'). When the country of origin or another attribute is important to name, participants' gender is obscured, both in the text ('they') and in the codes behind quotes (e.g. 'age 30-35') to protect their identities.

1.2. Topic guide

The topic guide (please see Appendix) comprised a brief introductory section on migration history and living situation, and two main parts: one on cultural experiences, the second, which is the focus of this work, on psychological well-being. We used general terms ("feelings"; "well-being") to discuss mental health with participants to prevent stigmatization or hesitation in sharing personal thoughts. We followed general recommendations for constructing topic guides for semi-structured interviews (e.g. Adams, 2015, Kallio et al., 2016) and consulted members of the community under study in the process. A partial, preliminary version of the topic guide was piloted in eight interviews not included in this study. Some questions were added to the topic guide after the first few interviews.

1.3. Data collection

The interviews were conducted between December 2018 and September 2019 in Berlin, Leipzig, Mülheim an der Ruhr, Dinslaken, and Duisburg (last three all in Duisburg area), Germany. One-off, semi-structured, individual in-depth interviews were face-to-face and mostly one-on-one (partners or translators present in a few cases; one interview of two brothers was analyzed as two separate interviews because both responded) using audio-recording, except in one case of note taking as per participant request. Interviews took place at locations of participants' choosing (mostly cafés).

Seven different interviewers conducted the study: a female Arabic-speaker (DR), a male Arabic-speaker (refugee himself, sociologist in MA program), a male Farsi-speaker (professional translator in psychiatry setting), and four German- and English-speaking interviewers (psychologists and sociologists, MA, including LW and JA). We instructed interviewers on the main study goals, interviewing practices, and the ethical framework.

Interviews were conducted in Arabic (22), Farsi/Dari (10), German (19), or English (3). Participants were able to choose the interview language; in the Duisburg area, the presence of a translator was required. In the last stages of the study, logistics meant that we were only able to interview individuals willing to speak German or English. 10 interviews were affected. Beverages were provided, but there was no financial compensation. Most interviews took between 45 and 60 minutes; the shortest interview took approximately 30 minutes, the longest around 90 minutes. The audio recordings were transcribed and translated into English or German by either the interviewers or external professional translators. To ensure the quality of the transcripts, we commissioned professional translators without previous study involvement to check a sample of interviews by each transcriber.

1.4. Data analysis

We applied thematic analysis following Braun and Clarke's (2006) guidelines to identify and organize patterns in our data. For data immersion, LW and JA read through all of the transcripts. Next, we coded transcripts line-by-line for the second part of the interview and data segments that were pertinent to our primary research question in the rest of the transcripts. In the interest of validity, LW and JA independently coded half of the transcripts each, exchanging transcripts after about every five, discussing and amending codes. We used a mostly inductive, partly deductive approach (Greg et al., 2012); it was deductive in the sense that we approached the data with the overarching question "how do integration processes and mental health relate?" in mind.

Our codes were open and detailed enough to represent the meaning of the text segment accurately. After the initial coding of each transcript, we entered a summary of each participant into a table, including sociodemographic and migration background information, a short summary of the interview, as well as a mental health status summary.

After coding all interviews, LW identified candidate themes revolving around the central research question by going through codes systematically and entering them into evolving theme maps in MAXQDA's visualization toolkit with feedback from JA. We continuously referred back to the transcripts and our summary table to ensure including not just an across-case, but also a within-case view of context (Ayres et al., 2003). Collaborators from the community under study critically assessed the themes for plausibility, and we refined them until a final thematic map (Image 1) was agreed upon.

1.5. Concept of Mental Health Problems

All explicit mentions of mental health conditions or symptoms, such as "psychological problems", depression, anxiety, trauma or post-traumatic stress, nightmares, or trouble sleeping were regarded as pertinent to our analysis, as were statements by participants expressing distress, including expressions of deep or lasting sadness, worries or rumination, exhaustion or listlessness, apathy, anger, fear, frustration, hopelessness, emptiness, overwhelm, loss of self-esteem or self-worth, loss of motivation, social withdrawal. In other words, our study explored the whole spectrum of poor mental health, not just the clinically significant end (Patel et al., 2018). We also attended to mechanisms with the potential to cause or exacerbate mental health problems and make these instances explicit in the analysis.

1.6. Concept of Integration

We considered all processes involved in arriving and building a new life in Germany mentioned by our participants as integration processes in our analysis, including, for example, legal processes, the housing journey, learning languages, navigating everyday life, interactions with cultural differences, pursuing education, employment, and other activities for oneself and others in the family, social life, experiences of interactions with key administrative bodies, feelings of inclusion and belonging, developments in one's sense of identity etc. As the results below show, illustrating the relationship between mental health and integration separately for different facets or domains (Ager & Strang, 2008) of integration ended up being a central organizing principle in the thematic analysis due to the specific mental health and integration connections we found within each.

1.7. Reflexivity

The study team included researchers of different ages, genders, levels of seniority, cultural backgrounds, as well as disciplinary backgrounds, including psychology, psychiatry, sociology, and anthropology. Furthermore, we consulted members of the community under study in the thematic analysis process.

2. Results

Please see Table 1 for sample characteristics. We identified five themes, each with sub-themes (Image 1). Theme 1 is clearly about mental health impacting integration unidirectionally. Themes 2 and 5 is mixed. Themes 3 and 4 are predominantly about the impact of integration processes on mental health, with several instances further negative impacts on integration or integration struggles being exacerbated by low well-being.

Gender	**Female**	**Male**					
	24	30					
Age	**18-24**	**25-29**	**30-34**	**35-39**	**40-44**	**45-49**	**50-55**
	11	13	12	5	5	3	5
Country of origin	**Syria**	**Afghanistan; Afghanistan/ Iran**	**Iran**	**Pakistan**	**Palestine**	**Libya**	**Sudan**
	36	9	4	2	1	1	1
Level of Education	**No secondary education**	**Secondary education**	**Started university in country of origin**	**University-educated**	**Young and currently in secondary education**	**N.A.**	
	5	3	9	28	3	6	
Residence in Germany	**Berlin, Berlin**	**Leipzig, Saxony**	**Mülheim an der Ruhr, Duisburg, or Dinslaken, North Rhine-Westphalia**				
	39	4	11				
Year of arrival in Germany	**2013**	**2014**	**2015**	**2016**	**2017**	**2018**	
	1	1	34	11	6	1	
Legal status	**Refugee or asylum status**	**Subsidiary protection or deportation ban**	**Unresolved**	**Humanitarian program**	**Family reunification**	**Visa sponsorship**	**N.A.**
	25	10	11	1	3	1	3
Housing	**Private**	**Housing facility**	**N.A.**				
	30	15	9				
Occupation	**Gainfully employed**	**In education**	**None**				
	13	11	30				

Table 1 Sample Characteristics.

2.1. Theme 1: Impaired by past and present events in the homeland

This theme addresses how psychological scars from pre-migration adverse experiences (sub-theme 1.1.) and worries about the homeland and family members left behind (1.2.) can result in overall functional impairment and impede activities key to integration.

2.1.1. Past adverse experiences

Several participants described feeling unable to tackle aspects of their integration process as a result of poor mental health attributed to adverse or traumatic experiences before and during flight. For example, one participant (50-55F) attributed her language learning difficulties to past experiences: "I doubt I will ever learn this language. It is too hard for me because I have psychological problems. I've experienced so many problems in life. I can't just forget them. My brain doesn't have the capacity to learn so much at once."

Another participant (30-34M) who reported traumatic events throughout his life in his country of origin feels that he is unable to "try to integrate" into German society "with a clear mind" until he has received therapy. He suffers daily from suicidal thoughts and nightmares concerning his experiences prior to arrival in Germany: "My brain is psychologically full of these knots. […] like in a vicious cycle, these [psychological problems] take all the energy I need to start my day and stay on my shoulders like a heavy weight. […] I still feel the pain even though I'm in Germany. This feeling takes all the energy I need for learning the language and for making social contacts."

In a statement generalizing these deleterious effects of past adverse experiences, a Syrian participant (age 25-29) said that they have "noticed […] the Syrians […] have a kind of general depression, even if they don't want to admit it" from the war. They reported that this depression makes them "[lose] the ability to do anything" as soon as they encounter obstacles in their attempt to have a purposeful day. These sentiments were echoed by another Syrian participant (age 45-49) who says of themselves and their fellow Syrians, "We are devastated […], 7 years of war – we are psychologically destroyed." They, too, feel they were "made unable to do things" by "the horror that [they] experienced in Syria and the fear of losing [their] children, the things [they] saw."results

Associations between integration processes and mental health struggles experienced by refugees in Germany

Themes		Sub-themes
Theme 1	Impaired by past and present events in the homeland	**1.1. Past adverse experiences** *"My brain is full of knots that take all the energy I need to start my day, learn the language, make contacts."* **1.2. Worries about those left behind** *"Your family is not safe, so you keep being afraid, obsessed"; "I'm stuck in Syria, maybe that's why I can't learn."*
Theme 2	Weighed down by legal uncertainty	**2.1. Uncertainty and fear during the asylum process** *"Uncertainty was most dangerous feeling"; "Shocked that even Germany could put me back in danger."* **2.2. Impact of legal status uncertainty on integration** *"The possibility that I will be told to go back after all my efforts hinders progress and enthusiasm to do anything."*
Theme 3	Feeling stuck and thwarted: mental health ramifications of struggles with structural integration (esp. finding work)	**3.1. Frustration over feeling stuck and directionless** *"Refugees' depression is because they can't achieve much. They try, but not much works"; "Cannot live without a goal."* **3.2. Feelings of loss of agency, status, and being undervalued** *"My life is imposed on me"; "I don't feel people here care about the young people who came with their huge potentials."* **3.3. Psychological burden of involuntary inactivity** *"Depressed because I am doing nothing"; "Don't feel important anymore"; "They say we're lazy"; "They don't see reality."*
Theme 4	Overwhelmed by fundamental tasks of integration	**4.1. Language learning** *"My psychological problems come from pressure to learn"; "Punishment for people who have never studied."* **4.2. Administrative tasks and bureaucratic processes** *"Refugees arrive emotional, need a bit of motivation, but there is nothing but bureaucracy tac tac tac."*
Theme 5	Social disconnections with host society and fellow refugee communities	**5.1. Experiences of xenophobia and racism** *"Feeling that one doesn't belong results in loss of motivation, withdrawal"; "They don't want me"; "I don't feel safe."* **5.2. Perceived lack of close-knit social networks in Germany** *"I don't feel people are happy here. They don't visit each other. I'm afraid to become like them"; "Friendships are cold."* **5.3. Lack of social support and feelings of community** *"Exhausted"; "I am not allowed to fall in Germany because no one will catch me. It is very stressful."* **5.4. Isolation in refugee camps** *"Isolating refugees in camps after all their suffering. They are let down. Not all of them get over it."* **5.5. Lack of social cohesion within refugee and migrant communities** *"They have their own problems"; "Conversations always negative"; "Some don't deserve asylum"; "I get a lot of criticism."*

Image 1. *Thematic map. Quote segments in italics are abridged and partly slightly reorganized for brevity; semi-colons separate utterances by different participants.*

2.1.2. Worries about those left behind

Some participants also feel impaired by concerns about family members still living in their country of origin: “My mom and my brother are still in Syria, so my head is full! I have no activities” (age 45-49). These worries have the potential to prevent refugees from overcoming their pasts and give rise to guilt and rumination: “When you come to Germany alone, you are safe then, but your family is not! So, you keep on being afraid, the same worries! […] because I came here, and I am in exile and left them, it became like an obsession to me [to check on them]” (25-29M).

Intense and debilitating worries about the homeland and fellow citizens left behind, not just family members were also reported by some. Continuous checking of the news is common among these participants, making them feel as if they are not rooted in their present circumstances and isolated from those around them, even co-nationals: “I am not out of Syria yet […], I'm still stuck there, and I use the internet in the morning to check the Syrian news, I listen to the radio about what is happening in Syria, and this is what my Facebook is all about, too. I can’t forget, and just start here […]. Maybe that's why I'm late learning the language, or that’s why I can’t remember words that I learn. […] Everyone around me asks me to get out of this grief, but […] I don’t understand these people, sometimes I think they were not in the same war […]” (age 50-55).

2.2. Theme 2: Weighed down by legal status uncertainty

The asylum process is central to refugees’ post-migration experience since its outcome determines access to various institutions, freedoms, and the right to stay in Germany. This central legal process of integration is bound up with distress and fear (sub-theme 2.1.), and the burden of uncertainty has the potential to impact other areas of integration (sub-theme 2.2.) negatively.

2.2.1. Uncertainty and fear during the asylum process

Many of our participants reflected on the asylum process as a major stressor. Some participants expressed lasting distress over what happened during their asylum hearing, including regrets over what they said and inadequate translation in the hearings. However, the most significant impact of seeking asylum on the mental health of our participants is the burden of uncertainty that accompanies the process: “Until [you have an answer], you will always have fear. Always. […] It was uncertainty in my life that I considered the most dangerous feeling in my life. […] Since we had this positive answer [regarding our asylum application], yes, I am very happy, I don't take my medicines anymore” (25-29F). The duration of this phase of uncertainty and the relentlessness of the accompanying stress was emphasized. According to one participant (35-39F), “all people are psychologically tired” from hearing a succession of updates about being allowed to stay “for a year, two or three years.”

The perceived lack of influence over the outcome of the asylum process, which can be understood as a loss of agency, was also highlighted as particularly challenging to deal with: “This burdens me immensely – not being able to do anything [to impact the asylum process] and just waiting to see what will happen” (25-29F).

One participant (30-34M) stood out for exhibiting a severe fear of deportation. Expecting full refugee protection, he only received a one-year title. He “no longer feel[s] safe” and is shocked that “even Germany could put me back in danger.” His fear of deportation seems to blend with these post-traumatic symptoms from political persecution and violent conflict, losing friends and relatives: “All my days are getting the same pattern where I get nightmares about [country of origin], or fears that I will get deported. [...] Constant fear, anxiety, and nightmares.”

2.2.2. Impact of legal status uncertainty on integration

The adverse mental health consequences of the uncertainty surrounding legal status can, in turn, result in a reduced ability to perform tasks essential to integration. A participant (30-34M) with severe fear of deportation said that “the stress takes everything out of” him and “doesn't give him the chance to feel that [he] wants to do any activities.” Another participant (18-24M) reported experiencing symptoms of forgetfulness as a consequence of four years of uncertainty regarding his legal status that was “psychologically taxing.”

Furthermore, several participants described the lingering uncertainty itself as lowering their motivation to build a life in Germany: “The possibility that I will be told to go back after all my efforts here hinders progress, achievement and enthusiasm to do anything” (30-34F). This quote also encapsulates how the possibility of being sent back can make refugees feel undervalued

in their contributions, and “after all this effort […] feel still not accepted” because of the impression that Germany is “thinking about how to send us away” (18-24F), threatening the sense of belonging to German society.

2.3. Theme 3: Feeling stuck and thwarted: mental health ramifications of struggles with structural integration

A large cluster of stressors and associated psychological problems centers around a perceived struggle with structural integration, which here is short for: participation in the host country labor market and educational programs, facilitated by language and integration courses (although in some integration frameworks, it also includes legal dimensions and housing (see e.g. Esser, 2006)). Many of our participants expressed feeling unable to accomplish various aspects of structural integration. Restrictions on access to language courses and work permits due to legal status were frequently mentioned obstacles. Problems with the acceptance of certificates or otherwise seeing no future for one’s profession in Germany as well as a perceived lack of guidance or too many restrictions (e.g. from the employment agency, “Job Center”) were also commonly mentioned, as were concerns about slow progress in language skill acquisition. Finally, several participants reported feeling held back by housing conditions impeding their pursuit of structural integration goals (e.g. “I wanted to study, but without an apartment and without privacy, I had to cancel everything. [...] If I can’t even sleep in peace, how am I supposed to work?” (18-24M); “I got the B1 certificate [...] despite the conditions in the housing facility, which I cannot describe” (35-39F).)

The challenges of structural integration were related to a myriad of mental health consequences by our participants. Many attributed feelings of depression to feeling stuck and without direction (sub-theme 3.1.), a loss of agency, status, and a sense of being valued (3.2.) and felt burdened by involuntary inactivity as a consequence of slow structural integration (3.3.). This theme captures how processes of integration impact mental health, and participant utterances quoted in this section also strongly suggest the potential for vicious cycles wherein frustrations demotivate and make integration even harder in turn.

2.3.1. Frustration over feeling stuck and directionless

Some participants attributed depression among refugees to frustrations over feeling unable to start a life in Germany, more so even than to past traumatic experiences: “[The other refugees] are suffering a little bit from depression. […] Not because of the war. It emerged here. Because of the difficulties, they can’t achieve much […]. They try, but not much works out [pause] that’s why” (30-34M). Indeed, several participants expressed feeling they have “accomplished nothing” (30-34F) or are “not developing” (18-24M) in their years in Germany, highlighting that career ambitions do not recede into the background in the flight context, especially among those of working age. Several participants in their thirties reported feeling under pressure to build a new career quickly. One participant (30-34F) considers “morning depression […] a must” because she is “already” in her thirties and has “no career […] because [her] university degree is irrelevant here.”

The lack of direction that comes from an inability to build an active life can itself represent a source of pressure. One participant feels that she struggles because she “cannot live” without a goal, that pursuing challenges “is life” (45-49F). Another participant (age 40-44), who sees no future for their job in Germany, suffers from attempting to pursue goals while feeling a lack of direction: “I’m not pleased with my life here. I don’t have a plan. I don’t know what the plan for tomorrow is. Keeping going without destination, plus my other problems, makes me feel so tired.”

The burden having no goals to pursue has troubled some refugees for many years, even the entire period of their displacement: “I’ve been suffering from the last seven years for not knowing where to go, what to do, […] I had to visit a therapist” (35-39M). As this quote shows, aimlessness from losing an established career might be compounded by uncertainty about “where to go” and doubts about “whether it was all worth it”, as another participant who experienced a high-risk flight described (35-39M). For many participants, starting a life in Germany is much more difficult than expected: “The first months were sadness because it was all different from the utopia we had in our heads. […] Our dreams were shattered” (25-29F).

2.3.2. Feelings of loss of agency, status, and being undervalued

A perceived absence of progress in the structural integration process can also mix with a sense of injustice or lack of agency for refugees: “My life in Germany is imposed on me. If I can’t establish anything for myself here, I will be more frustrated” (40-44F). Unforeseen bureaucratic restrictions, in particular, are perceived by some as an affront to their sense of agency: “That they’re not giving me a work permit or forcing me to do a

particular job feels like imprisonment and that stresses me" (40-44F, different from previous). This feeling of a loss of control can erode an initial sense of motivation: "When I came to Berlin I had the plan to learn the language, and other plans to start my life here, it was a solid plan, but I couldn't do it. The Job Center did everything, I felt like I didn't have my own choice" (25-29M). Restrictions on movement are also mentioned as playing into a feeling of imprisonment and being thwarted.

Several participants described anxiety over a perceived loss of status due to not finding a next step suitable to their backgrounds. This prospect is potentially so unacceptable to some that it depletes their motivation. One participant spoke of friends and acquaintances who are unwilling to integrate because "they did a lot in their country of origin and now they have to start from 'zero', and that is not ok for them" (25-29F). A fixation on the perceived loss of status can also be demoralizing: "I know a few people who always think about what was in Syria, what they studied, what […] and now they can't find their way in Germany. It's so hard" (30-34M).

Furthermore, not finding a purposeful activity and not feeling supported in the search for one are sometimes accompanied by a sense of not being valued by the host society. A young male who has "a lot of energy" and is eager for employment opportunities feels that his Job Center representative simply "forgets" about his case:"I don't feel really that in Germany people care about the young people who came with their huge potentials, care to guide them in the right direction" (25-29M). Some participants also feel undervalued during the structural integration process due to the "arbitrariness" of not being "allowed to do these things that others are" (30-34M), when they are restricted (in these cases: language course participation) and others are not: "I don't have any rights [because I don't have legal documents]. I was like a number, a file, and that's it. Not a person, but a file" (30-34M).

2.3.3. Psychological burden of involuntary inactivity

Several participants explained that the obstacles to building a life in Germany, such as lack of access to work and language courses, can lead to involuntary inactivity. Housing conditions were also emphasized as forcing inactivity: "Go to a camp, and you see how families live […]; they sit and watch TV all day, not because they want to" (35-39M). Inactivity, in turn, comes with deleterious mental health consequences, according to our participants. One participant stated that "most people get depressed" upon arrival in Germany because of the "very long waiting time to be able to do anything. This wait kills" (30-34F) and the concomitant loss of self-worth: "This feeling was continuous [before psychotherapeutic treatment]. A feeling that I'm not important [anymore]". Another participant reported: "I am depressed […] because I am sitting at home doing nothing" (40-44M). Several male participants described suffering from rumination because of a lack of activity and missing work as a distraction, "especially as someone who worked like a machine his whole life" (30-34M).

Showing that some refugees may have experienced the burden of lacking purposeful activity for extended periods before their arrival in the countries they settle in, one participant counted years of "sitting and doing nothing" (35-39M) in various countries on his way to Germany. "Feeling[s] of meaninglessness […] which are maybe bearable for a year" (30-34M) and anger about "life just pass[ing] by" (30-34M) result from months and years spent doing "absolutely nothing." Even for those enrolled in language and integration courses, the waiting time until the next course begins, poses a mental health challenge: "I had depression or something, doing a language course, waiting for the result, then a two-month wait for the next course, doing nothing" (25-29M).

A pernicious added layer to these frustrations is a feeling of shame about receiving social benefits and the worry that their involuntary "sitting around" will feed into prejudices against refugees: "The people who don't like refugees, they say things like we are lazy and just sitting around our houses, but we are not" (30-34F). Some feel helpless in reacting to these judgments in light of how difficult they find building a life: "What can I do? People say: 'Oh, he just wants to sit around.' They don't see the reality" (30-34M). These feelings often co-exist with discomfort about receiving social benefits: "I don't like taking money from someone and then also have that be constantly be held against me" (40-44F), which many also attribute to not being familiar with social benefits as an institution from their home country.

Finally, it is of note that frustration over difficulties with structural integration and sitting around can lead to mental health problems, which then make it even harder to become active. One participant told us: "There's a fine line between you and giving up, as a refugee" (35-39M). Another participant (25-29M) suggested that there should be mental health check-ins at Job Center appointments to counteract this vicious cycle.

2.4. Theme 4: Overwhelmed with fundamental tasks in the integration process

Fundamental daily tasks of integration include learning the host country language(s) (sub-theme 4.1.) and navigating the administrative processes (4.2.) involved not only in the asylum process but in everything from securing social benefits and housing, to getting certificates recognized and enrolling in courses, to seeking medical care. While many participants talked about the stress of struggling with these tasks, they appear to have the potential to become so overwhelming that they impact mental health. This theme also includes examples of consequent withdrawal as well as mentions of poor mental health exacerbating everyday stressors.

2.4.1. Language learning

Almost all of our participants mentioned learning a new language as a primary stressor. For some participants, this stressor can take a significant psychological toll. In particular, refugees with limited educational backgrounds can experience learning German as severely distressing, especially those who are illiterate in their mother tongue: “I’m learning German and, in parallel, I’m trying to learn to write words in Persian […]. I think my psychological problems come from a pressure to learn. I think about it a lot” (age 40-44).

One participant criticized the German integration scheme for failing to “know the circumstances of the world” in sending people who have “never studied in [their] whole life” to standard integration and language courses (50-55F). Another said: “It is like a punishment to them, being sent to an integration course. [...] Some of them had to visit a psychotherapist. So, imagine how much they suffered that they needed to visit a doctor for it” (40-44F). Mothers of young children reported stress due to lacking the time and space to study. Older age can also exacerbate the difficulties associated with a limited educational background: “And their ages range around the forties. Age plays a big role in language learning” (40-44F), and feelings of alienation can emerge from hopelessness about learning: “He [older, less educated acquaintance who is “in crisis”] doesn’t understand a thing. He always feels estranged” (18-24M).

As addressed in Theme 1, pre-existing psychological issues can also be a reason for feeling overwhelmed with language learning. One participant (25-29M) felt not ready to attend a language course because his “psychological status was not great” due to acute worries about his family and a stressful living situation in a housing facility. He demanded that these circumstances should be taken into account by Job Center and language program staff. The status quo, he feels, simply forces people to “go and fail.”

2.4.2. Administrative tasks and bureaucratic processes

Another facet of integration that was identified by almost all participants as a major stressor and by some as a cause of feeling psychologically overwhelmed was bureaucracy. The sheer number of bureaucratic processes (“Germany is the country of papers and bureaucracy. Always papers and appointments” (30-34F)), their incomprehensibility (“the language can’t even be understood by Germans” (50-55F)), and the lack of assistance for foreigners (“structures and processes that do not exist in Afghanistan or Iran, […] and no one is there to advize you” (age 25-29)) are nearly ubiquitous sources of frustration.

For some participants, this stress from bureaucracy sounds as though it is of a severity that is pertinent to mental health: “[Bureaucracy] causes me tension in that a hundred ideas must be present in my head to perform 100 tasks every day” (30-34F), and as a consequence also to integration processes: “When I got that letter, I didn’t understand anything in class all day because I just keep thinking about the letter. I had nothing but stress […]. This happens a lot” (40-44F). Everyday pressures also impede some refugees’ efforts to overcome mental health struggles by pursuing meaningful activities: “Depression … I feel negative most of the time. I am trying to break through this negativity. […] Every morning after I get up. I tell myself today I’m going to start something new. But after you are faced with all these bureaucracies and pressures such as learning the language or not knowing what’s going to happen tomorrow” (40-44F). One participant highlighted that bureaucratic demands can be particularly overwhelming immediately after arrival, when mental health is frail: “Refugees […] come from war and are very emotional, need a bit of motivation, but there is nothing but bureaucracy at the beginning, tac tac tac” (25-29M).

The stresses of bureaucracy sometimes interact with family dynamics. For example, one participant who struggles with a sense of overwhelm feels additional despair about not having achieved reunification with her husband because he was responsible for the family’s administrative affairs in the past; this would “unburden”

her. A few participants reported relying on their children to tackle bureaucracy because of their superior comprehension skills. One young participant (age 18-24) moved out of their family home because this responsibility became too stressful and all-consuming.

Feelings of being overwhelmed with bureaucratic processes can also arise from feelings of being mistreated and thwarted by the administrative bodies. Several participants expressed finding it arbitrary and untrustworthy: "I have only heard lies from administrative bodies so far. They say one thing and do another. They use your statements […] against you" (40-44F). These negative experiences can have consequences for well-being, motivation, and integration: "It's even gotten to the point where, because of these problems ["they treat you as they wish"], I am less willing to make contact with people. This naysaying by administrative bodies makes me think, ok, then I guess nothing is possible, and I no longer make any effort at all. […] The poor treatment by authorities influences my thoughts and the rest so much that I let them out as anger toward my wife and my children. Or my wife says, 'let's go somewhere', and I don't feel like it and say I have a headache" (30-34M).

2.5. Theme 5: Social disconnections with the host society and fellow refugee communities

This theme captures various forms of social disconnection, showing links between the social aspects of social integration and mental health. Regarding social integration with the host society, it covers experiences of xenophobia (sub-themes 5.1. and 5.2.) and how participants experience an absence of close-knit family and other networks (5.3.), and thus, a lack of social support in Germany (5.4.), as well as particular risks from isolation in refugee camps after arrival (5.5.). This part of the theme captures instances of social disintegration negatively impacting mental health as well as this distress resulting in further withdrawal and demotivation.

Our understanding of social integration is not limited to examining the "bridges" between refugees and members of the host society (Putnam, 2000). We also consider "bonds" within the refugee community and between migrant co-nationals to be vital parts of integration and a potentially significant source of support and solidarity. Therefore, this theme also addresses different forms of erosion of social cohesion among refugees and co-nationals, including stress and negativity from pre- and post-migration struggles (5.6.), mistrust due to asylum status anxiety and conflicts that because of how some change in Germany (5.7.). Here, worries and mental health struggles, many related to integration, are shown to threaten social integration, potentially further jeopardizing well-being.

2.5.1. Experiences of xenophobia and racism

While most participants characterized their reception in Germany as overall acceptable, even positive, or at least ambivalent, almost all participants reported experiences of xenophobia. This facet of exclusion and disintegration has the potential to act as a major stressor. According to our participants, slurs such as "Go back to your country!" (30-34M), "Why are you here?" (25-29M), and "Asylee!" (35-39F) from strangers in public spaces are not rare occurrences. One participant said that reading discriminatory headlines about refugees committing crimes makes him feel he does not want to go outside: "I cannot live well, I cannot walk on the street without thinking that others are looking: he's a refugee" (25-29M). Female participants perceive the hijab as a central source of discrimination: "Not everyone in Germany is racist, but the majority are, and I'm suffering from this, especially since I'm a woman who's wearing a hijab" (35-39F). One woman avoids public transport as a hijab-wearer for fear of "harassment from drunk people" (50-55F).

In personal encounters, our participants described facing false perceptions of themselves as "backward thinking, closed-minded extremists" (25-29M), "lower-level" (18-24M) and "barbaric" (25-29M) and always "having to prove yourself [as well-meaning]" (30-34F). Showing that discrimination is also experienced in interactions with actors involved in the integration process, one participant reported being in the midst of a discrimination complaint against the heads of her refugee housing facility for feeling looked down upon and ignored (25-29F). A German-language teacher supposedly told her students, "'honestly speaking, I don't like Arab men'" (40-44M).

On a political level, the rise of far-right, anti-immigrant sentiments in the German political landscape was mentioned as a concern by several participants: "There are AfD and NPD [far-right political parties] campaign posters that you see here that cause a deep-seated fear in migrants who can read German. This leads to stress and worries" (18-24M). Another said that being used as "pawns" in the political game between all parties "is really awful for us" (25-29M), a sentiment closely echoed by another participant who said that as a consequence of the treatment of refugees by the media, "we feel forced on people" (25-29M).

A few interviewees attributed almost all of their negative emotions and mental health struggles in Germany to feeling rejected and discriminated against. For example, a young woman (age 25-29) said that she "senses a hatred from the German people" and has "often been treated badly." She described walking into her workplace in the mornings and having her greetings ignored by her German colleagues while observing that they do greet other Germans. Her predominant feelings in Germany have been "loneliness, hopelessness, isolation". She talked about suffering from depression and feeling unable to engage in activities outside of work, connecting her poor mental health to the rejection she experiences: "The feeling that one doesn't belong here results in a loss of motivation, in being less active and in withdrawal."

A young participant (age 18-24) who fled by themselves and attempted suicide in Germany said that they initially thought that "countries in Europe like Germany are safe places, where you can feel at peace." They were shocked by what they found, having experienced several racist attacks, including a physical assault and an attack on the housing facility they lived in: "When I arrived, I realized that it's the opposite. Here there is racism; the lack of support is omnipresent. Everyone wants to succeed, but they put obstacles in your way." This feeling of being discriminated against and unwanted had severe consequences for this individual's attitude towards integration, which they see as a process that has to be reciprocal:"I tried to integrate into this society, but they didn't want me to. […] If they don't want my integration into this society, then I don't want it either." This participant said that "all of these difficulties" led them to attempt suicide because "someone who is not adult and in puberty is more easily hurt in their dignity", emphasizing the vulnerability of very young refugees. They still do not feel safe: "The fear is deeply ingrained."

2.5.2. Perceived lack of close-knit social networks in Germany

Another source of disconnection from the host country society presented in our interviews is a sense of alienation and loss regarding perceived differences in social life: "The social life I think here is very difficult, and I see this as the most difficult thing" (30-34M). Participants characterized their social networks in their countries of origin, to a great extent comprised of family, as being large ("I used to meet up to 150 family members per week", 30-34M), close-knit ("safe, held-together units", 25-29M), and involving frequent contact ("I spent most of my life, my whole time, in my friends' homes", 30-34F). By contrast, many participants expressed feelings of alienation about how they perceive Germans' social lives: distant, cold, or even non-existent. Difficulty making social connections with Germans, a fear of adapting to this lifestyle, and feelings of isolation were reported as concomitant with these observations. Participants across genders, age groups, and countries of origin expressed these thoughts:

"I thought Germany was a highly-developed country and everybody was happy. But I don't feel people are happy here, especially the Germans. I'm afraid to become like them. […] German people lack a social life. […] They don't visit each other." (Syrian, age 25-29)

"They are cold and take everything seriously, not like Eastern people who warm up quickly and make friends easily. […] Even friendships are cold." (Afghan, age 18-24)

"I think this is a little bit scary [that she has not met neighbors of two years]; I feel like I am living alone." (Syrian, age 30-34)

A young woman (age 18-24) attending school spent the first year in Germany hiding from her classmates during recess and "sat at home and did nothing" but watch television series in her free time because she was doing "terribly" emotionally from feeling ignored and rejected by her peers at school. She said she came to attribute this to cultural differences. "[In my country of origin], if you catch someone's eyes on the street randomly, you say 'oh, hello!'. In Germany, I think if I just smiled at someone randomly and said 'hello', this person would think 'piss off'."

A Sudanese participant (age 35-39) saw the loss of social "nearness" as a tradeoff for a society in which the state assumes responsibility for meeting many needs that, in Sudan, would be within the purview of relatives, friends, and religious figures: "People in Sudan live together, help one another, just do everything for one another. [This is something] I miss very, very much."

2.5.3. Lack of social support and feelings of community

These perceived differences in social life lead to a sense of loss of emotional support for some participants, with effects on their mental well-being. One woman feels "exhausted" (30-34F) as a consequence of not

being in the type of "social environment that gave [her] comfort." Another participant said that in the close-knit community in the country of origin, he "was not afraid of the future or anything" (25-29M). He described his current state in Germany, on the other hand, as being marked by depression, anxiety about building a life and feeling alone with his problems. Another participant similarly feels that he is "not allowed to fall" in Germany because, unlike back home, no one will catch him: "I have to be so strict I cannot fail, and just thinking about it is very stressful" (25-29M).

Seeking long-distance social support from the familiar network is not always an option due to a reluctance to burden family and friends who are already perpetually worried. For example, a young man (25-29M) describes that he "would love to share that [he] feel[s] tired and stressed," with his family, but refrains so as not to worry them. When he is feeling particularly low, he avoids video calls or "put[s] on a mask."

2.5.4. Isolation in refugee camps

A few of our participants described the temporary residence in refugee mass accommodation after arrival in Germany as a period of social isolation in an already difficult time ("I always wonder if Germany is aware how depressive the people are that they are putting in mass accommodation" (25-29M)) with severe consequences for mental health and integration:

"The way they are isolating refugees in camps is totally destroying them. After all the suffering those refugees had to go through to reach Germany. […] At the time they left the camps, they are already let down. I had friends who were so motivated when they first arrived in Germany. But they were isolated in camps for about six months until they got the residency. They were totally devastated by then. It took them a while to regain their mental health and be able to start again. But unfortunately, not all of them were capable of getting over it" (30-34F).

According to another participant (25-29M), the isolation in mass accommodation also means that although "there are many good organizations [promoting refugee social integration] [...]", it is difficult to become aware of these programs whilst living there: "I didn't see them for two years. [...] Events with others, with Germans, there weren't any. Or too few, and you have to find them yourself." Due to the psychological fatigue from flight and poor living conditions in mass accommodation, seeking out events is nearly impossible, according to this participant: "if you're in a camp, you have no motivation, zero motivation. [...]. The beginning is very difficult." He emphasized the importance of social connection in the initial phase of integration: "Maybe a word [from the host society] would help more than money and an apartment at the beginning", and argued that given the mental health risk of those in housing facilities, mental health care should be integrated or accessible on sight: "I am surprised how there are no psychological support teams to work in the housing facilities […] in an advanced country like in Germany […], but with refugees, it seems like they don't care about our psychological issues."

Restrictions on visitors in some housing facilities and security measures also make several participants feel isolated: "we have to show our card like we are in jail" (30-34M).

2.5.5. Lack of social cohesion within refugee and migrant communities

Participants also experience rifts with co-nationals and fellow refugees in Germany for various reasons.

"There are also divisions between Farsi-speaking people. They do not stand by one another." (age 25-29)

"I have not interacted much with any Arabs. Unfortunately, with all due respect, there were some fights between the Arabs I met [here] and me. I could not cope with the Arabs." (age 30-34)

A few of our participants reported an inability to turn to people from their own community for connection and support because "most of them have their own troubles and prefer to be left alone" (30-34M) or because "they are not psychologically stable, always thinking […], the Syrians in Germany are not like the ones in Syria" (age 25-29). Some have "deliberately moved away from [Arabic friends]" to escape the "negativity" and "discouragement" that apparently prevails in some Arabic refugee communities due to past and ongoing stressors: "In the camps for example, […] they say negative things, there are obvious problems these people have experienced, so the conversations always turn into the negative" (age 30-34).

Within refugee housing facilities, stress-inducing conversations and gossip about the asylum process can be the cause of a psychologically damaging atmosphere: "[…] in the camp […], people were talking about the

trial and who got rejected or accepted! It was so stressful to witness all of this […]" (45-49M). Additionally, refugees appear to experience highly dysfunctional social environments due to crowding in these large, temporary housing facilities: "We were in mass accommodation for a year and six months, meaning 70 people in a gym – the conditions were terrible. Police were there every day [...]. There were drugs, fights between residents, everything" (age 30-34).

Another potential threat to social cohesion, and thus, a threat to social support within refugee communities appears to be mistrust and suspicion of others' intentions and grounds for seeking asylum, which often arises out of comparisons: "There are people I know very well who had no problems in [country of origin] and were nevertheless granted asylum. […] They just stay at home and get social benefits, while [we] try with all our strength to achieve something […] There has been confusion between those who deserve asylum and those who do not deserve it" (age 30-34). These statements often arise in the context of a participant reasoning that their efforts should be but are not rewarded with greater security than less engaged refugees receive: "The migrants who only eat and sleep, they could be treated differently" (18-24M). Frustration about the perceived lack of influence over one's fate may play into these perceptions.

Another participant (30-34M) who was "shocked" that their application for refugee status was rejected even considers some whose applications were accepted but "who don't deserve asylum" as a potential threat, as "dormant cells of the regime" who "carry news and reports about refugees living in Germany to the [country of origin] regime." This transfer of the suspicion bred by political persecution in the country of origin to German refugee communities was framed as an obstacle to engaging within these communities by another participant: "Until this moment, I still check around me every time I speak to see if anyone has heard or not. Sometimes when I attend a lecture about Syria, I get the feeling that someone is monitoring me" (age 18-24). Overall, these striking instances of mistrust and comparison, while not connected to mental health directly by our participants, may contribute to feelings of rejection and isolation.

Finally, several clashes arise within the refugee community as a result of behavioral adaptation processes that cause distress. An LGBT participant (age 30-34) who feels free to express their identity in Germany experiences distressing bullying in a refugee housing facility. Several of our female participants reported feeling stressed by clashes between their lifestyles in Germany and certain community members' values: "I [live] alone. I get a lot of criticism because of that from [my] community, […] these criticisms put a lot of pressure on me" (18-24F). Some older participants reported feeling distressed by the lack of cultural cohesion amongst co-nationals in Germany. For example, one participant (50-55F) said that seeing young people from her country of origin "considering [themselves] German" and "not greeting her" in German class affects her ability to learn the language: "If I am not comfortable, I cannot learn."

These examples show that stress from pre- and post-migration adversities may have an indirect deleterious effect on mental health by eroding certain sources of social support. As a consequence of these multiple disconnections from Germans and co-nationals and fellow refugees alike, one participant feels left without a home: "I am distant from [both]. I have become very isolated" (25-29F).

3. Discussion

Our study identified five themes capturing the manifold links between mental health struggles and integration processes as prioritized by members of the refugee community in Germany themselves. The scope and content of our study provide a comprehensive view, touching on all domains and facets of integration that were important to the participants. It is of note that all of our themes were manifest among participants from different age groups, genders, cultural backgrounds, and from three different German cities.

Our first theme addresses how lasting distress from past adverse experiences as well as ongoing worries about those left behind in the homeland can seriously impede refugees' ability to pursue activities key to integration. Specifically, several participants expressed a sense of being hindered by a "head full of knots", a shortage of "brain capacity" or "being stuck", "unable to overcome the grief", "obsessed" with checking on those left behind and "unable to do" things like learning a new language or "unable to do anything" at all. While policy analyses have noted the potential deleterious effects of mental health problems from adverse experiences on integration in their considerations (e.g. Degler et al., 2017) and some quantitative studies have found these correlations (Schick et al., 2016), our participants' utterances add personal accounts of these effects. One participant's demand for psychotherapy as a prerequisite for integration shows that some refugees interpret their own situations as ones of functional impairment hindering successful integration.

The second theme addresses how prolonged uncertainty in the asylum process and even afterward, when statuses are still limited to a few years at a time, has caused many of our participants substantial distress. They reported fear, anxiety, fatigue, and feelings of being at the mercy of a process they cannot influence – absence of control being a potential primary source of post-migration stress among refugees (Miller & Rasmussen, 2017). These experiential reports add details to our understanding of the association between legal status insecurity and refugee mental well-being (Laban et al., 2004). Our participants also described that the burden of this uncertainty, like past adverse experiences, can lead to deactivation and that the threat of being sent away erodes motivation to participate and sense of belonging. It appears that legal status insecurity elicits feelings of being rejected or not valued by the host society and doubts about whether any steps forward in host society are worthwhile.

Our third theme includes accounts from participants who suffer from feeling stuck and thwarted in various ways in their attempts at "starting a new life", especially on the level of joining the labor market in a job appropriate to their background or taking preparatory steps like completing language courses. Unsurprisingly, those who had made substantial progress in their education or in their career before flight and are not close to the end of their careers were most anxious about finding meaningful and suitable activities. They reported experiencing "depression" because their efforts to advance their lives are perceived as fruitless. The loss of direction in life can be "tiring", and some participants have felt a burdensome lack of direction throughout their entire flight and post-flight life. Feelings of loss of agency and status and of not being valued also plague many of our participants.

The involuntary inactivity that follows from struggling to start life was described by participants as threatening to their mental health. They said it "kills" psychologically, brings on "unbearable meaninglessness" and feelings of no longer "being important" and "life just passing by," which mix with shame over receiving social benefits. Like male interviewees in a refugee camp study in Turkey (Cantekin, 2019), who reported feeling "bored and offended" because of not being able to work, some of our male participants, in particular, feel forced into an unfamiliar and pride-eroding situation. In line with another German interview study, we found that the conditions in refugee housing facilities are often described as contributing to inactivity (Gürer, 2019). These feelings of powerlessness, meaninglessness, lack of control over the future and passivity, as well as their mental health ramifications, have been described previously, for example in a study titled "A Life in Waiting" (Bjertrup et al., 2018) on refugees stuck in transit in Greece. It is striking that many of our participants, who have been living in a country they intend to stay in for at least several years, still feel stuck in waiting. Previous explorations of the role of active participation in fostering self-esteem, self-worth, a sense of purpose, and an alleviation of mental health problems among refugees (e.g. Wood et al., 2019) complement our findings in this theme.

The fourth theme presents the psychological toll of feeling overwhelmed by fundamental tasks in the integration process, namely, language learning and bureaucratic processes. Language learning struggles come with "psychological problems" like "pressure", "feelings of punishment", and "estrangement", especially for those with pre-existing mental health problems and those with limited educational backgrounds, a challenge that has been previously addressed (Elmeroth, 2003; Li & Sah, 2019). While refugees' struggle with Germany's bureaucracy has been reported elsewhere (Pearlman, 2017), the psychological toll of bureaucratic hurdles on refugees appears to be rarely discussed in the literature. However, another German interview study also found that the lack of knowledge about processes and unpredictable or unclear administrative demands result in helplessness and loss of self-esteem (Gürer, 2019). Overall, female participants expressed a sense of feeling overwhelmed more often than male participants, whose stress about bureaucratic processes tended to manifest in anger about perceived mistreatment and restrictions.

Finally, in the fifth theme, we identified several forms of social disconnection that were linked to mental distress by our participants explicitly or interpreted by us as threatening to well-being under the assumption that social support and social embeddedness are crucial to it (Gottlieb, 1981). Experiences of xenophobia and racism were reported by most participants, consistent with findings by the German Federal Anti-Discrimination Agency (2016). The link between experiences of xenophobia and racism and refugee mental health has been previously evidenced in the literature (e.g. Ziersch et al., 2020). While many of our participants only felt somewhat impacted, others reported strong feelings of rejection and not belonging, loss of dignity, sometimes fear, and the urge to withdraw themselves socially and give up on integration. Our interviewees were also aware of and distressed by the rise of anti-immigrant sentiments in Germany and described feeling instrumentalized in political debates in a way that harms their relationship to host society communities.

Beyond rejection, our participants described experiencing a clash between Germany's forms of togetherness, which they see as "cold", "distant," or even absent, and the close-knit communities they come from. Some participants reflected on this as the clash between collectivist and individualist cultures (Hofstede et al., 2010). Several reported a lack of social support in the absence of their familiar social environment and feelings of pressure or exhaustion from living without their social safety net. While the impact of missing social support on refugee mental health has been discussed (e.g. Bogic et al., 2015), our results suggest that it would be interesting to explore further whether there are certain forms of social support, not just social support per se, that are missing. In the early stages after arrival, complete isolation from the outside world in reception centers is a major threat to well-being, as others have reported (e.g. Gürer, 2019). Our participants offered striking warnings about the potential long-term harms of isolation and restrictive, stressful, even "inhumane" living environments at a time of severe vulnerability.

Our participants also reported rifts with fellow refugees and other co-nationals living in Germany. These represent threats to integration when integration is seen as consisting of both bridges between migrant and non-migrant communities and bonds within migrant communities (Putnam, 2000). These conflicts appear to stem in part from flight and migration-related mental health problems, presenting another instance of mental health influencing integration. Our participants reported pervasive negativity among refugee communities because members of the community are "not psychologically stable." Pervasive stress and talk about legal status matters, including unfavorable comparisons with those "who don't deserve asylum," further damage social cohesion. While migration's effects on social cohesion, in general, have been discussed in the literature (e.g. Daley, 2009), social cohesion within refugee communities have rarely been addressed. One existing study on refugee activism found that legal status hierarchies cause rifts in refugee movements (Odugbesan & Schwiertz, 2018). Some individuals also experience stress within their community due to the ways in which they break with expectations in their new environment, a form of acculturation stress that has been described in the migration literature (Habib, 2018). We argue that these erosions of solidarity pose a threat to mental health as well.

In reflecting on our results, it becomes clear that there is ample potential for interconnections between the mechanisms described within different themes. One form of connection between the themes emerges from the bidirectionality of effects. If mental health problems and feelings of uncertainty, rejection, or frustration can impede integration, and reduced progress with integration can cause or exacerbate mental health problems, then potential for vicious cycles is evident. Secondly, the dynamics described in our themes could multiply one another because of the close connection between domains of integration, for example, between labor market integration, social networks, and language (Landesmann & Leitner, 2019).

3.1. Implications for Concepts and Policymaking

Our study supports Ager & Strang's (2008) understanding of health as a "means and measure" of integration in the sense that it is both "an important resource for active engagement in a new society" and an outcome of successful integration policy. However, Ager & Strang limit their understanding of health as an outcome of successful integration policy to demanding the provision of adequate healthcare as a part of integration measures. Our analysis supports health as an indicator of successful integration in a much broader sense: various domains of integration and their interplay have the potential to strengthen or erode refugee mental health and well-being. The close relationship between living conditions and mental health is not unique to refugees, and neither is the resulting public health imperative of providing living circumstances that foster mental health (e.g. Saraceno, 2004; Silva et al., 2016). The WHO's "Health in All Policies" approach (WHO, 2014) encapsulates this demand. As others have previously argued, however, "Health in All Policies" is particularly relevant in the migrant and refugee context (Ingleby, 2009; Juárez et al., 2019). In a population that faces uniquely severe threats to well-being, "mental health" should not be conceived and treated in the medicalizing, individualizing sense, but as a direct distress response to adverse circumstances (Watters, 2001; Marlowe, 2009). The term "refugee mental health" thus represents mental health as inextricably linked to the circumstances faced by this population pre-, peri-, and post-migration (Zipfel et al., 2019), both as a direct outcome of adequate conditions and as an important resource for integration.

It thus follows that integration policy is also health policy and vice versa. In Germany, refugee mental health care could be improved by ensuring immediate full access (Chiarenza et al., 2019), more screenings and checkpoints in e.g. refugee housing facilities and job centers, as suggested by one of our participants, and the development of lower threshold psychosocial interventions and community-based approaches as a way of

meeting demand and connecting mental health needs to broader needs (Miller 1999; Silove et al., 2017; Böge et al., 2019).

On the integration policy side, our study demonstrates the need for quick but high-quality, reliable asylum procedures (Hänsel et al., 2019), and the need to reconsider whether the legal status hierarchy is justifiable given its deleterious impacts (Kiziak et al., 2019). Ensuring immediate complete access to institutions and opportunities such as permission to stay for full vocational training to all new arrivals could be beneficial in myriad ways (Degler et al., 2017), if not for long-term integration, then for the sake of international development (Kiziak et al., 2019). The introduction of professional mentoring programs, such as those under development in Austria, Norway, and Switzerland (Degler et al., 2017), and easing access to the labor market by replacing certificates with skills tests and opportunities to learn on the job (Ekren, 2018) could promote participation. Housing conditions need to be compatible with an active life (Ekren, 2018). The diversification of integration routes is also important: for example, the diversification of language courses according to background and goals (Degler et al., 2017). Further to this, a streamlining, shortening, and simplification of laws and processes is needed (Ekren, 2018), both to benefit refugees lost in a bureaucratic jungle and for organizations working with them (Kiziak et al., 2019). Finally, the facilitation of community projects that are easy to access has the potential to address multiple obstacles that our participants describe and simultaneously foster social connection and cohesion (Miller, 1999; Mahoney & Siyambalapitiya, 2017).

3.2. Limitations

A limitation of our study is a potential selection bias in participant recruitment. While we achieved our goal of recruiting some participants who are hard to reach, such as older and illiterate refugees, there are still undoubtedly self-selectivity mechanisms involved. All participants were able to follow through with an interview appointment, and they were willing to open up. They might have been particularly keen to voice their perception of what is not working in their efforts of integration. It is also our a priori focus on challenges and problems in the present study that skews the overall impression of refugees' experiences to the negative – a further limitation.
Furthermore, it was not the aim of this study to diagnose mental health problems. Thus, the instances of poor mental health identified cover a broad range. It is a strength of our research that we were able to offer participants interviews in their preferred language and with culturally competent interviewers. However, despite a quality check, translated transcripts may not be linguistically precise and do not reflect subtleties in tone.

3.3. Conclusion

This study examines the complex and intertwined relationship between mental health and integration for a diverse sample of recently-arrived refugee adults in three different cities in Germany. Our findings shed light on various ways in which, on the one hand, poor mental health negatively impacts the ability to pursue integration, and, on the other hand, difficulties integrating within different domains contribute to mental health problems. This study has policy implications for stakeholders interested in integrating refugee populations across Germany, including the need to ensure mental health service provision, improve the speed and quality of asylum-seeking process and reevaluate the legal status hierarchy, provide integration and language courses that are sensitive to individual differences, including mental health status, reduce bureaucratic demands, improve housing conditions, increase awareness regarding the impact of discrimination from the host community on the integration of incoming populations, and support initiatives that combat isolation and disconnection. Innovative solutions to challenges identified by members of the refugee community in Germany stand to simultaneously benefit mental health and integration outcomes.

Ethics Statement

This study was approved by the Ethics Commission of the Charité–Universitätsmedizin Berlin (approval no: EA1/120/18). Participants gave their informed verbal and written consent. Participants were informed that they could withdraw from the study at any point. An information sheet on mental health care was made available to participants who inquired about care options.

Conflicts of Interest

The authors declare that the research was conducted in the absence of any commercial or financial relationships that could be construed as a potential conflict of interest.

Author Contributions

LW, TMTT, EH, and MB conceived of the study. LW developed the mental health part of topic guide. LW, DR, JA, and further collaborators collected the data. LW and JA coded the transcripts. LW performed the thematic analysis with feedback and input from JA. LW wrote the manuscript. DR gave feedback and input on multiple drafts of the manuscript. UF, TMTT, EH, MB critically reviewed and made edits to the manuscript.

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CHAPTER 6: STUDY IV

A Qualitative Study on Resilience in Adult Refugees in Germany

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A qualitative study on resilience in adult refugees in Germany

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Abstract

Background: Because refugees face significant adversities before, during, and after resettlement, resilience is of central importance to this population. However, strengths-based research on post-migration refugee experiences is sparse.

Methods: We conducted semi-structured interviews with 54 adult refugee participants who arrived in Germany between 2013 and 2018 in their preferred language. We analyzed different aspects of resilience in these interviews using thematic analysis.

Results: Nine themes were identified. Four themes manifest resilience in different ways and encompass cognitive as well as behavioral strategies for facing adversity, self-ascriptions of resilience as a personal trait or lasting characteristic, and the role of volunteering, work, and activism for refugee causes. Five themes capture factors that facilitate resilience: social support, experiencing migration as an opportunity generally and for women in particular, being a parent, and being young.

Conclusions: This study adds to a growing body of knowledge about resilience among adult refugees. It may support clinicians working with refugees by making them aware of specific manifestations of resilience and factors promoting positive adaptation specific to this client group. It also contributes to a more strengths-based view on refugee mental health and processes of integration.

Keywords: Resilience, Refugees, Asylum-seekers, refugee mental health, Integration

Introduction

Refugees and asylum seekers (henceforth referred to as "refugees") face a range of adversities prior to, during, and after migration. Following exposure to various types of violence, loss, and life-threatening circumstances in their country of origin and during flight, refugees experience a multitude of challenges in receiving countries. These include protracted periods of uncertainty regarding prospects of staying in the receiving country, struggles with learning a new language and joining the labor market, stretches of involuntary inactivity and boredom, social isolation and discrimination [1].

Perhaps not surprisingly, the focus of research on mental health among refugees has predominantly been on these adversities' negative psychological sequelae, including depression, anxiety, and post-traumatic stress disorders. While mental health struggles are prevalent among refugees, it is also the case that a substantial proportion of this population does not appear to develop these psychological disorders [2] and that many find ways to rebuild and thrive [3]. In fact, it is plausible that self-selection mechanisms are at work whereby individuals with particular strengths and resources are more likely to risk flight and become refugees in the first place (e.g. positive selection on the level of education among Syrian and Iraqi refugees in Germany, [4]). The need for research and clinical practice to incorporate a strengths- rather than deficits-based view on refugee experiences in

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order to reflect this reality and avoid pathologization has been increasingly recognized [5–9]. Strengths-based views, both in clinical practice (e.g. [10]) and in academic research (e.g. [11]), essentially revolve around the key concept of resilience and have the ultimate aim of promoting resilience.

In line with a seminal work from developmental psychology, we consider resilience to be the "process of, capacity for, or outcome of successful adaptation despite challenging or threatening circumstances" ([12], p. 426). "Successful adaptation" or "positive adaption", as it is more commonly called, encompasses mental health and well-being as well as functioning [13]. Depending on the nature and severity of the adversity, different levels of mental well-being and functioning may constitute positive adaptation [14, 15]. A further concept closely related to resilience is coping, defined as cognitive or behavioral efforts to manage external or internal stressors ([16], p. 141, cited in [17]). We follow Rice and Liu [17] in considering coping mechanisms to be part of the process of adaptation to adversity. Additionally, factors that promote successful adaptation, such as an individual's characteristics and resources, are of particular interest in the study of resilience [14, 15, 18].

Importantly, this is a psychological perspective on resilience, as opposed to one that also addresses resilience on a social environment level (e.g. [19]). Ungar et al. [19], for example, include within their understanding of resilience "not only an individual's capacity to overcome adversity, but the capacity of the individual's environment to provide access to health-enhancing resources" (pg. 288). Without any intention to de-politicize the topic of refugee well-being [20], the present study focuses on psychological resilience in order to inform clinical practice and our understanding at an individual psychological level.

Research on psychological resilience within refugee experiences has the potential to be of great value to clinicians working with this population, making them aware of potential sources of strength specific to this client group [6, 7]. Because the process of integration produces many challenges and also requires high levels of functioning [21], resilience is also of paramount importance to integration. However, relatively few studies have focused on resilience among refugees – particularly adult refugees [9], and fewer still take a qualitative approach. Qualitative approaches are especially well-suited for uncovering new factors related to understudied phenomena and understanding lived experience in greater detail [22–24].

Existing qualitative research addressing resilience or coping among adult refugees has repeatedly identified social support as vital for the achievement and maintenance of well-being in the face of adversity [11, 25–32]. Cognitive strategies such as positive attitudes and beliefs, appraisals and self-talk centering around affirmations of inner strength, agency, hope, and optimism are another major resilience-related aspect highlighted across studies [11, 26, 28, 29, 32, 33]. A third recurring theme linked to resilience in refugee samples is religion and spirituality [25, 26, 28, 30, 32]. These studies have provided valuable insights into resilience among refugees, demonstrating the potential of qualitative research for this growing research area. It is of note, however, that most of these studies cover refugees' experiences more broadly and consequently feature rather brief explorations of factors related to resilience (e.g. [28, 29, 31–33]; an exception, e.g.: [11]). Relatively few qualitative studies focusing on resilience in adult refugees have been conducted in Germany, one of the major receiving countries for refugees in recent years [34]. Between 2013 and 2018, Germany's refugee population increased by 1.2 million – mostly from Syria, Afghanistan, Iraq, Iran, Pakistan, Eritrea, Somalia, and Nigeria [3].

The present study takes an in-depth look at different aspects of psychological resilience in 54 adult refugees who arrived in Germany between 2013 and 2018 based on the analysis of semi-structured, qualitative interviews. More specifically, the study addresses ways in which the process of, capacity for, and the outcome of successful adaptation to adversity manifest, as well as factors facilitating successful adaptation.

Methods

Participants and sampling

Our sample comprised 54 adult participants who arrived in Germany between 2013 and 2018 through forced migration (self-reported). Most participants arrived in 2015, the year that saw the largest number of new arrivals to Germany by far [3]. Participants resided in Berlin, Berlin; Leipzig, Saxony; or the Duisburg area – mainly the city Mülheim an der Ruhr (two interviewees from Duisburg, one from Dinslaken), North Rhine-Westphalia, Germany, at the time of the interviews. We recruited from three different areas in case we might find significant particularities in experiences based on place of residence. Only four interviews were conducted in Leipzig due to logistical constraints. Recruitment strategies included outreach on social media and through refugee organizations (Additional file 1 includes study flyer text) as well as snowballing. We increased our selectivity concerning the age, gender, education background, and country of origin of participants in the recruitment process to achieve greater variation. In particular, as recruitment progressed, we increased our efforts to recruit participants from Afghanistan, female participants, older participants, and participants with limited educational backgrounds. Recruitment continued until we reached our sampling goals:

diversity along the demographic factors mentioned, as well as approximate gender parity, substantial numbers of participants from both of the main countries of origin – Syria and Afghanistan.

Topic guide

The topic guide (included in the Additional file 1) was designed following guidelines on good practice in semi-structured interviews (e.g. [35, 36]) and input from our Arabic and Farsi/Dari native language interviewers, one of whom is a member of the exact community under study and two others who are first and second-generation migrants from countries represented in our sample. It encompassed three sections: first, a personal background section; second, a section on cultural experiences; and third, a section on emotions, well-being and mental health. We trialed a partial version of the topic guide in eight pilot interviews not used in the present study. Based on the first complete interviews included in this study, a few questions were added to the topic guide because interviews turned out shorter than expected, allowing for further questions. Also, one participant among the first struggled to open up about their personal situation, prompting us to add more general questions (e.g. "Do you think refugees in general face mental health challenges/ emotional stress? Why yes/no?"). Please see the topic guide in the Additional file 1 for questions flagged as "added after first interviews."

Data collection

Data collection took place between December 2018 and September 2019 in Berlin, Leipzig, and Mülheim an der Ruhr. Interviews were conducted in person in locations chosen by participants (usually cafés), semi-structured, on a single occasion, typically one-on-one (four interviews with translator and six with a family member of participants present, with one interview of two brothers analyzed as two separate interviews because both brothers answered our questions individually), and audio-recorded in all but one case. In this one case, the interviewer took notes which we used as data on topics raised but were not able to include details from. Durations ranged from approximately 30 to 90 min. Participants were not financially compensated for their participation; refreshments were paid for.

Participants chose their preferred interview language in advance (22 Arabic-, 10 Farsi/Dari-, 19 German-, and 3 English-language interviews) and matched with one of our seven interviewers based on this preference, as well as on the basis of interviewer availability. In the final phase of the study, we were only able to interview individuals able to speak German or English due to study logistics; this affected 10 interviews. Interviewers, who were all provided with interview technique guides, including ethics instructions, and a brief on study aims, included: a female Syrian-American Arabic-speaker (anthropologist), a male Syrian Arabic-speaker (sociologist), a male Iranian Farsi-speaker (professional psychiatric translator), and four German German- and English-speaking interviewers (psychologists and sociologists, including LW and JA).

The interviewers and external professional translators transcribed and translated the voice recordings into English or German. The quality of these translations was checked and confirmed by other professional translators based on a random selection of one interview from each translator.

Data analysis

We analyzed our data using the thematic analysis approach presented in Braun and Clarke's [37] seminal methodological framework. Following data immersion in the form of reading all transcripts, LW and JA independently applied, discussed, and amended open but detailed codes line-by-line to the well-being section of the transcripts as well as to segments related to well-being and adaptation in the first sections using MAXQDA. We also created an overview table summarizing participants' stories, including summarizing observations on their mental health, well-being, and adaptation to their new surroundings in order to make it easier to maintain a complete within-case understanding of interview contents throughout the analysis process [38]. Next, we analyzed codes and corresponding interview passages that were linked, broadly, to "overcoming or facing adversities", including passages about facing hardships, about positive well-being and functioning, and other displays of strength, arriving at themes in an iterative process of categorization, discussion, and categorization. Within this process, we also noted associations between participants' characteristics and facing adversity that we observed. We created code maps using MAXQDA's visualization tools to assist this analysis process.

Beyond setting a focus on overcoming adversities, we approached the data largely inductively. We did not formulate specific resilience-related categories based on the literature a priori, although our familiarity with the concepts "coping strategies" and "social support" played into our thematic categorizations early on. Eventually, the theoretical literature on resilience guided our understanding of how the themes we identified figured into resilience. Due to the succinctness of the definition and its openness with regard to whether resilience is a process, a capacity, or an outcome, we specified our concept of resilience as "process of, capacity for, or outcome of successful adaptation despite challenging or threatening circumstances" ([12], p. 426). We identified some of our themes as manifesting resilience in these

different forms. We identified the rest of our themes as representing factors that facilitate resilience understood in this way.

Results

Table 1 shows the sample characteristics.

Table 2 shows the nine themes we identified, specific points within each, as well as the two broad categories into which we organized themes based on their function within resilience. The themes *Cognitive coping strategies, Behavioral coping strategies, Self-ascribed resilience as an enduring capacity,* and *Volunteering, activism, and work for refugee causes* all capture ways in which participants manifest resilience as the "process of, capacity for, or outcome of successful adaptation despite challenging or threatening circumstances" ([12], p. 426). The themes *Social support, Experiencing migration as an opportunity for self-expression, belonging, and personal development, Experiencing migration as an opportunity for women, Being a parent,* and *Being young* all cover factors that appear to facilitate successful adaptation. Within overarching categories, themes are in no particular order except that *Cognitive and Behavioral coping strategies* and *Social support,* the first themes in the two categories, were the most globally represented among our participants. The sections below include interview quotations with the individuals quoted represented as "P" for "participant" and a participant number, e.g. "P1".

Manifestations of process of, capacity for, and outcome of successful adaptation

Cognitive coping strategies

Our participants exhibited several different cognitive strategies for overcoming or adaptively reappraising the adversities they face. These strategies manifest aspects of the process of as well as the capacity for successful adaptation. They include acceptance, focus on present or future, belief in an internal locus of control, favorable comparisons between life in Germany and life in the country of origin, comparisons to peers, and growth through adversity mindset.

Table 1 Sample Characteristics

Gender	**Female**	**Male**					
	24	30					
Age	**18–24**	**25–29**	**30–34**	**35–39**	**40–44**	**45–49**	**50–55**
	11	13	12	5	5	3	5
Country of origin	**Syria**	**Afghanistan; Afghanistan/Iran**	**Iran**	**Pakistan**	**Palestine**	**Libya**	**Sudan**
	36	9	4	2	1	1	1
Level of Education	**No secondary education**	**Secondary education**	**Started university in the country of origin**	**University-educated**	**Young and currently in secondary education**	**Unknown**	
	5	3	9	28	3	6	
Residence in Germany	**Berlin, Berlin**	**Leipzig, Saxony**	**Mülheim an der Ruhr, Duisburg, or Dinslaken, North Rhine-Westphalia**				
	39	4	11				
Year of arrival in Germany	**2013**	**2014**	**2015**	**2016**	**2017**	**2018**	
	1	1	34	11	6	1	
Legal status	**Refugee or asylum status**	**Subsidiary protection or deportation ban**	**Unresolved**	**Humanitarian program**	**Family reunification**	**Visa sponsorship**	**Unknown**
	25	10	11	1	3	1	3
Housing	**Private**	**Housing facility**	**Unknown**				
	30	15	9				
Occupation	**Gainfully employed**	**In education**	**None reported**				
	13	11	30				

Gender, age, country of origin, residence in Germany, year of arrival in Germany, legal status, and housing situation were directly ascertained (although housing situation and legal status were sometimes not entirely clear or unclear). Level of education and occupation were interpreted based on interview content. The "Unresolved" legal status category includes those waiting for the outcome of their appeal

Table 2 Thematic Map

Themes' Function within Resilience	Themes	Theme Contents
Manifestations of process of, capacity for, and outcome of successful adaptation	**Cognitive coping strategies**	• Acceptance • Focus on the present or future • Active forgetting • Focus on daily tasks • Belief in an internal locus of control • Favorable comparisons between life in Germany and life in the country of origin • Comparisons to peers • Growth through adversity mindset
	Behavioral coping strategies	• Work as distraction • Withdrawal from stressors • Connecting to cultural roots or faith • Processing through creative outlets • Seeking mental health care
	Self-ascribed resilience as an enduring capacity	• Character traits • Learned, life-long positive attitude • Resilience due to good past
	Volunteering, activism, and work for refugee causes	• Being active for refugee causes as a manifestation of psychological and other resources, sense of one's rights • Giving meaning to hardships, distance from hardships, agency and identity, sense of community • Using strengths to be a voice for peers • Activism in the country of origin turned activism in the host country; proactive individuals
Factors facilitating successful adaptation	**Social support**	• Acceptance, feeling more at ease, sense of belonging, concrete support • Infrastructure for social support (tandems, meet-ups) can be vital • Language teachers as important contacts • Family
	Experiencing migration as an opportunity for self-expression, belonging, and personal development	• Living more in keeping with values post-migration • Enjoying greater freedom • Opportunity for learning and personal development • Having wanted to migrate • Appreciation of multiculturalism and diversity
	Experiencing migration as an opportunity for women	• Opportunities for women beyond motherhood • Freedom to choose and pursue education and career • Feelings of youthfulness due to opportunities • Changes in the marital relationship
	Being a parent	• Children's opportunities • Remaining hopeful for children • Reducing stress for children • Meaning from children • Children as a new beginning
	Being young	• Not such severe loss of status • Friends at the educational facility as key to well-being • Clear metrics of success within an educational facility • Educational facilities as suitable contexts for integration

An **acceptance** of circumstances and challenges – including the whole situation of forced migration (quote 1 below), uncertainty about the future (quote 2), and slow progress in the integration process (quote 3) – allows some participants to focus on building their lives in Germany. Sometimes this acceptance appears to be the outcome of a long phase of disappointment over how much more difficult post-flight life is than previously expected.

[1] "*These are our circumstances. We are in this situation. We have to accept the situation and find a way to deal with this new life. Otherwise, we will become nothing.*" (P51).

[2] *"I don't worry at all about whether I will be allowed to stay in Germany – that was only at the beginning. I think if things were meant to happen, then they will happen."* (P53).
[3] *"In Germany, we have a normal kind of stress as newcomers in the process of migration. You have to go this path […]. It's a natural stress that you have to accept."* (P38).

Another form of adaptive thinking in our participants is a **focus on the present or the future**. It often entails an acceptance of past experiences and losses, as is made explicit in the first quote below. Hope for the future, expressed as confidence in being able to "build something" (quote 1), and curiosity regarding things to come (quote 2) are further potential facets of this attitude.

[1] *"I am building something here. Even though it's little steps, I prefer that compared to looking back at what I've lost and crying over it."* (P49).
[2] *"I'm someone who wants to experience a lot of new things. I want to see new places […], get to know new people and cultures, languages, I just love that. I think that's where my strength comes from."* (P50).

In addition to focusing on the present or the future, some of our participants make an effort to **actively forget past adverse experiences** to protect their mental health. Implementing this strategy is an ongoing challenge. The first quote below shows how intentional some are about actively forgetting. The second quote is from a participant who says he learned to suppress negative experiences as a form of adaptation whilst caring for the wounded during war.

[1] *"I want to be honest about my experiences [in this interview]. At the same time, I cannot explain everything in detail because I am trying to forget things that have happened to me in order to lead a new life."* (P10).
[2] *"[…] And with time, I changed. I don't think about the bad things that happen to me [anymore]."* (P46).

Some employ a **focus on daily tasks** as a means to confront paralyzing feelings of uncertainty and doubt. While many participants described feeling demotivated due to not knowing whether their efforts will bear fruit, the first quoted below frames his daily activities as "duties" to avoid a need for confidence in future prospects. Another participant repeatedly mentioned the importance of using a planner and filling it with appointments, saying that staying busy keeps him content and begets motivation (quote 2).

[1] *"I have a duty to do. I am registered as a refugee; they told me I have to go to course, then I go to course, I learn German, I finish my German and then I find a job. I don't think about what's gonna come next. I stop worrying about whether they're gonna send me, not send me back […]. I just pursue my daily life."* (P48).
[2] *"When we started the language courses, we got motivated and then kept posted with events going on with Facebook's help, then I started using a calendar just like Germans and writing down my appointments […] and all that gives you a motivation because you always have a new thing to do […], I like to keep busy."* (P12).

Some participants invoke an **internal locus of control** and report trying – albeit with difficulties – to focus on their personal sphere of influence to try to self-activate (quotes 1–2 below). These statements stand in juxtaposition to many expressions of feeling at the mercy of circumstances and hindered by various restrictions in our interviews. In an utterance directly addressing the struggle to secure a sense of agency in the face of the overwhelming external forces refugees experience, one participant distinguishes areas under external from areas under internal control and focuses on the latter (quote 2).

[1] *"[…] you have to take charge of yourself. My energy comes from the fact that after three years, I will be asked what did you do in Germany. […] And the answer is more important to me than to them. Yeah, what did I do? I got the B2 certificate, I am doing a traineeship […]. This is something; it's good for me. […] You have to think about yourself."* (P48).
[2] *"It was not my choice to have been born in [country] and to be [trait], but it was my choice to be saved, and that's why I only think about having been saved."* (P38).

Participants reappraised their present struggles through **favorable comparisons between life in Germany and life in the country of origin** (quotes 1–3 below). A focus on the appreciation of personal safety is often central to this attitude. Some also frame their time in Germany as a unique opportunity to develop in ways not possible in the country of origin (quote 2). In contrast to the many participants who find contact with administrative bodies stressful or even demeaning, one participant makes comparisons to the country of origin to frame these interactions (quote 3).

[1] *"When encountering a bad situation here, one will always remember how bad it was in Syria. Here one will feel like heaven because the stressors in Syria and the psychological wars were horrible."* (P17).

[2] "*In my country, people are experiencing harsh living conditions, here [in Germany] life is good. I should use this chance - of me being here - so I can build something. There, in my country, we cannot build anything.*" (P37).
[3] "*I tell my Syrian friends when complaining, 'Please remember how we are treated in Syria then. compare that to here and you will see the difference'. Some feel annoyed by the Job center appointments, but why? […] [In] our country, [there is] bribery and corruption, so when I am treated with respect here, I feel happy to be here.*" (P27).

Our participants develop their own attitudes towards the challenges they face through **comparisons with their peers**. The first quote below shows how some remind themselves that they have it easier than their peers because of family support, their language skills, or their educational background. Quotes 2 and 3 expresses how some are motivated by hearing about the successes or struggles of others.

[1] "*For me, it's very important to understand what people are suffering from so I can appreciate how lucky I am.*" (P48).
[2] "*I was speaking to a friend who came by sea a month after me, he said that he got C1 degree in German language and at that moment I woke up! Like what was I doing with my time!*" (P19).
[3] "*It's like a fine line between you and giving up, as a refugee. You know many people give up. […] And that might happen to me, so how am I going to face it? By keeping on doing things.*" (P48).

Several participants exhibit a **growth through adversity mindset**, conceiving themselves as empowered by the hardships they have overcome (e.g. quotes 1–2 below). One participant contrasts his and his fellow Syrians' hardiness as a consequence of this growth with the overreactions to problems he observes among Germans (quote 2).

[1] "*The past that I had in Afghanistan, that is why I can now solve my own problems and do something about my worries and thoughts myself.*" (P1).
[2] "*[…] My flatmate, when he has a small problem, he thinks the whole day is ruined. We [Syrians] are always relaxed. Everything is ok. […] When we have a big problem, we laugh because we always had problems in Syria.*" (P30).

Behavioral coping strategies

We also identified behavioral strategies that manifest aspects of the process as well as the capacity for positive adaptation among our participants. These strategies include work as a distraction and source of meaning, withdrawal from stressors, connecting to cultural roots or faith, processing through creative outlets, and seeking mental health care.

Several participants described using **work** as a distraction from negative thoughts and problems (quotes 1–2 below). One participant also ascribed beneficial effects to the social pressure to regulate one's mood at work (quote 2). Work can also help participants cope with limbo by giving uncertain times some meaning (quote 3).

[1] "*Work was the best thing [to help cope with trauma] because I don't have time [to ruminate] and I don't remember things anymore. I am busy with other things.*" (P1).
[2] "*Now that I work, I cannot say I feel bad today – you should always smile; it impacts the climate at work for everyone.*" (P31).
[3] "*[Work makes me feel good] in that I think it means my life isn't just passing by for nothing. As I said, I've been waiting for four years to find out what will happen to me […]. So in that respect, I am relieved that I am doing something positive and not just sitting around, waiting to see what terrible things will come my way.*" (P5).

One participant copes with the pressure of integration, especially difficulties with language, by **withdrawing** (quotes 1–2 below). The negative flip-side of this strategy is that she feels she is avoidant and choosing not to face problems (quote 2). It appears that she is also withdrawing more and more, becoming reliant on this coping mechanism:

[1] "*I leave everything behind, […] stay home for like two days, then I can go back to something good to do. I have to take a break […].*" (P49).
[2] "*I stay in my shell. […] I might find a way to manage things later, but I don't want to think about them now. Kind of like escaping.*" (P49).

A few participants, such as the first quoted below, seek out environments that feel familiar and allow them to connect to **cultural roots or faith**. One participant spoke about how connecting to her culture, largely meaning her religion, inspired her to overcome her initial feelings of emptiness in Germany and gave her a sense of direction (quote 2). Another participant feels consoled by his faith (quote 3):

[1] "*Sometimes I go to [a certain park] because it reminds me of my hometown. Sometimes I go to mosques, I feel at ease there.*" (P39).

[2] "*The emptiness at the beginning – what helped me get rid of it is my culture. […] I have a culture that tells me to fill [the emptiness] with useful things and not with useless things. […] [My culture] gave me motivation, and the impression that it is a beginning for me and not an end.*" (P37).
[3] "*Allah consoles me when something terrible happens to me.*" (P33).

Processing troubling past experiences through creative formats can provide comfort, as the first quote below shows. The second participant quoted reported that this practice also helps him compartmentalize by having dedicated time to process the past.

[1] "*Drawing has become the most comforting thing for me, and the other thing is writing. I am writing now about the story of running away and my emigration.*" (P14).
[2] "*I write, I spend almost half of the day writing. […] When I'm writing, I'm in the past, and when I'm not writing, I'm in the present.*" (P53).

Finally, several of our participants have sought **mental health care** and other forms of counselling to deal with past and present stressors. Some of their reflections on seeking this type of support, captured in the second and third quotes below, show that overcoming the stigma surrounding mental health and mental health care is often part of this process:

[1] "*I actually also need help and have sought it. There's this person, not a teacher, but a social worker, who I used to talk to. Especially in my first year [in Germany], I saw here twice a week then.*" (P45).
[2] "*I didn't really tell my family [that I went to see her]. I don't think they would have thought it's a good idea, that it's not cool to seek help – what's wrong with her? […]*" (P45).
[3] "It's *still something shameful for people to talk about. Even my own mother would be ashamed to tell others that I take an antidepressant. Not me. […] I tell everybody that I've been suffering from the last seven years, for not knowing where to go, what to do and […] yeah I had visited a therapist. […] Actually, it's a selfish thing in a good way [to seek help for your mental health].*" (P48).

Self-ascribed resilience as an enduring capacity

Some of our participants experience their strength in facing adversities as a trait or lasting characteristic rooted in their personality (quote 1), upbringing (quote 2), or positive past life experiences (quote 3). These self-assessments manifest an enduring or repeated capacity for positive adaptation in the face of adversity.

[1] "*I am quiet and calm in general. Any situation I face doesn't just make me sit whimpering in the corner, I go the steps, so I don't get strong depression. I always get out of [bad] situations I enter. If I failed a language course, […] it's no problem for me to register again.*" (P42).
[2] "*I am calm and content, I would say. […]. [My mother] taught me always to be calm, always be happy. Always try to be satisfied with life no matter what is actually happening to you.*" (P46).
[3] "*I don't have a depression as many others here because I had a good past and that gives me something to hold on to.*" (P20).

Volunteering, activism, and work for refugee causes

Several of our participants volunteer or work for refugee causes, employing their own experiences to become helpers to and advocates for others in similar situations. These activities appear to be a part of the process of positive adaptation. Activism and volunteering promote feelings of connection, agency, meaning and identity within participants who face isolation, long phases of unemployment, and the loss of roles that defined them in their pre-migration lives (quotes 1–2). One participant attributes the ease with which he felt he was able to integrate to the social networks that emerged from a large refugee protest (quote 3). Translating insights from hardships into helping others or even into political demands may also give these hardships meaning and provide a sense of distance from problems (quote 4):

[1] "*Helping others also helps me – a lot! I feel like I am not alone, and while I can't find work, I can do something for society, for myself, my family, not just sit around.*" (P52).
[2] "*[Volunteering to teach] made me feel like when I was in Syria. I felt like I was regaining myself again since I'm a […] teacher and this is what I used to do for a living.*" (P3).
[3] "*I was very lucky to […] to have joined the refugee protest […]. The social structures that emerged in this time are still there. That means that it was very, very easy for me to integrate.*" (P53).
[4] "*So, the problems I have, now I have changed them into a vision of helping other people.*" (P34).

In many cases, volunteering, activism, and work for refugee causes also come across as manifesting the outcome of as well as the capacity for successful adaptation: many of the participants quoted here can help others

because they have overcome some of the issues they see others facing (quotes 1–3 below). They demonstrate a sense of their rights and the confidence to make demands (quote 1), as well as a sense of having mastered specific aspects of integration such as navigating intercultural differences (quote 2). Some aim to use their language skills and their expertise on refugees' needs to give voice to others (quote 3). Many of these participants conceive of themselves as communicators more generally, having understood problems and potential solutions and wishing to convey them to others in their community and to host country policymakers:

[1] *"I am trying to do something for my [housing facility] because there are people who cannot even help themselves - they are so scared […]. But I am not scared anymore, because I know that [the housing facility leadership] cannot do anything [to me]. […] If I can speak, I will speak. […] I will get a [private apartment] afterwards. But I think there are people who need my help right now."* (P34).

[2] *"I would like to explain the differences between Syria and Germany to the Syrians. I would like to give seminars to the students in Syria. Or help them get scholarships, so they have the chance to explore the world. I would like to do many things."* (P6).

[3] *"I would do a much better job with being a social worker and interpreter, to help those people who can't deliver their ideas. People who have the language block, that they want to express what is wrong with them."* (P48).

Some of our highly proactive and emotionally stable participants involved in refugee causes were activists in their countries of origin. In other words, some of these individuals appear to have a long history of confronting adversity with proactive – and often courageous – involvement. They manifest a particularly pronounced capacity for positive adaptation. One such participant became active immediately upon arrival and gained increasing influence:

"I arrived in Germany in [month, year], and in that [same] month, I organized a demonstration […]. The demands were related to basic life needs in Germany […]. On this basis, I started working with civil society and humanitarian organizations here in Germany. I also started the political work. […] The goal was to reach more realistic solutions and to make decisions with a stronger connection to people in life […]." (P8).

Factors facilitating successful adaptation

Social support

Social support and new social connections in the host country in general, were instrumental in improving many participants' mental health and helping them face challenges in Germany. Participants reported feeling a sense of acceptance (quote 1 below), security (quote 2), belonging (quotes 1 and 3), and being able to ward off isolation (quote 4) thanks to social connections, especially to Germans. They also benefit from very concrete support, e.g. with legal processes and finding housing. These experiences are in contrast with those of many participants who feel isolated and rejected in Germany.

[1] *"I have my own contacts now. […] They accepted me and I accepted them. I got used to it. The feeling of being a stranger was gone. I started to see many people who are like me here. That has helped to adapt better."* (P28).

[2] *"We are more relaxed now. Especially since having met people who help us in all situations."* (P32).

[3] *"I play football with these German friends and I don't feel like I'm the only Afghan there. We greet each other, eat together and play. It feels like a family."* (P10).

[4] *"Wherever I find gatherings for Germans or Syrian/Germans, I participate. I always put myself in the atmosphere, I don't get isolated because I fear isolation, it brings me depression." (P42).*

Many participants' experiences also show that infrastructure dedicated to providing social support for refugees can, indeed, play a vital part in promoting well-being and feelings of acceptance. Our participants mentioned language tandems (quote 1 below), connections to families hosting refugees in their home (quote 2), refugee-centered social projects and meet-up events (quotes 3 and 4) as providing support on many levels. These resources provide practical and psychological support, boost confidence, comfort, sense of one's rights, and motivation. Furthermore, language teachers (quote 5) are individual actors involved in the integration process who seem to be particularly impactful when they are supportive. They are the first Germans many refugees have sustained contact with and can provide a sense of familiarity and acceptance.

[1] *"One of the important things that happened to me when I first arrived in Germany: I had a language tandem. She helped me get to know the city a lot. She took me to the cinema. We are still in contact until today. She was the first German person to invite me into her house and introduce me to her kids. All of that has given me more confidence in myself."* (P6).

[2] *"A friend of mine lives with a German family […]. When I first arrived, they welcomed me and protected me. The first months were so complicated, with so many appointments – they were always*

there. When it was my birthday, they had a surprise for me. […] It was like being at home." (P23).

[3] "*There's a regular event that I attend. It takes place in a church. […] The groups are mixed [migrants and locals] and there's no difference between people. This improved my mood and pulled me out of my isolation. It improved my psychological problems.*" (P11).

[4] "*We go to women's associations and attend workshops. […] I feel that the events make us feel comfortable talking about what we want and what is needed and what we lack, and we find people who motivate us.*" (P22).

[5] "*When I first arrived, a teacher took care of me so that I was not alone. She did so much for me. That's why I am healthy now. They [two teachers] did everything for me. […]*" (P1).

Of course, having family members in Germany can be a major emotional resource (e.g. quote 1 below). Some of our participants (e.g. quote 2) also report leaning on their family members through long-distance communication.

[1] "*When I feel longing, I go to visit my family. It makes me feel better instantly*." (P6).

[2] "*What gives you strength?*" (interviewer) "*That I talk to [my mother] on the phone every day.*" (P46).

Experiencing migration as an opportunity for self-expression, belonging, and personal development

This theme identifies a factor facilitating successful adaptation based on a type our analyses revealed among our participants: those who a) are mentally well and appear to be integrating with relative ease and who b) also view migration as an opportunity for self-expression, belonging, and personal development. These participants were mainly highly educated men in their twenties and thirties. This attitude toward migration usually seemed to be a result of these individuals having felt unable to live in accordance with their values and identity in the country of origin. For example, one participant who comes across as remarkably well-adjusted was a persecuted oppositional activist in his country of origin. He suffered a loss of sense of belonging to his country and feels he can live more freely and more in accordance with his values in Germany:

"*Being in an internal exile is much worse than being in an external one,' this is hard to translate, but what I mean is that I felt more like a stranger in Sudan and had a yearning to leave and not the other way around.*" (P53).

Another remarkably energetic participant values in Germany the individual freedom he missed in his country of origin and expressed enthusiasm about his relocation. He also attributed the ease with which he feels he is integrating in part to having been more "open" regarding other cultures and values compared to his peers in Syria. Through resettlement, he feels he has gained greater clarity of opinions, framing migration as an opportunity for personal growth:

[1] "*It was an amazing opportunity in my life to have fled here. I was reborn here, but with memories. […] I've always had many opinions that I couldn't show in Syria. I want to experience a lot and this wasn't possible, and you always have to somehow – yes – lie. Things that I didn't even agree with, but somehow I'm supposed to say 'yes'. No. This time now is for me. I have the feeling that no one is watching me here. I am free.*" (P23).

[2] "*I am very open and I was already very open in Syria, but I think I've improved, my character has improved, in Germany.*" (P23).

Even participants who express ambivalent emotions since arriving in Germany, such as the woman quoted here, derive positivity from their newfound freedom of expression:

"*I have mood swings. Sometimes so motivated and other times a bit let down. […] In general, I feel my positive energy is much higher in Germany […] Sometimes, I feel so motivated. This place makes me feel that I exist. I can freely express my opinion.*" (P24).

Others who seem to be content and active in Germany express being drawn to Europe culturally, feeling they belong, and having wanted to emigrate independent of their flight reasons (quotes 1–3 below). One of these participants (quote 1) emphasized the importance of religious and sexual freedom throughout his interview. As a new member of a religious community which is a minority in his country of origin, he feels more comfortable with Germans than with co-nationals. Another participant (quotes 2–3) feels that human life is inadequately valued in his country of origin. He can engage in an open discourse with people from various backgrounds in Germany and even prefers more individualist norms around socializing (quote 3). This is in direct contrast to many participants who suffer from missing the close-knit social network from their countries of origin and find German society to be socially cold.

[1] "*My way of thinking is very Western. I feel like I belong here. I didn't go to school for long, but I've seen a lot of the world. I've been to many countries. That's why I think like a European.*" (P10).

[2] *"I am very separated emotionally [from Syria]. I always felt I was going to leave this country, in a way or another. Yeah, like in my young brain, I always wanted to leave, if not to Germany then to somewhere else, anywhere else."* (P48).
[3] *"For me, I was never a social person. So I really feel happy in Germany, the society fits my standards."* (P48).

An appreciation of the relatively greater diversity in Germany compared to their countries of origin is something many of the participants represented in this category – who, perhaps notably, all live in Berlin – share. In many of these cases, this is linked to having previous personal experiences of being an 'other' culturally or previous intercultural experiences. For example, a participant who has never lived where he is accepted as belonging ("I was born as a refugee. Being a refugee is nothing bad for me" (P30)) contrasts his own appreciation for diversity with others' resistance to it:

"Every person is [different] here. And that is beautiful. This dialogue between people here, I always learn something new. I really enjoy that. But many refugees don't like this because of homesickness and wanting their own culture, their own things, their own pyjamas." (P30).

Experiencing migration as an opportunity for women

While the above examples are interestingly mostly from very educated male participants in their twenties and thirties, a few of our very educated female participants in the same age range experience a gender-specific "coming into their own" in Germany. These participants mostly report mixed experiences in terms of their well-being in Germany, but they show a sense of elation at perceived newfound freedom from gender role restrictions.

One woman feels invigorated by a sense of opportunity for herself as a mother in her thirties in Germany and experiences a more emancipated relationship with her husband post-migration. She feels that she is among those within the refugee community who have "found themselves" by breaking from old customs that limited them:

[1] *"I feel I'm younger [in Germany]. I do not know why. You feel that they [in Syrian society] have determined your task of procreation and your task is limited to cooking and home. […] Your purpose in life ends in the early 30s. I look at the older people [here] who wear pink and dye their hair pink, even though they are old. They still have a love for life. I feel that I am at the beginning of my life, and I want to do many things. This is a thing that has changed."* (P14).
[2] *"My relationship with my husband changed. Now I can say 'no' without justification. […] [My husband] became quieter, more polite, and I feel that he has been adjusting to the atmosphere of the society here and the changes in his wife. Thank God!"* (P14).
[3] *"There are people who […] have no desire for rebellion or change, but there is a large group that felt that they found themselves here. Like they lost a connection and found it in a certain place. For me, yes."* (P14).

A woman who says she feels at home in Germany and has recovered her mental health after extremely harrowing experiences emphasized that she never felt comfortable in her country of origin because of her restrictions as a woman. After resettlement, she feels she can 'pursue her dreams' of studying and moving through the world independently:

[1] *"When I was much younger, I used to be outside all the time, but when I grew older, then it was the time that restriction starts - girls should not go outside and so on. […] So, it's not like here in Germany - you can do whatever you want. There are no restrictions, but in Pakistan, in my situation, I cannot remember anything that was good."* (P34).
[2] *"Do you sometimes feel torn between your home country and Germany?"* (interviewer) *"No. I feel like home here."* (P34).

Other female participants, such as the first two quoted below, take pride in having greater professional and educational freedom and newfound independence since resettling. The final quote below shows that a more symbolic freedom can also have an impact on well-being.

[1] *"What are my feelings? Maybe that I am proud of everything that I have been able to do here. […] Back home, it's not common or not positive for a woman to work as a waitress. […] And my dream as a child was really to become a waitress. And now I've fulfilled my dream."* (P51).
[2] *"Now […] I am allowed to do what I want and what I feel like. It was not like that in my family. I always had to ask whether I was allowed to do something. […] My mother chose my major in Damascus."* (P51) *"But now you chose?"* (interviewer) *"Yes."* (P51).
[3] *"Riding a bicycle is something I didn't do in Syria. When I ride it, I feel freedom and happiness. In*

Syria, it wasn't common for a girl to ride a bike. It really makes me feel happy." (P6).

Being a parent

Several participants who are parents presented a positive attitude toward their new lives in Germany that is based on their children doing well, as the quote below shows. The educational opportunities afforded to their children in Germany were often mentioned as a benefit of having relocated, helping these parents think more positively about their forced migration.

"*[Feelings of comfort] come from my kids, always. They have a very normal life and they get everything they need. They live in safety and stability, which is the most important thing. That is enough for me to feel at ease.*" (P28).

Some parents fight mental health problems and make an effort to reduce stress and negativity for their children's sake. They have their children in mind when dealing with everything from past traumatic experiences to feeling overwhelmed, without direction, or depressed in the host country (quotes 1–3). Sometimes this comes in the form of suppressing problems and experiencing pressure as a consequence (quote 3):

[1] "*So I have a lot of frustration and feel that I don't want to do anything, sometimes I wish I could die because I am so tired from all of this. But then I still keep remembering my son, […] so I should leave all these negative feelings and just look on the bright side.*" (P29).
[2] "*We always try to be in good spirits for our child*." (P25).
[3] "*But I have to be strong and fight back. Not just for myself, also for the sake of my kids. At the same time, this puts too much pressure on me. I can't even express my sadness and anger so that it won't have a negative impact on my kids. Sometimes I lose control, and I can't help it.*" (P3).

For a few participants, a focus on their children is a way to counterbalance their own emotional struggles. On the one hand, this attitude is a source of solace; on the other hand, it may result in these participants abandoning hopes for their own development after resettlement:

[1] "*I am happy but at the same time depressed. Happy to see my children happy but depressed for myself because I am sitting at home and doing nothing.*" (P17).
[2] "*It is all about my children. […] We have no dreams anymore.*" (P17).

While many of our participants, including parents, reported suffering from a sense of meaninglessness while their lives feel on hold as a result of various uncertainties and restrictions, some parents are able to focus on the things they do for their children as tangible, meaningful activities:

"*I'm not doing any activities for myself. But I'm doing them for my son. Like swimming and music, etc. This makes me feel like I'm making a real-life investment. Which is my son.*" (P24).

In two participants who had children post-migration, the birth of their child made them feel more like they were experiencing a new beginning (quotes 1–2 below). In one of these cases (second quote), the birth of this child appears to have helped the parents heal from the traumatic loss of their first child and the harrowing flight journey surrounding it:

[1] "*My life in Syria is over. I'm starting a new life in here. Especially now that I have a son.*" (P24).
[2] "*But it was all the luck of my daughter, that we had afterwards. […] After she was born, she is so lucky – everywhere we've gone, everyone is happy and we never had any problem after she was born.*" (P34).

Being young

Some – though not all – of our very young (under 24 years old) participants appear to be doing particularly well in Germany by virtue of factors related to their youth. These participants, all well-educated, seem to have adjusted quickly and feel confident in their futures, able to focus on opportunities. Comparing their attitudes with the reflections of older participants, it appears that they are able to move forward in part due to not having experienced a perceived loss of status and future prospects due to migration. A youthful trust in a long future full of opportunities comes through in some very young participants' interviews:

"*I mean, you have your whole life ahead of you and can do so many wonderful things and study or work or start a family and get married – I don't know, just live life.*" (P13).

Relatedly, even though some did seek mental health care, some of these young participants also seem to let go of difficult past experiences more quickly than older participants:

"*Of course I experienced difficult things, flight and war, I don't know. But now that it's over, I've already*

forgotten everything. I started from scratch and I'm happy with everything I've already achieved up until now." (P50).

These particularly well-adapted young participants also tend to have fewer responsibilities in the integration process. With one exception, they came to Germany accompanied or preceded by supportive and capable parents. Finding their place amongst their peers at school appears to be one of our youngest participants' main integration struggle. From the way these young participants describe this struggle, it appears that this is not simply their focus because they have reduced responsibility: it also seems like their age-appropriate preoccupation with their peer group may focus their worlds in a protective way. For the two quoted here to illustrate this point, changing to a more academically oriented school and changing from a small-town school to a city school, respectively, made the difference:

[1] "*Since having friends, […] I also have a boyfriend […] and my best friend now also lives in Germany, and since then I've been happy. I actually feel totally ok. Yes.*" (P50).
[2] "*But then, when school started, and I found friends, the worries were suddenly gone and now everything is going well.*" (P13).

Doing well in terms of academic achievement is another primary concern and a source of satisfaction and motivation. Unlike their older counterparts, many of whom feel directionless, very young refugees who are in education may benefit from straightforward metrics of progress:

"*When I do something well, when I achieve something at school or in the traineeship, that makes me feel content.*" (P50).

Reflecting on differences in well-being between herself and her mother, one participant said she thinks it is easier for younger people to integrate, make new contacts, and learn the language – in part because of their greater flexibility, in part because educational facilities enable integration and language learning more readily than courses for adults:

[1] "*My mom also has these phases when she is depressed, which I can understand. I mean, older people cannot integrate as quickly, and she has no friends, only her family.*" (P45).
[b]"*It's probably completely different for me than for my parents, life in Germany. I am only 19 years old, my experiences are completely different.*" (P45).

Discussion

Based on a qualitative analysis on different aspects of resilience among adult refugees in Germany, this study presents a range of manifestations of the process of, capacity for, and outcome of successful adaptation as well as factors facilitating positive adaptation.

Manifestations of the process of, capacity for, and outcome of successful adaptation

Our participants use specific cognitive coping strategies and ways of framing circumstances in order to maintain their functioning and mental well-being despite adversities. Several of these strategies have been identified in other studies as well, for example, acceptance and focus on the present or future [26], belief in one's own inner strength [26], which is comparable our "internal locus of control" category, and favorable comparisons to others in the same situation [25]. Favorable comparisons between the receiving country and the country of origin have also been found as related to resilience in other analyses [26, 29]. The strategy of active forgetting, also identified in previous studies on refugees [39], raises the point that coping can be active or avoidant and adaptive or maladaptive [40]. Active forgetting is an example of an avoidant coping strategy. As such, it may be functional and thus conducive to positive adaptation as a short-term but not necessarily a long-term solution [41].

Among the behavioral coping strategies our participants use to manage the mental health repercussions of the stressors they face, there are also avoidant strategies. Withdrawal into the private realm is an avoidant strategy and may have ambivalent effects, as the participant who reports this behavior openly discussed. Experiencing work explicitly as a distraction from worries also comes across as potentially ambivalent in our participants, unlike using it as a way of bringing meaning to a limbo state. Processing experiences using creative outlets as well as connecting to cultural roots and faith are active and likely adaptive forms of coping. While spirituality and faith are major themes in many qualitative studies on refugee resilience [9], they were not strongly represented in our interviews. Perhaps our sample happened to be less religious, or perhaps it takes more specific questions, including specific questions about coping strategies, to elicit mentions of faith.

Seeking mental health care is not often framed as a coping method in the literature (except in [31]); however, like the other examples presented in this theme, it represents a behavior actively undertaken to manage stress responses to adverse experiences. Our participants also display inner strength in seeking mental health care because it often means overcoming stigma around mental health treatment, which may be pronounced among refugee communities [27,42].

Some participants' impression that they have something like an enduring capacity for successful adaptation due to different factors including life-long characteristics, an attitude instilled by a parent, or a good past in part chimes with the classical understanding of resilience as a trait (e.g. [43]). This view has been critiqued for implying a binary between those who can and those who cannot overcome adversity [44]. However, the existence of something like an enduring or repeated capacity for positive adaptation in the face of adversity based on personality factors and particular resources seems highly likely. In any case, it is noteworthy that some of our participants perceive themselves as uniquely robust. The question arises whether this self-image might itself act as a cognitive strategy for positive adaptation.

Volunteering, activism, and work for refugee causes manifest as a part of the process of adaptation. In a mechanism similar to what has been described in the literature as 'altruism born of suffering' [45] and 'adversity-activated development' [5], some participants translate their adverse experiences into activism or helping others. In line with the classic clinical perspective on this phenomenon, some of our participants seem to employ their volunteering or activism almost as a coping mechanism that helps them find meaning in their suffering [45] and build agency by avoiding the role of victim [46]. Indeed, volunteering has been shown to elicit a range of beneficial outcomes for refugees, including feelings of self-fulfillment and sense of belonging and overall improvement of mental health [47], as some of our participants described.

Volunteering and activism are also manifestations of the capacity for and outcome of positive adaptation. Our participants presented in this theme are in part able to help because they have overcome or are overcoming. They use resources such as language abilities, cultural knowledge, and knowledge of their rights in order to help others. Some individuals in our sample were already activists in their countries of origin and then became active for causes in Germany. This again suggests the possibility of an enduring or repeated capacity for, in this case, a certain type of adaptation: responding to adversities with remarkable proactivity. Two characteristics linked to resilience as a trait in the literature that would appear to be a prerequisite for turning suffering into action include high energy levels and the ability to detach and conceptualize problems [43].

While manifold links between volunteering and activism and resilience can be found, a note of caution is warranted. Any normative appeals that refugees should become volunteers or activists disregard the many reasons why someone may be unable, reproduces the prejudice of the "lazy refugee" [48], of which our participants are painfully aware, and potentially adds to a pressure to perform as "good refugees" [49]. It also promotes unpaid or underpaid forms of labor in a community that is already economically disadvantaged.

Factors facilitating successful adaptation

Social support is a primary theme in most studies on refugee resilience [9]. Our findings resonate with summaries from previous studies stating that social networks provide emotional as well as informational support and promote a sense of belonging [30]. The importance of infrastructure designed to provide social support, such as meet-ups and tandems, and key contacts in the integration process, such as language teachers, also comes across in our data.

We identified another potential protective factor from a pattern that emerged in our analyses: Several participants who appeared to be emotionally well and very active – i.e. those who came across as having adapted well to difficult circumstances – also exhibited a distinct attitude toward their relocation. They reported having been critical of, persecuted, or othered by, or simply having felt alienated and restricted by the dominant culture or governments in their countries of origin. After resettlement, they feel that they are experiencing increased opportunities for self-expression and even a greater sense of belonging. These individuals contrast many of the other participants in our sample who may appreciate the safety and civil liberties they have gained through migration but feel deeply rooted in their societies of origin.

The observed pattern may be due to several underlying mechanisms. We have categorized it as a factor promoting adaptation under the assumption that positive attitudes toward relocation, which often appear to have predated resettlement, may justify struggles and provide determination and motivation. Conversely, better mental health and a more active life may also lead to more positive, empowered appraisals of migration – or these appraisals may function as strategies for overcoming struggles. There might also be a confounding factor underlying this pattern: Perhaps those who have enduring capacities or greater resources for successful adaptation are also the ones who questioned the social order in their countries of origin or who value experiencing new environments. For example, the high level of education among these participants may explain both positive adaptation and positive attitudes toward migration. Because multiculturalism is among the things these participants appreciate about Germany, it should be noted that all participants represented in this theme live in Berlin. This city prides itself in its multiculturalism [50]. It is very likely that circumstances in the receiving country impact how refugees' attitudes toward their resettlement

develop, even those that appear to originate from pre-migration times.

Interestingly, the examples of this pattern in our sample are overwhelmingly male, perhaps owing to greater opportunity for being oppositional in the country of origin, more personal choice in the matter of migration, and greater opportunities in the host country [51].

However, some women in our sample reported a post-migration appreciation of newfound gender role freedoms in the receiving country that seems to be a source of well-being. A similar finding was presented in Liu and colleagues' [11] qualitative resilience analysis. While refugee women are more likely to suffer from mental health problems in the receiving country than their male counterparts (e.g. [52, 53]), migration can increase autonomy, self-esteem, and social standing and provide new opportunities, as also summarized in a previous report [54]. However, several factors such as socioeconomic characteristics and the immediate home environment in the receiving country impact whether migration opportunities can level or outweigh the risks of migration for women [54]. Indeed, women in our sample who draw strength from newfound gender role freedom were mainly highly educated and young.

Although migration holds particular challenges for parents, such as having to manage childrearing alongside integration and facing acculturation-related intergenerational conflicts [55], we found that children can promote positive adaptation in refugee parents. In accordance with previous studies, we found that children can be primary sources of motivation to overcome difficulties, sense of meaning, and justification for sacrifices and hardships for their parents [55]. The experiences of the mothers in our sample also resonate with previous reports of refugee mothers' well-being as strongly linked to their children's adaptation process [56], which means their children may represent a source of hope independent of their own struggles. On the flip side, parents may also experience a double burden when their children are not doing well [56]. A focus on the children may come at the expense of parents' willingness to invest in their own development post-migration, as we found in some of our participants, as well as participant quotations from other studies: "'I have no expectations. […] I don't care anymore. […] I just hope for a better future for my children" ([57], p. 316).

Our finding that being young seems to confer resilience in some cases is in line with an EU-wide study reporting that younger refugees experience an easier adaptation process than their older counterparts across the countries examined [57]. Our interviews suggest that young people with relatively good starting conditions, such as having migrated with family and being well-educated, exhibit a certain youthful hopefulness and flexibility. A youthful preoccupation with the peer environment and academic achievements may also be adaptive. An external advantage the youngest adult refugees often have is entering into educational facilities in the receiving countries, usually secondary schools. Schools facilitate the process of integration by providing social support and giving young refugees a sense of agency based on daily tasks to accomplish [58]. In line with our participants' experiences, however, the school environment's quality with regard to inclusivity is key to fostering social contact building, a sense of belonging, and a positive attitude toward education [59, 60].

We also observed that our youngest participants were not burdened by the feeling of having to "start from scratch" that was central to the experiences of many older participants. Because they were still in the process of completing their education before resettlement, our youngest participants have, indeed, lost less progress in their lives through migration. Many young refugees are focused on education and the desire to build a meaningful life in the receiving country, as has been observed previously [61]. Again, a major caveat here is that our young participants are all in relatively privileged positions concerning their domestic and educational situations.

Limitations

A limitation of this study is that the interview topic guide featured several questions focused on stressors and mental health problems, which may have curtailed participants' reflections related to strength and resilience. Furthermore, our reliance on native speaker Arabic and Farsi interviewers and translators for many interviews enabled participants to describe their experiences fluently; however, despite quality checks, it also means that the transcripts we used in our analyses may lack linguistic precision. It should also be noted that while we were able to recruit hard-to-reach participants with very limited educational backgrounds, our sample was on the whole highly educated, with over half having attended or completed university – a far higher proportion than in the population of refugees in Germany at large [3]. 19 participants were able to participate in German, indicating good integration along with one key parameter. While the level of education is mentioned as a factor in themes where it seemed to be particularly relevant, these are caveats regarding our results' generalizability. On the content level, it is important to note that sorting reported human experiences into different resilience categories is not a straightforward process. Various manifestations of and factors promoting resilience are likely to function in various ways and to be highly interconnected.

Conclusions

By identifying a range of manifestations of the process of, capacity for, and outcome of successful adaptation as well as factors facilitating successful adaptation in the face of adversity among adult refugees, this study contributes to a growing body of knowledge on resilience in this population. These findings may support clinicians working with refugees by making them aware of potential strategies and sources of strength specific to this client group. They also contribute to moving the academic discourse and potentially clinical practice toward a more strengths-based view on refugee mental health and integration processes.

Supplementary Information

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Additional file 1.

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Authors' contributions

LW, TMTT, EH, and MB conceived of the interview study. LW conceived of the analysis in the present study. LW developed the mental health part of topic guide. LW, JA, and further collaborators collected the data. LW and JA coded the transcripts. LW performed the thematic analysis with substantial contributions from JA. LW wrote the manuscript. JA, UF, TMTT, EH, MB gave feedback on the manuscript. All authors reviewed and approved the final version of the manuscript.

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Availability of data and materials

To protect the identity of the participants, the data used in this study is not available to third parties.

Declarations

Ethics approval and consent to participate

The Ethics Commission of the Charité–Universitätsmedizin Berlin (approval no: EA1/120/18) approved this study. All protocols were carried out in accordance with the relevant guidelines and regulations. Participants provided their informed verbal and written consent. Participants were informed that they could withdraw from the study at any point. An information sheet on mental health care was made available to participants who inquired about care options.

Consent for publication

Not applicable.

Competing interests

The authors declare no competing interests.

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Publisher's Note

CHAPTER 7: INTEGRATIVE DISCUSSION

The goal of this dissertation project was to investigate the relationship between mental health and integration among refugees who arrived in Germany from 2013 onward using quantitative as well as qualitative approaches. Two quantitative studies (Studies I and II, chapter 3 and 4) examined the association between various aspects of integration and different mental health and well-being measures, as well as the prevalence of various levels of psychological distress, also by sub-group. One qualitative study (Studies III, chapter 5) examined the mental health and integration nexus in detail, analyzing the various ways in which connections between the two play out with a focus on mental health problems. The second qualitative study (Study IV, chapter 6) looked at resilience rather than poor mental health, providing a strengths-based perspective on some aspects of the link between mental health and integration.

The results of these studies have been discussed in turn within chapters 3-6. The purpose of the following Integrative Discussion is to bring findings from the four studies together in a manner that may be described as "triangulation" (see section 2.3.2), draw conclusions, address limitations, and outline future directions. *First*, findings from all four studies on the topic of prevalence of mental health problems as well as sociodemographic risk and protective factors are discussed. Seeing as providing adequate healthcare is one receiving society responsibility within the integration process, understanding the mental healthcare needs of refugee populations is one important aspect of the relationship between mental health and integration, albeit on a different level than associations discussed in the next step. Prevalence estimates also give an indication of how wide-spread distress that may be in part linked to integration actually is. *Second* and centrally, results from all four studies are used to discuss the relationship between mental health and different areas of integration: section 7.2.1. Asylum procedure and legal status, 7.2.2. Housing, 7.2.3. Labor market, education, and integration courses, 7.2.4. Bureaucratic tasks, 7.2.5. German language, 7.2.6. Social bridges, and 7.2.7. Social bonds, including 7.2.8. Family connections and separation. *Third* the overall picture of the relationship between mental health and integration that emerges from the different results is addressed in a Conclusion. *Fourth*, methodological strengths and limitations are raised from an integrative perspective. *Fifth* and finally, potential future research directions are sketched.

7.1. Prevalence of psychological distress and sociodemographic risk factors

7.1.1. Overall prevalence of psychological distress

Because healthcare provision is a central responsibility of receiving societies vis à vis newcomers within integration, the results on prevalences of mental health problems from Study II and on sociodemographic risk factors from Studies I-IV provide insight into the relationship between mental health and integration in this very specific sense: regarding what the (mental) health domain-of-integration needs of refugees are. Additionally, prevalence estimates indicate how common mental health problems that may be associated with integration are.

Study I revealed a substantially elevated mean PHQ-4 score capturing core symptoms of depression and anxiety among refugees who arrived in Germany between 2013 and 2016 compared to previous estimates of a mean for the German general population. Study II showed that over 40% of this population experiences symptoms of depression, anxiety, and PTSD indicative of mild to severe psychological distress. Given the large number of comorbidities, this is likely to be roughly consistent with the most recent meta-analysis estimates of a 32% prevalence of depression, 31% prevalence of PTSD, and 11% prevalence of anxiety disorder (Blackmore et al., 2020), as well as a large recent study from Berlin showing a 40% prevalence of unipolar depression, and a 24% prevalence of PTSD (Bajbouj et al., 2021). Over two in ten members of this population score in a range indicative of a need for mental healthcare and a further two in ten may need care subject to further assessment.

The interview studies included in this dissertation, particularly Study III, provide a vivid impression of different types of mental health struggles members of the refugee population encounter in participants' own words. These included expressions of fatigue, psychological exhaustion, frustration, suffering, sadness, worries, obsessions, head being "full" or "in knots", grief, fear, feeling unsafe, nightmares, stress, forgetfulness, feeling rejected or even hated, feeling stuck, feelings of accomplishing nothing, feeling like waiting is "killing" them, loss of agency, feeling devalued, feeling lost, meaninglessness, hopelessness, a sense of "sitting around", pressure, tension, estrangement, negativity, loneliness, isolation, wanting to withdraw – and more.

As mentioned in Studies II and III, a major integration policy improvement in Germany would be to make complete medical care, including psychotherapeutic care, accessible to all asylum seekers immediately (Bozorgmehr & Razum, 2015; Kiziak, 2017; Chiarenza et al., 2019). The expansion and increased funding of psychosocial centers would also be called for to provide adequate support (Hettich, 2017). The need for appropriately trained translators and culturally-sensitive interventions within the mental healthcare system, safeguarded, for example, through cultural competence trainings, has also been emphasized (Kirmayer et al., 2011).

As also mentioned in both Studies II and III, the development of and/or greater investment in stepped care models featuring lower-threshold programs such as community-based approaches – which may automatically be more culturally sensitive, may also benefit Germany's refugee population (Miller,

1999; Silove et al., 2017; Böge et al., 2019; Leopoldina, 2019). As further elaborated in the Conclusion below, Miller (1999) argues that psychotherapeutic and psychiatric approaches are best used adjunctively in refugee populations in combination with community-based programs, not just because of the high demand, but also because refugee mental health problems are so linked to circumstances that they should not be treated as mental health problems alone. These lower-threshold approaches may also reach those for whom the stigma around mental healthcare, which may be prevalent within refugee populations (Sossou et al., 2018; Byrow et al., 2019), is a barrier to seeking support.

Study IV includes examples of participants benefiting from mental healthcare in clinical settings, counseling provided within educational institutions, as well as from various forms of community projects. However, Study III includes an example of an interviewee who felt very passionately that mental healthcare for refugees is inadequate and that it is unfathomable that refugee housing facilities and Job Centers are not used as check-in and referral points – the quote is worth repeating here: "*I am surprised how there is no psychological support teams to work in the housing facilities. […] In the Job Center there must be someone to transfer you, in an advanced country like in Germany […], but with refugees it seems like they don't care about our psychological issues*."

7.1.2. Sociodemographic risk factors for psychological distress

Good mental healthcare provision must also take into account particular sociodemographic risk factors. All studies presented in this dissertation provide some insight into these risk factors within the German refugee population.

Across population studies, women are found to suffer from symptoms of psychological distress more frequently than men (e.g. Alonso et al., 2004). Studies I and II confirm this pattern for the population of refugees who arrived in Germany between 2013 and 2016, consistent with previous findings based on smaller studies (Bogic et al., 2015). 17.4% of women in this population exhibit symptoms of depression, anxiety, and PTSD indicative of severe distress compared to 8.7% of men, as shown in Study II. Stressors that are specific to women, such as gender-based violence and discrimination, most likely explain some of this gender difference (Deacon & Sullivan, 2009). Study IV identified a group of overwhelmingly male interviewees who appeared to be mentally well and reported experiencing migration as an opportunity in various ways. As noted in Study IV's discussion, this pattern may reflect gender differences in reasons for migration, freedom of choice around migration, and opportunities in the host society (Yeoh et al., 2002), which, in turn, may be part of the reason why male refugees may be in better mental health.

On the other hand, Study IV showed that female refugees may benefit from a gender-specific source of strength: a newfound sense of empowerment from living in an environment with greater gender

equality than in their country of origin. Striking statements by women about feeling younger in Germany, having opportunities they did not have back home, and enjoying greater equality with their spouses through domestic changes in gender dynamics reveal a potential source of resilience upon which psychosocial programs might build. However, socioeconomic factors, age, and domestic situation are likely to impact or determine the extent to which women can reap these benefits (O'Neil et al., 2016).

One caveat to consider is that the use of scales that do not include items on anger, irritability, aggressiveness, substance abuse, or risk taking behaviors may miss mental health problems such as depression in men (Walther et al., 2021). This caveat aside, the mental health risks faced by refugee women demand attention, for example in the form of gender-specific psychosocial interventions (Kastrup & Dymi, 2020) and policy that addresses the particular difficulties women face in the integration process (Liebig & Tronstad, 2018).

Both Studies I and II identified older respondents as particularly at risk of mental health problems, consistent with previous studies (e.g. Tinghög et al., 2017). Study II revealed that 22.8% of those aged 45 to 54 exhibit severe distress requiring urgent and advanced care compared to 6.1% among those aged 25 to 34 and 10.4% among those aged 18 to 24. A potential, migrant-specific reason for older refugees' mental health struggles is that integration generally and acculturation specifically are more challenging for older adults (Alemi et al., 2015). Study III presents an example of an acculturation conflict in an older participant who reported feeling alienated by younger co-nationals who she feels are leaving their culture behind. Study III also captures the pressures adults in their thirties to forties feel to build a life quickly and to a standard appropriate to their pre-flight situation. Study IV includes a theme on the potentially protective nature of youth: some of the youngest adult participants had a sense of having their whole futures and a wealth of opportunities in front of them; they were also embedded in educational institutions and focused on building social connections with their peers and succeeded academically. Older adults, on the other hand, reported a strong sense of loss of status and do not enter into clear structures that facilitate integration. On the other hand, one of most distressed interview study participants who reported having attempted suicide reported how difficult it was to arrive in Germany by himself as a teenager, pointing to particular risks for very young refugees, especially unaccompanied minors (Rücker et al., 2017).

Studies I and II also both show that refugees of Afghan nationality appear to be particularly affected by symptoms of depression, anxiety, and PTSD. While 65% of refugees of Syrian nationality exhibit no signs of psychological distress, only 38.5% of Afghan refugees are free of any indication of requiring further assessment or treatment. Almost 40% of Afghan refugees exhibit moderate or severe levels of distress. No other sociodemographic category exhibits an equal or greater proportion of individuals who appear to be in need of mental health treatment. The decades of violent conflict and

upheaval in Afghanistan briefly outlined in section 1.1.1 are a likely explanation for the particular mental health and other hardships experienced by Afghan refugees (Alemi et al., 2015; Slewa-Younan et al., 2017). Psychosocial programs and mental health professional may be required to address complex, multigenerational trauma as well as integration difficulties due to disrupted biographies and low socioeconomic status (e.g. Danieli, 2007). The particular risk of Afghan refugees means that educating and employing competent Dari language translators for mental health services, including for full psychotherapeutic treatments, should be a priority.

Neither Study I nor Study II found an association between level of education and mental health. Study III demonstrates ways in which level of education can go both ways in terms of its impact on mental health. On the one hand, illiterate participants experience distress and overwhelm from the demands placed on them in the language learning process. Of course, in general, education confers several advantages in the integration process due to learning skills, literacy, language skills. On the other hand, Study III demonstrates anguish over loss of status and career anxiety that participants with higher socioeconomic statuses pre-migration can experience in receiving societies. Perhaps associations are attenuated by these contrasting patterns: greater integration difficulties for those with limited educational backgrounds versus greater feelings of loss and disappointment among the more or very educated. Policymakers should be aware of potentially contrasting needs – distress from overwhelm or distress from feeling restricted and unable to thrive.

7.2. Associations between mental health and areas of integration

7.2.1. Asylum procedure and legal status

The process of gaining the legal right to remain in the receiving society and the conditions linked to the type of protection or lack thereof granted falls into Esser's (2001, 2006) "placement" dimension of integration, Penninx and Garcés-Mascareñas' (2016) legal-political dimension, and is prominently positioned as part of the "foundation" of integration by Ager and Strang (2008). The fact that an asylum procedure is a necessary part of resettlement for most refugees is one of the integration challenges specific to this group (Castles et al., 2002; Desiderio, 2016). While refugees are, of course, involved in making their case during the asylum procedure, this is a facet of integration that is predominantly within the receiving society's political control, representing a major responsibility of the receiving society vis à vis refugees within the two- (or multi-) way process of integration as introduced in section 1.2.3.

Studies I-III link less secure legal statuses and awaiting the outcome of the asylum procedure to reduced mental health, as has been previously found (Li et al., 2016; Silove et al., 2017; Hynie, 2018). Study I demonstrates this relationship at the finest level of detail, showing elevated psychological distress among those who were granted subsidiary forms of protection (subsidiary protection or

national ban on deportation), temporary suspension of deportation as well as among those awaiting the outcome of the asylum procedure compared to those granted refugee status or asylum or who arrived in Germany through a humanitarian resettlement program (please revisit section 1.2.6 for details on legal statuses granted in Germany). Study II, which used a different legal status variable that does not include subsidiary forms of protection as a category, similarly found that those granted a suspension of deportation have an elevated risk of screening positive for psychological distress measured using the RHS-13. Studies I and II produced different results with regard to those awaiting the outcome of the asylum procedure. Study II did not identify a significant association between awaiting the outcome and screening positive for mild to severe psychological distress. This may be due to the binary treatment of the outcome variable in Study II, the differences in symptoms picked up by the outcome variable between the studies, or any of the other methodological differences between Studies I and II as detailed in section 2.1.4. There is also a chance that asylum seekers adjust to the state of waiting over time, explaining potential differences in strength of association between the first and second survey wave.

Because Study II was based on data from the second wave of the IAB-BAMF-SOEP refugee survey, a comparison between those who received a protection status more recently and those who already reported having received one in the previous wave was possible. Among males, psychological distress was more prevalent for those who had only been granted protection more recently. Perhaps this is linked to negative impacts of a longer asylum procedure, as demonstrated by a previous study that found an association between longer asylum procedures and increased rates of anxiety, depression, and somatoform disorders (Laban et al., 2004). It would be of interest to further explore whether this duration may have a negative effect – even after the conclusion of the process.

The qualitative approach used in Study III complements these quantitative findings with insights into the concrete emotional mechanisms at work. As portrayed in Theme 2 in Study III, it was centrally the uncertainty that surrounds the asylum process and insecure legal statuses that was described as an immense burden by participants. Indeed, refugees in Germany face uncertainty around the prospect of staying in Germany as well as uncertainty about the conditions under which they will be able to stay whilst awaiting the outcome of asylum procedures, the outcome of an appeal against the original decision, as well as during status renewals after temporary protection statuses elapse (see section 1.2.6). These repeated phases of uncertainty, even when a protection status has been granted, were characterized as severely “psychologically tiring” by a participant in Study III. Providing further evidence for stress arising from the temporary nature of any protection status, a study found that a shorter future validity of residence permits was linked to more severe levels of PTSD among Syrian refugees in Germany (Georgiadou et al., 2018).

Beyond being psychologically tiring, legal status uncertainty may also sap energy and motivation required for activities that foster integration, as described in Study III. In other words, the mental health burden of legal status uncertainty may have a deleterious effect on other areas of integration, highlighting the interconnectedness of different areas of integration that is emphasized across integration frameworks (see section 1.2.5) as well as the potential role of mental health in mediating these interconnections. Study III participants' expressions of doubt about how worthwhile efforts to e.g. learn German or develop a social network are in light of legal status uncertainty and disappointment over the outcome of the asylum procedure further hint at the potential for negative spirals. Being at the mercy of ministry or court decisions can also make refugees suffer feelings of powerlessness and loss of agency, as Study III shows; feelings that may be central to post-migration stress among refugees (Miller & Rasmussen, 2017). The previous finding that the alleviation of symptoms of depression and PTSD linked to the transition from temporary to permanent residence permits among refugees is mediated by concomitant improvements in living conditions further suggests that insecure legal statuses may harm refugee mental health in part indirectly, by restricting other areas of life (Nickerson et al., 2011). Similarly, Study III includes a sub-theme on the psychological burden of feeling restricted, in part by legal statuses limiting access to courses and other institutions and privileges, in keeping with this domain's role as part of the foundation of integration in Ager and Strang's framework (2008).

Study IV enriches the emerging picture of how the asylum procedure and the uncertainty attached to it relate to mental health by presenting ways in which refugees face the burden of uncertainty and feelings of loss of agency with resilience. Taking a cognitive stance of acceptance of uncertainty and a "what happens, happens" attitude helps some cope. A focus on smaller steps, on daily tasks and opportunities to achieve small goals and progress in life is another cognitive strategy some employ, as is focusing on areas within one's own control more generally. Working or developing skills through traineeships, other educational programs, or volunteer work can add meaning to limbo for some who are in a position to pursue those activities. These adaptive responses in the face of years of uncertainty regarding such a foundational aspect of integration underscore the fact that narratives about refugee mental health should include resilience as a major facet (Papadopoulos, 2007; Murray et al., 2010; Hutchinson & Dorsett, 2012; Simich, 2014; Siriwardhana, 2014).

Study III moreover enriches the quantitative findings presented here by showing that beyond the central burden of uncertainty, some refugees with insecure legal statuses experience a fear of deportation that appears to blend with symptoms of post-traumatic stress. The participant quoted as saying that he is shocked that "even Germany could put [him] back in danger" and reporting nightmares about having to return illustrates the potential of the asylum procedure to re-traumatize refugees (Drožđek et al., 2013). Study III also shows that some refugees suffer from anxiety related to concrete steps in the asylum procedure, obsessing over what happened during the asylum hearing,

regretting how they presented their case, and anguishing over perceived miscommunication due to inadequate translation. Finally, the qualitative results presented suggest that insecure legal statuses can make refugees feel rejected and unwanted by the host society, touching on the identification dimension of integration (Esser, 2001, 2006) as well as on Penninx and Garcés-Mascareñas' (2016) overall understanding of integration as "becoming an *accepted* part of society" (p 14., emphasis own). These feelings seem to come about from considerations of deservingness: participants feel that their efforts to integrate should be rewarded with a right to stay; if they are not, this is a striking rejection. Questions around deservingness of legal statuses are also central the erosions of social cohesion within refugee communities explored in Study III, a rarely discussed negative consequence of the struggle for legal recognition and another, indirect way in which matters related to the asylum procedure and legal statuses may relate to mental health.

The findings regarding the multifaceted relationship between mental health and the asylum procedure and legal statuses presented in this dissertation underscore calls for quick but high-quality asylum procedures (Hänsel, 2019). The benefit of granting insecure legal statuses at all has also been called into question in the German context: with even those whose application was rejected remaining in Germany for various reasons, seemingly unnecessary confusion and uncertainty are common (Kiziak, 2019) and concomitant with distress and demotivation, as the results of Studies I-IV show. Different legal statuses have also been critiqued for creating a class system among refugees (Kiziak, 2019), the social ramifications of which became apparent in Study III. Finally, it has been argued that all legal statuses should at least confer full immediate access to institutions and opportunities, for example, the opportunity to stay for a full vocational training program and some work experience afterwards (Degler, 2017), if not for long-term integration, then for the sake of international development (Kiziak, 2019). In the words of, From a more immediate receiving country interests perspective, one might say that "the risk of not investing in people who stay … exceeds risk of investing in people who leave" (Papademetriou & Benton, 2016, p. 21). For Esser (2001, 2006), full integration means naturalization; for Penninx and Garcés-Mascareñas (2016), similarly, it means to be "regarded as fully fledged members of the political community" (p. 14). Given the results of the studies presented in this dissertation, a substantial gain in mental health, in sense of acceptance and belonging, and in motivation to become involved would be expected at this milestone.

7.2.2. Housing

Housing is included in the dimension of "placement" or "structural integration" in Esser's framework (2001, 2006), in socioeconomic integration in Penninx and Garcés-Mascareñas (2016), and alongside health, education, and employment as a "marker and means" of integration by Ager and Strang (2008). In Germany and many other receiving countries, special housing provisions in the form of mass accommodation and smaller-scale housing facilities are made for refugees, particularly for the initial months after arrival, as outlined in section 1.2.6.

Studies I and II show that those who live in refugee housing facilities experience higher levels of psychological distress, both as a continuous outcome based on the PHQ-4 and as a binary outcome based on the RHS-13. This is in keeping with results from Porter and Haslam's (2005) widely-cited meta-analysis as well as a recent study showing very high levels of depression, anxiety, and PTSD among residents of refugee housing facilities in Sweden (Leiler et al., 2019). Interestingly, the exploratory interaction analyses included in Study I show that Eritrean nationals, unlike respondents of all other nationalities, actually exhibit better mental health residing in refugee housing facilities than in private accommodation. It is unclear why Eritreans represent an exception in this regard; it may be speculated that circumstances of housing in the country of origin, including the extent to which communal living is culturally positively connoted, may be factors. It is noteworthy that the relationship between living conditions in the receiving country and mental health, may, of course, vary by cultural background.

The qualitative results presented in Study III include various possible explanations for why living in refugee housing facilities is linked to greater levels of distress in most refugees in Germany. First of all, participant reports reflected poor conditions characterized by very limited personal space, noise, as well as conflicts in some housing facilities, in keeping with assessments in policy papers (Aumüller et al., 2015; Schmid & Kück, 2017). These circumstances can have the knock-on effect of preventing refugees from pursuing activities vital for other areas of integration, including language learning and other forms of studying. One participant quoted in Study III attributed the inactivity among refugees predominantly to the housing conditions, in accordance with another study from Germany (Gürer, 2019).

Another participant's impassioned statement about the deleterious effects of the isolation and disconnection from the community refugees face in housing facilities matches qualitative findings in a study from Australia (Ziersch et al., 2017) and Ager and Strang's (2008) emphasis on appropriate housing as key to feelings of community – as well as feelings of security. This participant also reported that many struggle to recover from the additional damage housing conditions, particularly those in reception centers, can do to refugees arriving in Germany after harrowing pre-migration experiences and long and traumatizing flight journeys that leave them in poor mental health (Study I in chapter 3 found associations between the number of peri-flight potentially traumatic events and distress). Perhaps this participant report explains, in part, the Study I finding that the more flight reasons respondents report, the more living in refugee housing facilities relates to higher distress. This may be an instance of post-migration living conditions or the conditions of integration making it more difficult to recover from past trauma (Hynie, 2017). The fact that integration, and with it, an interplay between mental health and integration, begins at the point of arrival (Castles et al., 2002; Spencer & Charsley, 2016) is also made clear by the significance of conditions in initial reception centers.

In Study IV, housing conditions show up as one of the topics that refugees become politically active over. It is also striking that the participant seemingly leading an effort to improve conditions in the housing facility where she lives is confident that she will get a private apartment and appears to be in part remaining in the housing facility in order to fight for better conditions. A person who is resilient enough to know her rights and be unafraid to speak up is also one who feels confident she will get private housing. This indicates that, to some extent, better mental health may also make it easier to secure private housing for oneself – mental health impacting integration.

The urgent importance of providing adequate housing as a major host society responsibility in the integration process is summarized in a sentence by Phillimore and Goodson (2008): "For those seeking refuge, it could be argued that the importance of finding a home is particularly symbolic as it marks the end of a journey and the point at which refugees can start to consider their wider need" (p. 315–316).

7.2.3. Labor market, education, and integration courses

As highlighted in section 1.2.6, offering language and civics lessons within "integration courses" as well as access to education and the ultimate aim of labor market integration are at the heart of German integration policy (Chemin & Nagel, 2020), so much so that this is often what is meant by "integration" in the public discourse. This is why Study II refers to these factors as "indicators of integration". Within the frameworks of integration presented in section 1.2.5, these areas are included in both "placement"/"structural integration" and "culturation" (Esser 2001, 2006), the socioeconomic dimension of integration (Penninx & Garcés-Mascareñas, 2016), or "markers and means of integration" and "language and cultural knowledge" as "facilitators of integration" (Ager & Strang, 2008). Labor market integration is considered to be another aspect of integration that is more challenging for members of refugee populations than members of other migrant populations because refugees tend to come from less privileged socioeconomic backgrounds than other migrants and also do not have the benefit of planning their migration in advance or of choosing their destination to make use of potential existing social networks that could facilitate the process of finding work (Schwartz et al., 2010).

All four studies provide insights into the relationship between these key facets of structural integration and mental health among refugees in Germany. Studies I and II demonstrate associations between labor market participation, participation in educational programs, and participation in integration courses and different measures of mental health. First, both show an association between being in employment and better mental health among male refugees. The association between unemployment and worse mental health outcomes in refugee populations has been reported repeatedly (Porter &

Haslam, 2005; Khoo, 2010; De Vroome & Van Tubergen, 2010; Beiser & Hou, 2001; Warfa et al., 2012; Bakker, 2014; Beiser et al., 2015; Bogic et al., 2015; Wood et al., 2019). It should be noted that this association is well-documented in general populations as well (e.g. Paul & Moser, 2009; Kim & von dem Knesebeck, 2016).

The relationship of being in education or participating in any kind of receiving society integration course program, however, has not received much attention in research. Study II shows a link between having participated in at least one language or integration course and levels of psychological distress below cutoff among male refugees. Being in education, on the other hand, was associated with below-concerning levels of psychological distress among female refugees in Study II and with elevated psychological distress among highly educated participants in Study I. Generally, Study I models, in contrast to Study II models, show a positive association between distress and being in education. This is potentially due to the mediating effect of other variables included in the complete model in Study I, such as language ability (see section 2.1.4 comparing methodologies).

The qualitative results from Study III's Theme 3 reveal the multifaceted emotional ramifications that accompany the process of learning the skills to become active in Germany and of finding suitable work. Beyond the – no doubt important – binaries of being employed, in education, in courses or not, a picture emerges that some newcomers several years into their resettlement feel let down in their expectations, thwarted by bureaucratic complications and restrictions, and stuck without many prospects. Many interview study participants report suffering from feeling under pressure to make progress as well as from having to keep themselves motivated without any tangible future prospects. Their sense of agency and sense of being valued by the receiving society are also under threat from the feeling of being restricted in their efforts. One participant's statement about getting the sense that Germany "doesn't care about the huge potential" young refugees bring is striking and shows how a sense of not being valued, a sense of rejection, and a sense of lost purpose can come together and threaten mental health when socioeconomic integration feels slow. This also ties in with Wood and colleagues' (2019) qualitative finding that work is important for self-esteem, sense of purpose, and sense of belonging to receiving society.

The sometimes deep frustration around loss of status through migration expressed by several participants in Study III may explain the link between being highly educated and experiencing reduced mental health when in education in Germany that was found in Study I. Perhaps to those who are already very educated, re-entering an education system represents a setback. Considering how some participants in Study III are affected by disappointment over difficulties entering an occupation comparable to the one practiced prior to migration, and how undervalued this can make them feel, the relationship between joining educational programs, seeking employment, and even being in employment in Germany and mental health may be rather complex. Indeed, having country of origin

qualifications recognized can be a long process that is not always successful, which is one reason why refugees are at a high risk of working below their previous qualifications and experiences (Degler et al., 2017). Kuhlman (1991) considers successful economic integration to entail refugees participating "in ways commensurate with their skills" (p. 7), however.

Study IV suggests that a distinct mental health advantage of arriving in Germany as a very young adult may be that at a younger age, refugees have less country of origin status to lose, but instead are able to focus on opportunities and show optimism for the future. The fact that these youngest adult arrivals often begin integration within the structure of secondary education also bestows clear and frequent opportunities for a sense of purpose, agency, and achievement, as has been previously reported (Özdemir & Stattin, 2014). Study IV's finding that some refugees who are parents focus on their children's progress in Germany in a way that is psychologically protective on the one hand but can manifest a sense that it is "too late" for them on the other hand further underlines the role of age in feelings of loss or hope related to socioeconomic integration.

Some of the association between not being in employment and distress may be to do with the burden of involuntary inactivity also described by participants in Study III. Some feel they are perpetually "waiting"; some experience waiting for a chance to become active in the receiving country as an extension of the forced passivity they experienced throughout their flight journey, highlighting the particular refugee-specific burden of a slow start to rebuilding after resettlement. While participants who are blocked from even taking part in integration courses suffer feelings of injustice on top of despair at forced inactivity, as Study III shows, the course phase, which includes long pauses, can also be a challenge. This may partly explain the small effect size of the relationship between course participation and mental health in Study II and the absence of this association in Study I. Another refugee-specific facet of the burden of unemployment that comes across in Study III is the fear of feeding into prejudices of the "lazy refugee" (see e.g. Yap et al., 2011 for further discussion).

In addition to boredom, meaninglessness, and erosions of self-worth from inactivity, some refugees appear to miss work or other structured activities as a distraction from deeper problems, as comes across in both Studies III and IV. Participants without structured tasks described ruminating and revisiting painful memories because they are missing distraction; employed participants described starting work as a mental health shift in part because they feel distracted. This seems to be particularly relevant for male refugees, perhaps explaining one part of the particular association of employment and mental health among male refugees found in Studies I and II, although gender role expectations are likely to be a main driver of this association (Vitale & Ryde, 2016). A qualitative study on refugees living in refugee camps in Turkey also found that male refugees felt a strong sense of boredom and hurt pride from the lack of an occupation (Cantekin, 2019).

Interestingly, when it comes to educational programs, it is among female refugees that incidences of psychological distress appear to be lower in participation, according to Study II. Perhaps male refugees in education experience the loss of status described above, whereas female refugees enjoy the opportunity to pursue further education that was not given in the country of origin context, as the theme about migration as an opportunity for women in Study IV suggests.

Study IV provides further insights into the relationship between mental health and the aspects of structural integration discussed here by capturing resilient responses and factors protective against the negative mental health effects just described. It shows that some refugees employ comparisons to peers as well as a belief in an internal locus of control and a focus on daily tasks as strategies in part directed at boosting motivation for structural integration and warding off a depressive "stuckness". For example, one participant quoted makes an active effort to focus on immediate tasks to combat feeling overwhelmed by a negative long-term outlook, as he reflects many of his peers do. Regarding comparisons with peers, Study III results show that both recognizing that others have made more progress and becoming aware of potential pitfalls through others' struggles may have the potential to motivate individuals.

Study IV's theme "Experiencing migration as an opportunity for self-expression, belonging and personal development" may also be applicable here. This mindset may protect against the compounding effect of feeling like migration itself was forced in addition to the loss of agency concomitant with struggles to build a life, as expressed in this participant quote: "My life in Germany is imposed on me. If I can't establish anything for myself here, I will be more frustrated." Having strong feelings of experiencing a newfound freedom of expression or belonging is also likely to fuel motivation, compensate obstacles in structural integration, and support psychological resilience. If so, this would be an apt example of how the conditions under which migrants and refugees leave their countries of origin play into how integration progresses, as Castles and colleagues (2002) posited, and how mental health may be involved in this association.

Finally, Study IV brings in volunteering and activism as forms of activity outside of the labor market that help some individuals combat the stresses outlined above. It is important to emphasize that there should be no mistaking this finding for an endorsement of bringing refugees into some form of unpaid labor as a policy measure or of any tropes about refugees lacking initiative. However, the results do illustrate how volunteering and activism can promote mental health: by combatting meaninglessness, promoting feelings of agency, identity, and community, and manifesting as well as facilitating a certain distance from one's problems. Some of these positive mental health effects of volunteering have been explored in a previous qualitative studies on refugee experiences (Lavie-Ajayi & Slonim-Nevo, 2017; Wood et al., 2019). Of course, it is also likely that the initiative behind volunteering and activism manifests existing psychological and other resources.

Interestingly, as mentioned in section 1.4.1 on the relationship between mental health and integration as well as in section 1.4.2 presenting previous findings on associations between labor market participation and mental health, when it comes to this area of integration, research studies and, in particular, policy papers often focus on the following direction of effects: poor mental health among members of refugee populations potentially thwarting economic integration (e.g. Khoo, 2010; De Vroome & Van Tubergen, 2010; Bakker et al., 2014; Beiser et al., 2015; Degler et al., 2017; Leopoldina, 2018; Kiziak et al., 2019). Study II also took this approach, reasoning that participation in integration courses, education, and the labor market are particularly dependent on a high degree of functioning and ability to take initiative. Of course, in most quantitative studies, focusing on one direction of effects over the other is merely a decision regarding the overall narrative and argument, since evidence tends to be of a correlational and not a causal nature.

While the extent to which qualitative research allows for causal inferences in disputed (e.g. Maxwell, 2004, see also Limitations in section 7.4), it is significant that participants in Study III reported experiencing their mental health as getting in the way of integration. This is entirely plausible given a broad consensus in the mental health field that conditions such as depression, anxiety, and PTSD often include substantial functional impairments in various areas of life (McKnight & Kashdan, 2009; Stein, 2004; Holowka & Marx, 2012), as noted in section 1.4.1. In Study III's theme about the psychological repercussions of past experiences (see also section 1.3.2 on pre-migration trauma) and from worrying about family members left behind, participants' descriptions of lacking mental space, peace, and energy to pursue integration, as well as experiencing a general depressiveness that makes them inactive, illustrate various ways in which refugees' mental health status may impact participation. As presented above in section 7.2.1 above, the emotional and motivational consequences of legal status uncertainty can also thwart efforts toward structural integration – perhaps an instance of mental health mediating the relationship between two domains of integration.

Although Germany has made efforts to reduce obstacles and improve incentives to refugee participation in integration courses, educational programs, and the labor market, as outlined in section 1.2.6, the results of the interview study presented in this dissertation suggest that many refugees perceive themselves as stuck and thwarted several years into resettlement. The results of all studies presented demonstrate a close relationship between these aspects of integration and mental health, with evidence for both directions of influence. Consequently, adequate mental healthcare may be crucial for labor market integration because "[d]eveloping the human agency needed to function effectively in a new environment requires the individual and collective initiative of the newcomers" (Castles et al., 2002, p. 113). Conversely, "early activation", as Degler and Liebig call for (2017), by means of easy access, barrier reduction, and effective economic integration programs that recognize refugees' ability and desire for self-reliance (Ekren, 2018) may be crucial for mental

health and integration because “[w]here restrictive rules and rigid systems confine [newcomers] to a passive role, integration may be slow and incomplete” (Castles et al., 2002, p. 113). The way in which Castles and colleagues highlight the need for initiative from newcomers as well as the need for flexible systems in the receiving society in the quoted passage also emphasizes integration as a two- or multi-way process.

7.2.4. Bureaucratic tasks

Bureaucracy is not frequently mentioned as an element of integration, perhaps because it is at the level of daily tasks serving legal and structural integration. It is also not easy to operationalize and not directly captured within the IAB-BAMF-SOEP questionnaire or the quantitative studies in this dissertation. However, participant reflections in the interview study suggest that bureaucratic tasks play a sufficiently large role in their experiences of integration and on their mental state that a sub-theme within a broader theme on “overwhelm" was dedicated to them in Study III. As reported in chapter 5, some participants seem to experience such a substantial level of stress and frustration about the challenge to navigate administrative tasks that their mental health is impacted. The finding that some experience so much distress over bureaucratic matters that they feel they cannot concentrate on other aspects of integration or engage in activities that would help their mental health shows bidirectional links between paper work in integration and mental health.

These findings are in keeping with Gürer’s criticisms of the labyrinthine nature of bureaucratic processes involved in various larger integration processes as well as his call for more clarity on these processes as important to facilitating not just integration but psychological well-being. The importance of bureaucracy to refugees' experiences of integration in Germany were also highlighted by Pearlman (2017), who was surprised to have rarely heard Syrian asylum seekers in Germany speak about cultural differences (which are so often the focus of public discourse), but instead discovered that “it was the interface with state bureaucracy that appears primary in most refugees’ lives” (p. 318).

The other facet of bureaucratic overwhelm presented in Study III, namely, feeling mistreated by service providers working in administrative bodies, touches on something that is often mentioned in the literature on integration; Ager and Strang (2008) use Puntnam’s (1993) term “social links” to refer to these connections between individuals and institutions. Study III findings on the distress, distrust, and demotivation that can arise from negative interactions with service providers partly overlap with previous findings by Rowley and colleagues (2019). Overall, this Study III sub-theme sheds light on an under-explored aspect of the relationship between mental health and integration and demonstrates that efforts to improve communication regarding bureaucratic tasks on all levels – both in terms of clarity of information and in terms of respect for individuals – may by urgently needed (Gürer, 2019).

7.2.5. German language

Receiving society language skills are emphasized as a crucial aspects of integration and a crucial facilitator of other aspects of integration across integration frameworks (Esser, 2001, 2006; Ager & Strang, 2008; Penninx & Garcés-Mascareñas, 2016; Tip et al., 2019). It is plain to see that basic environmental mastery, participation in education, the labor market, social connections to the majority of the population in the receiving society, and more all depend on a significant level of language proficiency. Refugees themselves are, of course, well aware of the centrality of language learning (e.g. Mangrio et al., 2019).

Given the importance of language for truly arriving in a receiving country, Study I's finding of an association between average German speaking, reading, and writing ability and psychological distress such that greater language ability was linked to better mental health is not surprising. This is consistent with several previous studies (Bogic et al., 2015; Beiser & Hou, 2001; Kartal et al., 2019). Providing further insight into this association, Study III presents an example of one participant who suffers from feeling isolated due to language struggles as well as several examples of participants reporting that their ability to learn German is impaired by mental health struggles, demonstrating bidirectional associations between language and mental health.

The interaction analyses in Study I further show that the positive association between German language ability is stronger and only reaches statistical significance at the alpha of 0.05 threshold among male refugees – although there is also a trend in this direction among females. This gender difference might be attributable to the fact that female refugees appear to have fewer social contacts to Germans and are also less likely to be employed, as another analysis based on IAB-BAMF-SOEP data shows (Paiva Lareiro & Schwarzmüller, 2021). Perhaps female refugees are more embedded in social networks with co-nationals and are therefore slightly less disrupted by language problems. Paiva Lareiro and Schwarzmüller (ibid.) furthermore found that women refugees have a lower self-reported German language ability than their male counterparts, which is linked to their lower levels of contact, rates of employment, and also reduced participation in leisure activities compared to male refugees. In light of female refugees' high levels of psychological distress and elevated levels of severe distress shown in Study II, their lower German language ability, their reduced participation in cultural life (although possibly not within their own ethnic communities – see section 7.2.7 on social bonds below), and their preoccupation with household responsibilities (Paiva Lareiro & Schwarzmüller, 2021), special language programs for women may be particularly important.

Study III also addresses the overwhelm that many experience from the language learning process; especially those with limited educational backgrounds or even illiteracy in their native language. Participation in language and integration courses can be very stressful for these individuals, suggesting that specialized programs would be ideal. The deleterious effects of mental health problems on

language learning indicate a need for specialized programs for those with special mental health needs or community-based mental health interventions with a language focus (see e.g. Miller, 1999 on multi-pronged community approaches also addressed in section 7.3).

7.2.6. Contact to Germans: social bridges and xenophobia

"Social bridges" (Putnam, 1993; Ager & Strang, 2008) or "interaction" (Esser 2001; 2006) between newcomers and natives or other long-term receiving society members encapsulate integration in a most tangible, everyday way. In their review of the literature and discourses around refugee integration, Ager and Strang (2008) identified social cohesion, inclusion versus exclusion, and race relations the most common topics addressed with regard to social connections between refugees and natives. From the perspective of newcomers, they emphasize the importance of social bridges for sense of belonging and acceptance, feelings of safety, and as a vital form of social capital. The benefit of social support for mental health in general (Gottlieb, 1981) and for refugees in particular (e.g. Siriwardhana et al., 2014) is well-known. Studies I, III, and IV shed light on the particular role of social contacts between refugees and native Germans and refugees' mental health. Some of these associations also touch upon acculturational aspects of integration (Berry, 1997, 2006; Schwartz et al., 2010).

The finding from Study I that spending more time with Germans, in particular, is associated with reduced psychological distress is complemented by themes presented in Studies III and IV: First, the value of social support from members of the receiving society, which may explain much of this association, comes across in the theme on social support in Study IV. Connections to Germans provide new arrivals with a sense of acceptance, belonging, and home as well as access to knowledge and resources that make certain aspects of integration easier. The potential emotional benefits of contacts to Germans within the integration infrastructure of tandems, meet-ups, refugee social projects, housing shares, and language classes are also illustrated in Study IV. These contacts help newcomers get to know their new surroundings and learn to move confidently within them, accompany them to important appointments, pull them out of isolation, make them feel emotionally secure, and help them overcome mental health problems.

Findings from Study III add complexity to this picture. The sub-themes titled "Perceived lack of close-knit social networks in Germany" and "Lack of social support and feelings of community" show that making meaningful connections to Germans and finding adequate social support in the receiving country can be very difficult for members of the refugee community, as previously found by Gürer (2019). The fact that a substantial number of participants of different genders, ages, and countries of origin expressed feeling alienated by what they perceived as a cold and disconnected social world is striking. Participants' statements about not wanting to become like Germans given this perceived social poverty are related to both social and acculturational aspects of integration. These findings may

relate to the quantitative results from Study I in different ways, if at all. Assuming that the primary direction of effect is that spending time with Germans promotes mental health, perhaps it relates to why contact to Germans but not contact to members of other groups is associated with mental health and well-being: contact may alleviate the sense of alienation participants in Study III describe and provide, beyond the benefits of social support, the sense that a fulfilling social life is possible in the receiving country. Or, conversely, those with limited exposure to Germans may suffer not just from a lack of social contact in general but from sense that the connections they seek are not possible in the receiving country in addition.

However, it is not clear whether contact to Germans reduces the impression or, in fact, increases the impression that Germans' social networks and the customs around these networks are disconnected and cold compared to those many refugees know from their countries of origin. After all, the existence of differences between collectivist and individualist cultures is well-documented (Hofstede et al., 2010). It would be interesting to further explore their bearing on refugees' mental health in host societies. Interestingly, as shown in connection to the theme "Experiencing migration as an opportunity for self-expression, belonging and personal development" in Study IV, some individuals feel that German culture around socializing actually suits them. This theme from Study IV may furthermore provide a potential explanation for the Study I finding that the mental health benefit of contact to Germans increases with the number of light reasons from Study I: Those participants who experience migration as bestowing greater belonging based on their values and political persuasions and who felt like outsiders in some regards in their country of origins are presumably more likely to have experienced political persecution and discrimination, i.e. more flight reasons. These individuals may also have an easier time interacting with Germans, considering the values-based kinship they appear to feel or the relief from rejection they experience among Germans. They also tend to value multiculturalism and learning about new cultures, which may make cross-cultural contacts particularly beneficial to these individuals who may also be among those to report a greater number of flight reasons.

Of course, it is very likely that the association between mental health and frequency of contact to Germans is bidirectional. Social withdrawal is a hallmark of many common mental health problems (e.g. Rubin & Burgess, 2001), and making cross-cultural contacts may be particularly socially taxing. Indeed, Study III's theme on how poor mental health as a consequence of pre-migration factors impacts integration includes a vivid example of a participant reflecting on how the "knots in his head" from traumatic experiences hinder his social connection making in Germany. Study IV includes an example of a participant who withdraws into her home when all that is new in Germany becomes overwhelming as a coping mechanism she herself deems somewhat problematic. Overwhelm from learning and using German is a part of what makes this participant withdraw, demonstrating that greater distress could lead to reduced contact to Germans in particular – an instance of mental health

thwarting integration. The close connection between the three factors receiving country language ability, intergroup contact, and mental health was examined in a previous study (Tip et al., 2019).

Study III also captures the devastating mental health effects of the xenophobia and racism Germans display toward members of the refugee community. The association between discrimination experiences and mental health has been reported in several previous studies (e.g. Noh et al., 1999; Ellis et al., 2008; Haase et al., 2019; Ziersch et al., 2020). Discrimination experiences and even the potential for discrimination experiences are obviously a negative aspects of contact to Germans. On the other hand, again, perhaps more contact to Germans means more positive experiences to counterbalance the negative ones and make acceptance and belonging in Germany more imaginable. Ager and Strang (2008), who included experiences related to racism and xenophobia in the "safety and stability" category as part of the "foundation" of integration, report that brief everyday interactions may be particularly important to feelings of acceptance, "at homeness", and safety. Study III presents the flip side of this: how rejected and distressed xenophobic micro-aggressions in public can make refugees feel. Ziersch and colleagues (2020) similarly found that discrimination experiences were associated with a reduced sense of belonging, lower levels of trust, hopelessness, and less of a sense of control. Study III shows that it is not only the immediate experiences of discrimination that have these effects, but also the overall political climate, which, as introduced in section 1.1.2 on forced migration to Germany, has been characterized by an increase in vocal anti-immigrant sentiment and right-wing political movements, particularly since the arrival of large numbers of asylum seekers in the late summer of 2015. Finally, Study III includes devastating portrayals of two individuals for whom experiences of rejection and discrimination appear to be at the heart of poor mental health. These examples show that withdrawal can be one consequence of strong feelings of rejection, which may give rise to vicious cycles involving feelings of rejection, withdrawal, and poor mental health.

The study findings brought together here show the importance of facilitating social bridges between natives, other long-term receiving society members and refugees for the sake of both mental health and progress in other areas of integration, also through dedicated programs, projects, and key figures such as language teachers. Again, there appears be a bidirectional relationship between this facet of integration and mental health. This means that efforts to facilitate social bridges would potentially be more influential if they were lower-threshold for those threatening to withdraw or already withdrawing due to mental health struggles. The urgency of tackling racism, xenophobia, and right-wing anti-immigrant sentiment in Western receiving societies can obviously not be overstated (see e.g. Discussion in Ziersch et al., 2020).

Interestingly, while the latest literature on integration emphasizes superdiversity and the fact that there is neither a mainstream in receiving societies nor in any of the migrant groups (e.g. Grzymala-Kazlowska & Phillimore, 2018; see section 1.2.4), many of the participants in Study III did make clear

distinctions between one cultural aspect of natives and their own co-nationals, namely, between forms of socializing and social networks. This does not render arguments against simplistic conceptions of "receiving society" and "migrants" within discourses about integration moot; however, it is worth noting the perception and subjective experience of newcomers. To counter assimilationist discourses on integration as presented in section 1.2.1, it is also interesting to entertain the notion that Western societies might benefit from (re-)learning a greater emphasis on community from migrant populations from more collectivist backgrounds. This would be in-keeping with Penninx and Garcés-Mascareñas' (2016) understanding of the cultural dimension of integration entailing the "reciprocal [between immigrants and receiving society] reactions to difference and diversity" (p. 15).

7.2.7. Social bonds

Social connections to co-nationals and fellow members of the refugee community are not often addressed in the public discourse or even within integration frameworks as a factor in integration. This may owe to classical conceptions of integration as being the process of newcomers gradually becoming a part of the existing society, which are still widespread in the public discourse (see sections 1.2.1 and 1.2.4). A notable exception to this is the framework by Ager and Strang (2008), which, following Putnam (1993), includes "social bonds" within its "social connections" category, arguing that social bonds and a potential concomitant maintenance of pre-migration identity do not threaten integration into receiving societies more generally. As also presented in section 1.2.4, the idea that integration into "same-ethnic" communities is a part of integration was raised at least once before (Elwert, 1982). With regard to social bonds' possible significance to mental health, Ager and Strang (2008) reference a study by Beiser (1993), which found an association between lacking these connections and worse mental health and also emphasizes the significance of social bond networks for opening paths to labor market participation. It would also appear that there is potential for (political) solidarity within and among refugee communities: while refugee populations are in no way homogenous groups (Grzymala-Kazlowska & Phillimore, 2018), they do experience many of the same conditions and pressures within on receiving society context – for example, German conditions as laid out in section 1.2.6.

Given the importance of social connections for mental health (see section 7.2.6 above), it is significant that Study I found an association between psychological distress and frequency of contact to Germans, but no clearly significant association with frequency of contact to third nationals or co-nationals in the sample as a whole (though for both coefficients, confidence intervals only slightly crossed the zero-line). Stratification analyses did, however reveal that female refugees who spend more time with co-nationals exhibit lower levels of distress than those who spend less. The fact that this association was found only for women may be related to their particularly patterns of socializing: other analyses of the IAB-BAMF-SOEP data found that refugee women have significantly less frequent contact to Germans than men, potentially owing to their lower levels of participation in the labor market, of German

language ability, and of participation in leisure activities (Paiva Lareiro & Schwarzmüller, 2021). This may mean that social bonds are linked to refugee women's mental health because they are the primary form of social connection in this group. It is unclear from Study I analyses whether these contacts to co-nationals are familial or extra-familiar; however, a participant quote from Study IV about how important the attendance of refugee women's groups is to her awareness of her needs and her confidence to make demands illustrates how bonds among non-related refugee women may also play into this association. This would be interesting to explore further in future research.

The striking findings in Paper III's theme "Lack of social cohesion within refugee and migrant communities" deliver several possible explanations for the absence of a clear correlation between frequency of contact to co-nationals and mental health in the sample as a whole and among male participants in particular. Social cohesion among refugee populations seems to be threatened by a range of factors. As detailed in Study III in chapter 5, one of these factors is an overall negativity owing to hardships and mental health struggles that some perceive among fellow refugees and co-nationals, suggesting that the high prevalence of psychological distress demonstrated in Study II may have a corrosive effect on the formation of social bonds within integration. Reports that some refugees cannot engage with others because they are too caught up in their own worries further suggest that poor mental health may hinder this facet of integration. Conditions in refugee accommodation and comparisons of grounds for asylum and "deservedness" of asylum process outcomes are reported as further fueling tensions by participants. This suggests that pressures from other areas of integration may play into the erosion of a potential source for social support and solidarity as well. Mistrust due to political dynamics from the country of origin – particularly among those who experienced persecution – causing some to avoid contacts to co-nationals is an example of conditions of exit from the country of origin as factors in integration (Castles et al., 2002) as well as integration as a multi-way process also involving the ongoing situation in the country of origin (see section 1.2.3). Finally, Study III shows that perceived varying degrees of post-migration cultural change processes that can be described as "acculturation" (Berry, 1997, 2006; Schwartz et al., 2010) or part of the cultural dimension of integration (Esser, 2001, 2006) can cause conflicts within co-national communities that may be a source of stress.

Social bonds are under-explored aspects of integration, also with regard to how they relate to mental health. Given the potential of bonds for providing resources and information (Ager & Strang, 2008), solidarity and the type of social support Study III shows many miss, as well as fostering connections to the country of origin culture that Study IV shows some rely on as a coping mechanism, further research is called for.

7.2.8. Family connections and separation

Family connections are a special of case "social bonds" (Ager & Strang, 2008) and may represent an important resource for mental health and integration (Ryan et al., 2008; Honohan, 2009; Wilmsen, 2013). Enabling family unity as a human right should be a major responsibility of receiving societies within integration (e.g. Article 16 of the Universal Declaration of Human Rights; Löbel & Jacobsen, 2021). In other words, matters related to family separation and reunification fall under the legal-political dimension of integration (Penninx & Garcés-Mascareñas, 2016) as well. A relationship between family separation and poorer mental health has been shown in previous studies (e.g. Nickerson et al., 2010; Miller et al., 2018; Löbel, 2020). Results from Study I presented in this dissertation corroborate this association, finding that those who are seeking reunification with minor children or a spouse experience higher levels of psychological distress consisting of symptoms of depression and anxiety. Surprisingly, Study II did not show a link between being separated from a minor child or a spouse and a positive screen for psychological distress as measured using the RHS-13. This discrepancy may be due to the binary treatment of the outcome variable, differences between the outcome variables (see section 2.1.4), or perhaps even psychological adjustment to separation over time, as has been found in one previous study on migrant family separation (Suárez-Orzoco et al., 2011); however, this remains unclear.

Study III illustrates how the fear and incessant worries for family members left behind in the country of origin can impact mental health and make it difficult to pursue the daily activities of integration. In other words, family separation – an integration factor – may cause mental health problems, which, in turn, can affect other areas of integration. This cluster of effects around family separation, mental health, and integration is in line with a previous qualitative study reporting participant experiences of distress, fear, helplessness and also cultural disruption around family separation that results in ambivalence regarding resettlement (Miller et al., 2018). As Study I shows, a further factor determining distress related to family separation and seeking family reunification may be pre-flight traumatic experiences. Interaction analyses revealed that a greater number of flight reasons is linked to greater distress from seeking family reunification. As phrased in another study: "For refugees who have had traumatic experiences, extended separation from family members may serve as a continuing link to an unbearable past" (Rousseau et al., 2001; also quoted in Miller et al., 2018). Miller and colleagues (2018) conclude that family separation links pre- and post-migration experiences.

Paper IV addresses having family in Germany as a particular source of support and emotional comfort. It also shows that having children in the household can motivate parents to tackle mental health problems, provide a source of meaning in a time of limbo, and justify integration struggles, as previously reported (Merry et al., 2017). However, Study III also shows that family in Germany can come with specific challenges. Older teenage or young adult children can find themselves

overwhelmed from having to take over bureaucratic processes that their parents lack the language skills to complete, and young mothers can struggle to find time to learn German. Study IV furthermore presents changes in gender role dynamics that can take place in the process of adaptation to the receiving society. While these changes are shown to confer benefits in the examples in Study IV, this represents an additional acculturation process with its own complexities (Deacon & Sullivan, 2009). Of course, family separation is also a source of changing dynamics, as the Study III example of a woman separated from her husband struggling to take on the tasks that used to be his responsibility, particularly bureaucratic processes, shows.

Interestingly, Study I found that male refugees experience more distress from seeking family reunification. It should be noted, however, that most women included in the IAB-BAMF-SOEP sample and most women in the refugee population arrived in Germany with or through family and live amongst family (Paiva Lareiro & Schwarzmüller, 2021). The gender-specific finding from Study II that male refugees who are single and without children are more distressed than male refugees with a spouse and/or children in Germany points to a particular risk of isolation (see e.g. Hynie, 2017 on isolation) and compensatory social networks among this group. The Study I finding that arriving in Germany alone is linked to greater distress than arriving together with someone also highlights the potential significance of isolation and loneliness from being without family in the receiving society.

In light of the human right for family unity as well as the effects of family separation, Germany and other receiving societies should reconsider restrictions on family reunification (see section 1.2.6).

7.3. Conclusions

Taken together, Studies I-IV reveal links between mental health and all areas of integration explored: asylum procedure and legal status, housing, participation in the labor market, education, and integration courses, bureaucratic tasks within integration, German language learning, social bridges to Germans and experiences of xenophobia from Germans, and social bonds within refugee communities – including experiences of family connections and separation. While the quantitative studies substantiate the existence of these links in large-scale population-based data, the qualitative studies provide an in-depth look at these associations. Crucially, the qualitative data also provides evidence for the bi-directionality of this relationship as well as for how different areas of integration can be interlinked in their relationship with mental health. Results from the study on resilience interspersed throughout the Integrative Discussion demonstrate different ways in which refugee individuals protect themselves or are protected from adversities encountered within the integration process as well as from other adversities that can impede integration by harming mental health. The quantitative results also provide vital information on the prevalence of psychological distress among refugees in Germany, showing substantial healthcare needs that the receiving society is responsible for providing within

integration. High prevalence rates also highlight the fact that the mental health problems that appear to interact with integration processes are wide-spread.

The results of this dissertation project lend empirical support to the hypothesis of a reciprocal relationship between mental health and integration put forth in policy papers and reports – as summarized in section 1.4.1 – as well as to the need for "health in all policies" (WHO, 2014) and "the necessity of an integrated approach to issues of mental health and social integration among refugees" (Niemi et al., 2019, p. 2). The role of (mental) health as a "marker and means" of integration, as framed in Ager & Strang's (2008) refugee integration framework, thus goes beyond questions of healthcare provision and mental health as a resource in integration – instead, the role appears to encompass mental health as a resource in integration, the importance of healthcare provision, as well as integration facilitation as a prerequisite for health (as in WHO Regional Office for Europe, 2018, see section 1.4.1).

Regarding our understanding of refugee mental health, the strong connections between processes of integration and mental health evidenced in the studies presented in this dissertation raise the caveat that a medicalizing perspective may undermine the extent to which "disorders" are responses to difficult circumstances. Of course, this concern is a central critique of medicalizing perspectives in the area of mental health more generally (e.g. Jacob, 2013). However, the potential for medicalizing perspectives to de-politicize discourses (e.g. Lenette et al., 2013) is important to point out in each context, including the refugee context. While mental distress requires care regardless of its origins, the nature of interventions can be adapted to these origins.

The urgency for taking action – both in integration and health policy – is increased by the threat of vicious cycles from the bi-directionality of effects between mental health and integration as well as by how problems in different domains of integration are related, as Study III shows most vividly: negative dynamics between mental health and different domains of integration may have the potential to multiply because of how problems in different domains of integration can exacerbate one another.

Apart from some of the larger integration policy changes mentioned for each area of integration above, community-based programs may be ideally suited to complement clinical services. Clinical approaches and other approaches could be brought together in a stepped care model (e.g. Silove et al., 2017; Böge et al., 2019; Leopoldina, 2019) – ideally one that also makes accommodations for the particular needs of refugee women, older individuals, and Afghan nationals identified in this project. Miller (1999) makes a compelling case for the potential benefits of so-called "ecological approaches" such as training mental health para-professionals within the refugee community, training language teachers to provide basic psychosocial care and raise awareness, and facilitating various types of support groups and community projects. Ecological approaches may be particularly relevant for a

community in which mental health problems are so prevalent that clinical services may not be adequate, in which cultural factors may prevent many from seeking professional help, and, crucially, in which mental health is intricately bound up with stressors that clinical approaches may not be ideally suited to address. Importantly, community-based programs may also be particularly suited to bolstering and building on the strengths and resilience of refugee individuals and communities.

It is worth re-emphasizing the appeal for a more strengths-based view on matters of refugee mental health as well as processes of integration made in Study IV: merely by having fled and fought for the opportunity of a new start in a safer environment, refugees demonstrate immense resilience, and an exclusive focus on mental illness undermines this reality – potentially doing refugee communities a disservice with regard to how discourses around them are shaped. Concerning translation intro practice, the factors and strategies linked to resilience in Study IV have the potential to inform clinical work with members of the refugee population (Murray et al., 2010; Hutchinson & Dorsett, 2012) – as well as extra-clinical or community-based programs.

7.4. Strengths and limitations

The central strength of this dissertation project is the fact that it used both quantitative and qualitative approaches to explore the relationship between mental health and integration among refugees who arrived in Germany after 2012. This means that the project was able to benefit from the advantages of both methodologies (see section 2.3.1). On the quantitative side, the project produced results on the prevalence of psychological distress, sociodemographic risk factors, and statistical associations between factors of integration and measures of mental health that are based on validated scales, independent of respondents' own judgment of these associations, replicable and reliable, and, thanks to the qualities of the large-scale IAB-BAMF-SOEP refugee survey, nationally representative of a refugee population. The fact that Study II included a mental health screener specifically designed for refugee populations that includes symptoms from the most common mental syndromes among refugees is also a strength attributable to the IAB-BAMF-SOEP refugee survey, as is the possibility to include objective rather than primarily psycho-metric indicators of post-migration life circumstances.

On the qualitative side, this dissertation project presents results that illustrate how and why certain associations between mental health and integration may come to be. It also allowed for refugees to bring in their own subjective priorities as well as new aspects of their lived experience that may have been previously neglected, such as the stress related to bureaucratic processes, feelings of alienation with regard to German social life, and threats to social bonds. The interview study underlying the qualitative studies presented also has the distinct advantages of including a relatively large sample for a qualitative investigation and having been carried out by native speakers and culturally competent interviewers, both factors that likely increased the richness of the data. The fact that one of the qualitative studies took a rare strengths-focused view on refugee mental health means that the

dissertation project includes insights into resilience processes within the mental health and integration nexus. The first two Integrative Discussion sections above (sections 7.1 and 7.2) represent an opportunity to bring together all quantitative and qualitative results in a sort of triangulation (see 2.3.2), with results complementing each other to paint a broad and deep picture of how various aspects of integration interplay with mental health.

The limitations of the individual studies presented in this dissertation are included in the studies themselves (chapters 3-6). Summarized briefly, the main limitations of the quantitative studies include that the evidence is merely correlational and does not permit conclusions about causality, that the cross-cultural validity of the measures of psychological distress used as outcome variables requires further investigation, that these measures are brief self-report screening tools rather than diagnostic instruments (which may overestimate symptomatology (Blackmore et al., 2020)), and that those who participate in a survey study are likely to be in better mental health (and that non-response weights cannot completely account for this). These latter points are, of course, particularly relevant to the prevalence estimates and less so to investigations of associations. Selection bias in recruitment is also a limitation in the interview study. Again, participants' mental health was sufficient for participation in the study. The interviewees were also majority highly-educated, although a few hard-to-reach illiterate participants were also included in the sample. The other main limitation in the qualitative studies is that the reliance on native speaker interviewers, named as a strength above, may infringe on interpretation accuracy given that those analyzing the data relied on translated transcripts rather than impressions of the original tone and wording used by participants. This may have led to instances of misinterpretation, particularly with regard to the gravity of mental health related contents.

The limitation regarding causal inferences mentioned above warrants a discussion in the context of all studies combined. The most significant limitation of the findings presented in this dissertation project – but one shared by all studies in this area – is that true causal inferences that would resolve the extent to which mental health impacts integration and vice versa are not possible based on the data used. Although the notion of causality and the epistemology around it are highly controversial (e.g. Sobel, 2000; Maxwell, 2004), experimental conditions are generally thought to be required to draw conclusions about causality (e.g. Sobel, 2000; Steel, 2004). Experiments with conditions of integration, however, like experiments within social sciences at large, are almost impossible to conduct (Steel, 2004). While the studies presented here are all observational, an argument can be made that qualitative research does at least provide some insight into potential mechanisms linking different phenomena (ibid.), albeit at a very local and context-specific level (Maxwell, 2004, citing Miles & Huberman, 1984). Of course, conclusions about mechanisms also depend on the accuracy of participants' insights into their own behavioral and mental processes, which is assumed within the pragmatic and realist approach taken in qualitative Studies III and IV. These are the bases upon which conclusions about evidence for bi-directionality in the relationship between mental health and

integration are drawn in this dissertation. While these inferences warrant caution, it is also the case that the reality of these associations is probably so complex and multifaceted as well as individual, with multiple bi-directionalities and interconnections, as addressed in the conclusion, that no neat model of directions of effects could reflect this reality even if hypothetical, perfect research tools and conditions were available.

A limitation regarding the degree to which triangulation between the quantitative and qualitative studies was possible is that there is no sample overlap between the studies. Initially, a truly mixed methods design and recruitment of interview study participants through the IAB-BAMF-SOEP refugee survey was intended. However, this was ultimately not possible. Given that a very small sub-sample of survey respondents would have been involved in the qualitative study and that this sub-sample never would have had the sort of representativity that the survey has, the actual advantages of this mixed methods approach may have been limited. Also, the sample recruited for the qualitative study is overwhelmingly also from the population of refugees who arrived in Germany between 2013 and 2016, which makes for study conditions very similar to recruitment from among survey respondents. The next best approach would have been to give the interview study participants a small survey including all of the variables that went into the quantitative studies. This was not possible due to time constraints and not wanting to overwhelm participants. Also, the reality of this kind of mixed methods approach would have been that the sample size would have greatly limited the quantitative analyses in their generalizability.

Finally, the extent to which results from this dissertation project translate to other contexts is unclear, although, as shown throughout, results do show a substantial amount of overlap to results from other integration contexts. However, as mentioned previously in this dissertation (e.g. 1.5.1), context-specific results are actually desirable due to the differences between contexts.

7.5. Future directions

Owing to practical constraints, the studies presented in this dissertation took a cross-sectional perspective on the relationship between mental health and integration. Given the processual and never-ending nature of integration (see section 1.2.5) and also the fact that mental health problems – even those linked to pre-migration experiences – may emerge over time post-migration (Roth et al., 2006), a longitudinal perspective on the development of mental health as well as its associations with areas of integration among refugees who arrived in Germany from 2012 is of particular valuable. It would also be of interest to investigate whether symptom configurations change across time as stressors change and temporal distance to pre-migration experiences increases, as well as how factors and strategies related to resilience may develop.

With regard to healthcare provision research, the conclusions of this dissertation call for explorations of how sociodemographic risk factors might be addressed in treatment program designs, how knowledge about strengths might be tied in, and what types of lower-threshold, community-based or other psychosocial interventions might be beneficial.

As the limitations sections of Studies I and II also summarized in section 7.4 above suggest, further cross-cultural mental health screener validation studies would support research in the areas of refugee and global mental health (see e.g. Karnouk et al., 2021). Given potential cross-cultural blindspots and the general paucity of research including refugee voices in study designs, qualitative studies on mental health experiences could shed light on whether there are phenomena being missed by standardized scales in use.

As mentioned several times throughout the dissertation, resilience is generally under-researched in refugee populations, and investigations specifically addressing the integration-mental health-resilience nexus would be novel, as would inquiries into how refugees themselves perceive the discourse on "refugee mental health". The study on resilience included in this dissertation focuses on psychological resilience; in connection to further research on the findings on threats to social cohesion and solidarity within refugee communities presented above, community resilience could receive more attention in future studies.

Turning to further points based on specific findings, research is needed on the particular mental health needs as well as potential particular integration struggles faced by refugees of Afghan nationality in Germany. Why Eritreans show such relatively low levels of distress also warrants investigation. The factor of bureaucracy raised as significant stressor in Study III would be interesting to operationalize for use in surveys, perhaps – along with other variables getting at difficulties with environmental mastery. Finally, further research on the mental health experiences of refugees in educational programs and integration courses would be of interest given the relative lack of studies including these factors.

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Personal contribution to studies with co-authors

All four studies presented in this dissertation include co-authors. In what follows, my personal contribution to each study is detailed.

STUDY I: Living Conditions and the Mental Health and Well-being of Refugees: Evidence from a Large-Scale German Survey

Published as: *Walther, L., Fuchs, L. M., Schupp, J., & von Scheve, C. (2020). Living Conditions and the Mental Health and Well-being of Refugees: Evidence from a Large-Scale German Survey. Journal of Immigrant and Minority Health, 1-11.*

Personal contribution to each step in producing the study: *Conception of the study (predominantly own personal contribution), literature search (predominantly own personal contribution), data analysis conception (mostly own contribution), conducting data analysis (entirely own contribution), drafting of manuscript (predominantly own personal contribution), revision work and answers to reviewers (overwhelmingly own personal contribution)*

STUDY II: Psychological distress among refugees in Germany: a cross-sectional analysis of individual and contextual risk factors and potential consequences for integration using a nationally representative survey

Published as: *Walther, L.*, Kröger, H.*, Tibubos, A.N., Ta, T.M.M.T., von Scheve, C., Schupp, J., Hahn, E., Bajbouj, M. (2020). Psychological distress among refugees in Germany – A representative study on individual and contextual risk factors and the potential consequences of poor mental health for integration in the host country. BMJ Open. 10:e033658. *made equal contributions*

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STUDY III: The mental health and integration nexus: A qualitative study on the struggles of recently arrived refugees in Germany

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Personal contribution to each step in producing the study: *Conception of the study (substantial personal contribution), literature search (overwhelmingly own personal contribution), design of mental health section of topic guide (entirely own contribution), ethics committee application (substantial personal contribution), data collection (substantial contribution to planning and*

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Lena Walther
Berlin, July 2021

Selbstständigkeitserklärung

Hiermit erkläre ich, die Dissertationsarbeit „The relationship between mental health and integration in refugees – Quantitative and qualitative investigations among refugees who arrived in Germany between 2013 and 2018" selbstständig verfasst zu haben. Alle Hilfsmittel, die verwendet wurden, habe ich angegeben. Die Dissertation ist in keinem früheren Promotionsverfahren angenommen oder abgelehnt worden.

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Lena Walther
Berlin, Juli 2021